Motor and Drives Price Book

TECO Westinghouse

Effective: 03-24-17

ANAB ACCREDITED ISO/IEC 17021 MANAGEMENT SYSTEMS CERTIFICATION BODY

SYSTEM CERTIFICATION ISO 9001 SGS

TECO Westinghouse

QUALITY AND ENVIRONMENTAL STATEMENT

TECO-Westinghouse Motor Company (TWMC) is committed to serving the needs of our customers BETTER THAN ANYONE ELSE. We strive to provide quality products and services while also minimizing safety and environmental impacts. We are also committed to providing a work environment that protects the health and safety of employees, visitors, and guests. We understand that safety, quality, and environmental stewardship are at the core of our business.

Safety, sustainability, improved efficiency, compliance, and continuity are at the heart of the Quality and Environmental Management Systems. Therefore, management is committed to and personally involved in establishing objectives and periodically reviewing these objectives to ensure its continuing suitability. The management team assures that quality and environmental requirements are clearly stated and implemented. They also provide the necessary training and equipment, establish measurable guidelines, and define priorities for continual improvement.

Quality and environmental objectives and targets are established within the Quality and Environmental Management Systems and are communicated to all employees. TWMC is committed to maintaining these systems, and this cannot be done without each employee striving for excellence in personal job performance. We will not settle for less than exact conformance in anything we do.

POLÍTICA DE CALIDAD Y AMBIENTAL

TECO-Westinghouse Motor Company (TWMC) está comprometido a satisfacer las necesidades de nuestros clientes MEJOR QUE CUALQUIER OTRA COMPAÑIA. Nos esforzamos por ofrecer productos y servicios de calidad al mismo tiempo que minimizamos los impactos en la seguridad y el medio ambiente. También estamos comprometidos a proveer un ambiente de trabajo que proteja la salud y seguridad de empleados, visitantes e invitados. Entendemos que la administración de la seguridad, la calidad y el medio ambiente están en el centro de nuestro negocio.

La seguridad, la sostenibilidad, la mejora de la eficiencia, el cumplimiento y la continuidad son el corazón de los Sistemas de Gestión de Calidad y Medio Ambiente. Por lo tanto, la gerencia está comprometida con y personalmente involucrada en el establecimiento de objetivos y revisar periódicamente estos objetivos para asegurar su continuada adecuación. El equipo directivo se asegura que los requisitos de calidad y medioambientales estén claramente establecidos e implementados. También proporcionan la capacitación y el equipo necesarios, establecen pautas medibles y definen las prioridades para la mejora continua.

Se establecen objetivos y metas de calidad y medioambientales dentro de los Sistemas de Gestión de Calidad y Medio Ambiente y se comunican a todos los empleados. TWMC esta comprometido a mantener estos sistemas, y esto no puede hacerse sin que cada empleado se esfuerce por la excelencia en el desempeño de su trabajo personal. No estaremos satisfechos con menos que con la conformidad exacta en cualquier cosa que hagamos.

Patrick M. Rogers
President
TECO-Westinghouse Motor Company 3/2/17

TABLE OF CONTENTS

All data presented in this book is for reference only and subject to change without notice. For specific applications, certified dimensions, or additional performance data, etc., please contact your TECO-Westinghouse representative or call: 1-800-USE-TECO

Notes:

* Fire Pump Available.

(1) Italicized letters represent the TECO Product Type (e.g. ASHH). Letters in brackets represent the Catalog Number [e.g. DHP]. Both Product Type and Catalog Number can be found on Motor Nameplate.

Notes:

(1) Italicized letters represent the TECO Product Type (e.g. ASHH). Letters in brackets represent the catalog number [e.g. DHP]. Both Product Type and Catalog Number can be found on Motor Nameplate.

(2) Medium Voltage Crusher Duty Motor (pg. 60-61) and Medium Voltage Vertical Motors offered (various - see next page for details).

Notes:

* Fire Pump Available.

(1) Italicized letters represent the TECO Product Type (e.g. ASHH). Letters in brackets represent the Catalog Number [e.g. DHP]. Both Product Type and Catalog Number can be found on Motor Nameplate.

Notes:

* Fire Pump Available.

(1) Italicized letters represent the TECO Product Type (e.g. ASHH). Letters in brackets represent the Catalog Number [e.g. DHP]. Both Product Type and Catalog Number can be found on Motor Nameplate.

TABLE OF CONTENTS

ONLINE SUBMITTAL DATA INSTRUCTIONS

ONLINE INSTRUCTIONS

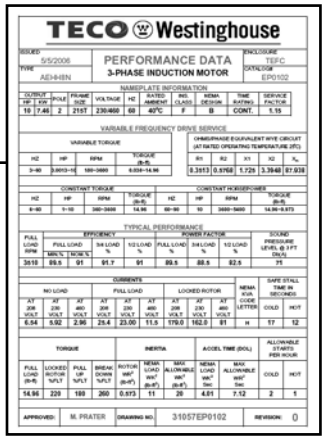
SUBMITTAL DATA

Submittal data consists of basic performance data, dimensional drawings, connection diagrams, and instruction manuals. Mechanical and electrical submittal data is available on many stock catalog motors through our website **www.tecowestinghouse.com** by following the three easy steps below. If additional submittal data is required, please contact your TECO-Westinghouse representative.

1. **From our website homepage, www.tecowestinghouse.com, enter in the part or catalog number in the box in the middle of the page and then click on "Go".**

   (Note: If you have a TECO-Westinghouse motor and are looking for the performance data, please use the catalog number off the nameplate for your search. Ex: EP0102.)

2. A product listing page will appear about the motor. Click on the "Learn More" button and you will be taken to the download page. Here you will be able to print the available performance data, dimensional drawings, connection diagrams, and instruction manuals in PDF format for the motor you have selected. Links to the available information are listed at the bottom of the screen. **Click on the appropriate product link for the information that you need.**



3. Your results will look similar to the example shown to the right for the TECO-Westinghouse MAX-E1® NEMA Premium Efficiency Severe Duty TEFC motor, catalog # EP0102.

   It's that easy!

CATALOG NUMBER REFERENCE GUIDE

EXAMPLE:

DHP 0754R

FIRST 1-3 SPACES (LETTERS) DESIGNATE THE MOTOR PRODUCT LINE

THREE PHASE ODP

DSP=	ROLLED STEEL ODP NEMA PREMIUM F#56 (1/4 HP - 3 HP)
DTP=	ROLLED STEEL ODP NEMA PREMIUM F#140T - 280T (1 HP - 40 HP)
*DS=	ROLLED STEEL ODP HIGH EFFICIENCY F#56 (1/3 HP - 3 HP)
DJPP/DJMP=	ROLLED STEEL ODP JP/JM NEMA PREMIUM (1 HP - 40 HP)
*DJP/DJM=	ROLLED STEEL ODP JP/JM HIGH EFFICIENCY (1 HP - 40 HP)
DTP_G=	ROLLED STEEL ODP NEMA PREMIUM WITH AEGIS® SGR (1 HP - 40 HP)
DHP=	CAST IRON ODP NEMA PREMIUM (1 HP - 800 HP)
DHP_G=	CAST IRON ODP NEMA PREMIUM WITH AEGIS® SGR (1 HP - 75 HP)

THREE PHASE TEFC - GENERAL PURPOSE MOTORS

G=	3-PHASE FRACTIONAL HP TEFC HIGH EFFICIENCY (1/3 HP - 2 HP)
GH=	ROLLED STEEL TEFC NEMA PREMIUM F#56 (1/4 HP - 2 HP)
GP=	ROLLED STEEL TEFC NEMA PREMIUM F#140T - 210T (1 HP - 10 HP)
GH_C=	ROLLED STEEL TEFC NEMA PREMIUM FOOTED C-FACE F#56 (1/4 HP - 2 HP)
GHV_C=	ROLLED STEEL TEFC NEMA PREMIUM ROUND BODY C-FACE F#56 (1/4 HP - 2 HP)
GP_C=	ROLLED STEEL TEFC NEMA PREMIUM FOOTED C-FACE F#140T - 210T (1 HP - 10 HP)
GPV_C=	ROLLED STEEL TEFC NEMA PREMIUM ROUND BODY C-FACE F#140T - 210T (1 HP - 10 HP)
GP_G=	ROLLED STEEL TEFC NEMA PREMIUM WITH AEGIS® SGR (1 HP - 10 HP)
MP=	MAX-IE3 METRIC PREMIUM IE3 EFFICIENCY (0.75 Kw - 112 kW)

THREE PHASE TEFC - SEVERE DUTY MOTORS

JPP/JMP=	CAST IRON TEFC JP/JM NEMA PREMIUM (1 HP - 50 HP)
*JPN/JMN=	CAST IRON TEFC JP/JM HIGH EFFICIENCY (3/4 HP - 50 HP)
NP=	MAX-PE™ NEMA PREMIUM (1 HP - 200 HP)
NP_C=	MAX-PE™ NEMA PREMIUM FOOTED C-FACE (1 HP - 200 HP)
NPV_C=	MAX-PE™ NEMA PREMIUM ROUND BODY C-FACE (1 HP - 200 HP)
NP_G=	MAX-PE™ NEMA PREMIUM WITH AEGIS® SGR (1 HP - 75 HP)
*NV_C=	MAX-SE™ HIGH EFFICIENCY ROUND BODY C-FACE (1 HP - 100 HP)
EP=	MAX-E1® NEMA PREMIUM (1 HP - 500 HP)
E=	MAX-E1® HIGH EFFICIENCY (3/4 HP - 800 HP)
EP_C=	MAX-E1® NEMA PREMIUM FOOTED C-FACE (1 HP - 300 HP)
EPV_C=	MAX-E1® NEMA PREMIUM ROUND BODY C-FACE (1 HP - 300 HP)
EPY=	KEYLESS SHAFT NEMA PREMIUM (200 HP - 500 HP)
EY=	KEYLESS SHAFT HIGH EFFICIENCY (600 HP - 800 HP)
HH=	MAX-E2/841® "LITE" NEMA PREMIUM (1 HP - 300 HP)
HB=	MAX-E2/841® NEMA PREMIUM (1 HP - 500 HP)
HB_C=	MAX-E2/841® NEMA PREMIUM FOOTED C-FACE (1 HP - 100 HP)
HBV_C=	MAX-E2/841® NEMA PREMIUM ROUND BODY C-FACE (1 HP - 100 HP)
CDP=	MAX-HT™ NEMA PREMIUM DESIGN C (20 HP - 200 HP)
CDP=	MAX-HT™ NEMA PREMIUM DESIGN A (250 HP - 500 HP)
*CD=	MAX-HT™ HIGH EFFICIENCY DESIGN C (20 HP - 600 HP)
KD=	MAX-HT™ MEDIUM VOLTAGE ENERGY EFFICIENT HIGH TORQUE (100 HP - 900 HP)

DEFINITE PURPOSE MOTORS

WFP/WP=	STAINLESS STEEL WASHDOWN NEMA PREMIUM FOOTED C-FACE (1/2 HP - 10 HP)
WFPV/WPV=	STAINLESS STEEL WASHDOWN NEMA PREMIUM ROUND BODY C-FACE (1/2 HP - 10 HP)
S=	FARM DUTY SINGLE PHASE HIGH TORQUE (1/3 HP - 10 HP)
SP/SPH=	HVAC SINGLE PHASE OPD (1/4 HP - 3 HP)
ST/SPT/SPHT=	HVAC SINGLE PHASE TEFC (1/4 HP - 10 HP)
Q=	ODP OIL WELL PUMP STANDARD EFFICIENCY (5 HP - 125 HP)
QT=	TEFC OIL WELL PUMP STANDARD EFFICIENCY(5 HP - 125 HP)
CP=	2 SPEED, 1 WINDING, VARIABLE TORQUE HIGH EFFICIENCY (100/25 HP - 300/75 HP)

EXPLOSION PROOF MOTORS

XP=	TEXP EXPLOSION PROOF NEMA PREMIUM (1 HP - 400 HP)
XP_C=	TEXP EXPLOSION PROOF NEMA PREMIUM FOOTED C-FACE (1 HP - 100 HP)
XV_C=	TEXP EXPLOSION PROOF NEMA PREMIUM ROUND BODY C-FACE (1 HP - 75 HP)

First 1-3 spaces list continued on next page>>

Notes:

* Product is obsolete.

CATALOG NUMBER REFERENCE GUIDE

Effective 03-24-17
Supercedes 06-14-15

EXAMPLE:

DHP 0754R

FIRST 1-3 SPACES (LETTERS) DESIGNATE THE MOTOR PRODUCT LINE

MEDIUM VOLTAGE MOTORS - GLOBAL SERIES

PG=	MEDIUM VOLTAGE WPI NEMA PREMIUM (100 HP - 2000 HP)
P=	MEDIUM VOLTAGE ODP HIGH EFFICIENCY (100 HP - 1000 HP)
KG=	MEDIUM VOLTAGE TEFC NEMA PREMIUM (100 HP - 900 HP)
*JH=	MEDIUM VOLTAGE TEFC IEC HIGH EFFICIENCY (800 HP - 2000 HP)
KF=	MEDIUM VOLTAGE TEFC NEMA PREMIUM (500 HP - 2000 HP)
JF=	MEDIUM VOLTAGE TEFC IEC HIGH EFFICIENCY (900 HP - 1750 HP)

VERTICAL MOTORS

VHP=	MAX-VHP™ LV HT VHS WPI NEMA PREMIUM (7.5 HP - 500 HP)
VH=	MAX-VH™ LV HT VHS WPI HIGH EFFICIENCY (7.5 HP - 500 HP)
VHTP=	MAX-VHP™ LV HT VHS TEFC NEMA PREMIUM (15 HP - 800 HP)
VHKP=	MEDIUM VOLTAGE HT WPI NEMA PREMIUM (200 HP - 1000 HP)
VHKTP=	MEDIUM VOLTAGE HT TEFC NEMA PREMIUM (200 HP - 700 HP)
EPV_P=	MAX-E1™ LV NORMAL THRUST VSS ROUND BODY NEMA PREMIUM (7.5 HP - 100 HP)
HBV_P=	MAX-E2/841™ LV NORMAL THRUST VSS ROUND BODY NEMA PREMIUM (7.5 HP - 100 HP)
VSP=	MAX-VSP™ LV HT VSS WPI NEMA PREMIUM (15 HP - 800 HP)
VSTP=	MAX-VSP™ LV HT VSS TEFC NEMA PREMIUM (15 HP - 800 HP)
VSKP=	MEDIUM VOLTAGE HT VSS WPI PREMIUM EFFICIENCY (200 HP - 1000 HP)
VSKTP=	MEDIUM VOLTAGE HT VSS TEFC PREMIUM EFFICIENCY (200 HP - 700 HP)

NEXT 3-4 SPACES (NUMBERS) DESIGNATE THE HORSEPOWER

THE FOLLOWING MOTOR LINES ARE THE ONLY ONES THAT WILL HAVE 4 SPACES: PG, P, JH, KF, JF, VHKP, VSKP

IF FOR ONE OF ABOVE, HP <1000, USE A "0" IN 1ST SPACE -- "0800" = 800 HP (i.g. JH**0800**8)
FOR ALL OTHERS, IF HP IS <100, USE A "0" IN 1ST SPACE SPACE -- "025" = 25 HP (i.g. EP**025**4)
IF HP IS <100, USE A "0" IN THE 1ST SPACE - "075" = 75 HP
IF HP < 1, USE A "0" IN THE 1ST SPACE, FOLLOWED BY A "/", THEN THE NUMBER AFTER THE DECIMAL - "0/2" = 0.25 HP (i.g. DSP**0/2**2)
IF HP HAS A DECIMAL > 1, USE THE WHOLE NUMBER 1ST FOLLOWED BY A "/", THEN THE NUMBER AFTER THE DECIMAL - "7/5" = 7.5 HP (i.g. DTP**7/5**4)

NEXT SPACE (NUMBER) DESIGNATES THE SPEED

2 = 2 POLE = 3600 OR 3000 RPM
4 = 4 POLE = 1800 OR 1500 RPM
6 = 6 POLE = 1200 OR 1000 RPM
8 = 8 POLE = 900 OR 750 RPM

NEXT SPACE IF OCCUPIED

S = 4 POLE MOTOR WITH SHORT SHAFT (TS)
5 = MOTOR STOCKED STANDARD AS 575 VOLT
2 = MOTOR STOCKED STANDARD AS 200 VOLT
R = MOTOR STOCKED STANDARD WITH A DRIVE-END ROLLER BEARING
C = MOTOR STOCKED STANDARD WITH A C-FACE

Notes:

* Product is obsolete.

1. Vertical motor abbreviations: "VHS" stands for "Vertical Hollow Shaft", "VSS" stands for "Vertical Solid Shaft", "LV" stands for "Low Voltage", "HT" stands for "High Thrust".
2. "ODP" stands for "Open Drip Proof".
3. "WPI" stands for "Weather Protected Type I".

CONTACT US

Effective 03-24-17
Supercedes 06-14-15

STOCK MOTOR GROUP	**Customer Service Hours:** 7:00 am to 7:00 pm CST Monday through Friday **Toll Free: 1-800-USE-TECO (873-8326)**	
T-Frame Documents:	tframedocs@tecowestinghouse.com	Drawings, Test Reports, Submittal Requests, Etc.
T-Frame Parts:	tframeparts@tecowestinghouse.com	Stock Parts Quotes and Availability
T-Frame Warranty:	tframewarranty@tecowestinghouse.com	Warranty Support
Customer Service:	customerservice@tecowestinghouse.com	Orders Status, Stock Checks, Quotes, Etc.
Purchase Orders Entry:	orders@tecowestinghouse.com	Stock Orders Only
CONTROLS GROUP	**Phone: 800-279-4007**	
Low Voltage Technical Support	controlstechsupport@tecowestinghouse.com	Technical Support, Submittal Information On Build Up Packages
Low Voltage Warranty	controlswarranty@tecowestinghouse.com	Controls Warranty Support For VFDs, Starters
Purchase Orders Entry	orders@tecowestinghouse.com	Orders Only
CENTRAL PHONE NUMBERS		
Stock Product Group Customer Service	800-USE-TECO (873-8326)	
Controls Group Customer Service	800-279-4007	

After Hours Emergency Line: 24 Hours a Day / 7 Days a Week	
Sales/ Customer Service*:	512-632-7338
Motor Technical Support:	512-538-8771
Drives/ Controls Products Technical Support:	512-633-1513

Notes:

* Additional Fees Apply for After Hours Emergency Sales. For additional details, please contact your Customer Service Representative or Outside Sales Representative for your area.

Customer Service Center Locations:
Spartanburg, South Carolina
Round Rock, Texas

Warehouse Distribution Center Locations:
Spartanburg, South Carolina
Allentown, Pennsylvania
Des Moines, Iowa
Round Rock, Texas
Reno/Sparks, Nevada

SELLING POLICY, STOCK MOTORS

Effective 03-24-17
Supercedes 06-14-15

Terms and Conditions of Sale

TECO-Westinghouse Motor Company (TWMC) hereby gives notice of its objection to any different or additional terms and conditions. Unless different or additional terms are stated in TWMC's proposal, in which event: 1) such different or additional terms shall be exclusive as to the subject covered, 2) the terms and conditions stated below apply, and 3) such terms and conditions supersede any prior or contemporaneous agreements or correspondence between the parties. This sale is expressly conditional on purchaser's assent to the terms and conditions stated below. Purchaser's direction to proceed with any the engineering, manufacture, or shipment of any product is conclusive as to such assent.

Dispatch of the buyers purchase order will constitute an acceptance of the quotation, and an assent to the terms and conditions stated below, if the purchase order agrees with the quotation in respect to all material terms.

Quotations

Each quotation is valid for sixty (60) days from the date of the quotation unless otherwise stated in the quotation.

Minimum Billing

The minimum billing per order shall be $100.00, unless otherwise agreed by TWMC.

Taxes

With the exception of Harbor Maintenance Tax as stated in the following paragraph, TWMC will assume the payment of all taxes and fees assessed by any taxing authority in the United States with respect to this order. Purchaser will assume the payment of all taxes, duties, fees and other charges assessed by any taxing authority in the Purchaser's country or country of ultimate destination with respect to this order.

Under FAS Incoterms it is the buyer's responsibility to clear the goods for export. Accordingly, should the buyer appoint a freight forwarder or agent to effect export on the buyer's instruction, the buyer's freight forwarder is responsible for payment of the US Harbor Maintenance Tax on behalf of the buyer.

Terms of Payment

A. Net 30

For contracts with a total price less than $250,000 and with a shipment date less than 12 months from the date of order, an invoice will be issued when each unit is shipped and the standard terms of payment are net within thirty (30) days from the date of invoice.

B. Progress Payments

For contracts with a total price greater than $250,000 and/or with a shipment date greater than 12 months from the date of order, the following payment terms shall apply.

1. 10% of the contract price shall be invoiced when drawings for approval are issued by TWMC. If drawings for approval are not specified, an invoice will be mailed when construction drawings are issued, but in no event later than 120 days after the date of order.
2. 30% of the price of each unit shall be invoiced seven (7) months prior to the first day of the scheduled shipment month of that unit.
3. 30% of the price of each unit shall be invoiced four (4) months prior to the first day of the scheduled shipment month of that unit.
4. The final 30% of the price of each unit shall be invoiced upon complete shipment of each unit.

   In each of the above instances, the terms of payment are net within 30 days from date of invoice.
5. A separate invoice will be issued concurrently with sections 1,2,3 and 4 for the escalation on that portion of the contract price. The escalation for the portion of the contract involved under 1, 2, 3 and 4 ceases on the date the invoice is issued.

C. Adequate Assurances of Payment

If, in the judgment of TWMC, the financial condition of the purchaser does not justify the terms of payment specified, TWMC may, at its option, require full or partial payment in advance.

Overdue Payments

If payments are not made in accordance with these terms, the quoted price shall, without prejudice to the right of TWMC to immediate payment, be increased by an amount equal to the lesser of 1.5 percent per month or fraction thereof or the highest legal rate of interest on the unpaid balance.

Delivery

Delivery of each item of equipment shall be made FOB Point of Shipment with freight prepaid. Purchaser shall reimburse TWMC for freight charges in an amount equal to the lesser of TWMC's NEMA Frame Freight Policy in effect at the time of shipment or actual freight charges. Such amounts will be paid by purchaser upon presentation of invoice by TWMC.

Force Majeure

TWMC shall not be liable for failure to perform or for delay in performance resulting from any cause beyond TWMC's reasonable control or due to compliance with any regulations, orders, acts, instructions or priority requests of any federal, state or municipal Government, or any department or agency thereof, civil or military authority, acts of God, acts or omissions of the Purchaser, fires, floods, weather, strikes lockouts, factory shutdowns, faulty castings or forgings, embargoes, wars, hostilities, riots, delays or shortages in transportation or inability to obtain labor, manufacturing facilities or material from TWMC's usual sources.

In the event of delay in performance due to any such cause, the date of

delivery or time for completion shall be extended by a period of time reasonably necessary to overcome the effect of such delay, and TWMC shall be reimbursed for any additional expense(s) resulting from such delay. The Purchaser's receipt of products shall constitute a waiver of any claims related to the delay.

Warranty

Standard Warranty

TWMC warrants that the equipment furnished hereunder will be of the kind and quality described in its proposal or contract and will be free of defects in workmanship and material.
Should any failure to conform to this warranty occur within one year after the date of initial operation, or eighteen months after the date of shipment (with respect to custom motors, the stock motor warranty period shall be thirty-six months from the date of manufacture, regardless of the date the motor is placed in operation), whichever is earlier, TWMC shall correct such nonconformity by repairing or replacing the defective part or parts, FOB factory or its designated repair facility at TWMC's option.
The buyer shall not be required to deliver a defective part to the seller if:

1. The part was destroyed as a result of its defect or of any defect in any part covered in this warranty, and
2. The seller is reasonably satisfied that the part was defective at the time of sale. If both these conditions are met the seller shall replace the part in the same manner as if the buyer had delivered it into the seller's plant.

This warranty is conditioned upon the storage, installation, operation, and maintenance of the equipment in accordance with any TWMC recommendations and standard industry practice.
In no event shall TWMC be responsible for:

1. Providing working access to the defect, including the removal disassembly, replacement or reinstallation of any equipment, materials or structures to the extent necessary to permit TWMC to perform its warranty obligations,
2. Transportation costs to and from the TWMC factory or designated repair facility,
3. The conditions of any test shall be mutually agreed upon, and TWMC shall be notified of, and may be present at all tests that may be made,
4. Repairs performed without authorization by TWMC.

Merger Clause

Any representation, warranty, course of dealing, or trade usage not contained or referenced herein shall not be binding on TWMC. This writing, along with any additional parol agreements favoring TWMC, constitutes the entire agreement of the parties on the subject matter hereof. No modification, amendment, recision, waiver, or other change shall be binding on TWMC unless expressly assented to in writing by TWMC.
DISCLAIMER OF WARRANTIES: THE WARRANTIES SET FORTH IN THIS PROVISION ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER STATUTORY, EXPRESS OR IMPLIED (INCLUDING ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT.
The remedies provided above are the Purchaser's sole remedies for any failure of TWMC to comply with its obligations. Correction of any non-conformity in the manner and for the period of time provided above shall constitute complete fulfillment of all the liabilities of TWMC whether the claims of the Purchaser are based in contract, in tort (including negligence or strict liability otherwise with respect to or arising out of the product furnished hereunder.

Limitation of Liability

TWMC, its subcontractors and suppliers of any tier, shall not be liable in contract, in tort (including negligence or strict liability equipment, loss of profits or otherwise) for damage or loss of other property or revenue, loss of use of equipment or power system, cost of capital, cost of purchased or replacement power or temporary equipment (including additional expenses incurred in using, claims of customers of the existing facilities Purchaser, or for any special, indirect, incidental, or consequential damages whatsoever.
The remedies of the Purchaser set forth herein are exclusive and the total cumulative liability of TWMC with respect to any contract, or any action taken in connection therewith such as the performance or breach thereof, or from the manufacture, sale, delivery, resale, or use of any product covered by or furnished under the order, whether in contract, in tort (including negligence or strict liability or otherwise) shall not exceed the price of the product or part on which such liability is based.
The sole purpose of the exclusive remedy stipulated herein shall be to insure that the product furnished is of the kind and quality described in TWMC's proposal or contract, and is free of defects in workmanship and material. This exclusive remedy shall not be deemed to have failed of its essential purpose:

1. as long as TWMC is willing and able to correct defects in the workmanship and material of the product, or, alternatively,
2. if TWMC has expended a combined sum equal to or greater than the purchase price of the product in its attempts to correct defects in the workmanship or material of the product.

SELLING POLICY, STOCK MOTORS - CONTINUED

Patents

Subject to the following provisions, TWMC shall, at its own expense, defend or at its option settle any claim, suit or preceding brought against the Purchaser, and/or its vendees, mediate or immediate, so far as based on an allegation that any goods, material, equipment, device, or article (hereinafter referred to as product) constitutes a direct or contributory infringement of any claim of any patent of the United or any part thereof furnished hereunder States. This obligation shall be effective only if Purchaser shall have made all payments then due hereunder and if TWMC is notified promptly in writing and given authority, information, and assistance for the defense of said claim, suit, or proceeding. TWMC shall pay all damages and costs awarded in such suit or proceeding so defended.

1. In case the product or any part thereof furnished hereunder becomes the subject of any claim, suit, or proceeding for the infringement of any United States patent, or if the use or sale of such product or parts is enjoined, TWMC shall, at its option and its own expense either:
   a. procure for the purchaser the right to continue using said product or part thereof; or
   b. replace it with a non-infringing product; or
   c. modify it so it becomes non-infringing, or
   d. as a last resort remove it and refund the purchase price and the transportation and installation costs thereof.
2. The foregoing indemnity does not apply to the following:
   a. Patented processes performed by the product, or any product produced thereby,
   b. Products supplied according to a design other than that of TWMC's and which is required by the Purchaser,
   c. Combinations of the product with another product not furnished hereunder unless TWMC is a contributory infringer,
   d. Any settlement of a suit or proceeding made without TWMC's written consent.

TWMC shall not be obliged to deliver the products until such insurance, indemnities and waivers have been procured and are legally operative in TWMC's favor, failing which TWMC may rescind the sale without liability. The foregoing states the entire liability of TWMC with respect to patent infringement by said product or any part thereof. If a suit or proceeding is brought against TWMC solely on account of activities enumerated in paragraph 2 a, b, c above, Purchaser agrees to indemnify TWMC in the manner and to the extent TWMC indemnified the Purchaser in the first paragraph of this provision insofar as the terms thereof are appropriate.

Additional Conditions Applicable to Nuclear Applications

1. In the event that the Purchaser or third parties use product or any part thereof, in connection with any activity or process involving nuclear fission or fusion or any use or handling of any source, special nuclear or byproduct material as those materials are defined in the US Atomic Energy Act of 1954 as amended, Purchaser, at no expense to TWMC shall provide or arrange for insurance coverage, indemnities, waivers of liability, recourse and subrogation in such amounts and under such terms and conditions as may be acceptable to TWMC, to protect TWMC (and its subsidiaries, subcontractors or suppliers of any tier) against any and all loss, cost, damage or expense and claims and demands therefore, in contract, in tort or otherwise, including the cost of investigating, litigating and/or settling any such claims or demands, on account of bodily injury, sickness, disease or death to any person or the loss of, loss of use of, or damage to property whether located on or off the site of a nuclear installation, arising out of, or resulting from the radioactive, toxic, explosive or other hazardous properties of source, special nuclear or byproduct materials, as those materials are defined in the US Atomic Energy Act of 1954 as amended.
2. In the event that the Purchaser resells, distributes or in any way relinquishes control of the product or services to a third party, the Purchaser shall require from such third party
   a. compliance with all requirements under 1 above and
   b. assurance that any subsequent Purchaser of the product or services complies with all requirements under 1 above.

Interpretation

All orders shall be interpreted in accordance with the laws of the State of Texas.

TWMC-4500T, Rev. 2, 3/02/17

TECO-WESTINGHOUSE STOCK MOTOR AND CONTROL PRODUCTS WARRANTY POLICY

Effective 03-24-17
Supercedes 06-14-15

STANDARD WARRANTY INFORMATION

All TECO-Westinghouse brand Stock Motors and Low Voltage Control Products, such as Solid State Starters and AC Drives, ("control products") sold by TECO-Westinghouse Motor Company ("TWMC") are warranted to be free from defects in material and workmanship for a period of 36 months from the date of manufacture. A warranty of 36 months from the date of sale is applicable when a TWMC Low Voltage Control Product and a TWMC Inverter Duty Motor are purchased together. All MAX-E2/841® motors have a 5 year warranty.

This warranty is conditioned upon the installation, operation, and maintenance of the motors and control products in accordance with TECO-Westinghouse Motor Company's recommendations or standard industry practice, and the motors and control products have at all times been operated or used under normal operating conditions for which they were designed. This warranty will not be applicable to products that have been altered without written permission from TWMC.

TWMC shall, at its sole option and expense, either repair or replace, FOB warehouse or TWMC designated service center, any such motor, motor part, or control product which is defective within the warranty period.

In the event of warranty claims, TWMC must be notified promptly following any motor or control product failure. The motor or control product shall be sent to a TWMC authorized service center for diagnosis on the cause of failure. For motor and control products if the failure is due to defective material and/or workmanship, TWMC will replace or repair the defective motor, motor part, or control product at its discretion.

The repair or replacement of defective material and workmanship shall constitute complete fulfillment of TECO-Westinghouse Motor Company's warranty liability whether the warranty claims are based on contract, tort (including negligence and strict liability), or otherwise. **THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, AND ALL WARRANTIES ARISING FROM COURSE OF DEALING AND USAGE OF TRADE. UNDER NO CIRCUMSTANCES SHALL TECO-WESTINGHOUSE MOTOR COMPANY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING FREIGHT.**

STOCK MOTOR AND CONTROL PRODUCTS RETURN POLICY

All returned goods are subject to prior approval and must be accompanied by a Return Material Authorization (RMA) number. These goods must be returned within 90 days, freight prepaid, in resalable condition and in original packaging. A 15% restocking fee will be applied. If upon receipt of the RMA, goods are deemed not to be in resalable condition or in original packaging, then additional fees will be applied. **RETURNS ON MODIFIED MOTORS OR CONTROL PRODUCTS WILL NOT BE ALLOWED.**

PROCEDURE FOR WARRANTY CLAIMS ON STOCK MOTORS

Effective 03-24-17
Supercedes 06-14-15

WARRANTY CLAIMS

In the event of warranty claims, TECO-Westinghouse Motor Company must be notified promptly prior to any repairs or replacement of failed motors and/or motor components. Original purchase information will be requested. The failed motor shall be sent to a TECO-Westinghouse authorized service center for diagnosis on the cause of the failure. EASA Certified Shops can be found at **EASA.com** using the "find a member" search feature. If the failure is due to defective material and/or workmanship, TWMC shall, at its sole option, either repair on a straight time bases, issue credit, or replace, FOB Warehouse any such motor or component that is defective within the warranty period. Failure to notify TWMC prior to performing repairs or providing replacements will result in denial of warranty claims.

Contact the TWMC Warranty Department at (**512) 218-7475**.
or via email - **tframewarranty@tecowestinghouse.com**

AUTHORIZED SERVICE

Authorized service centers shall contact TWMC's Warranty Department for serial number verification to determine warranty status of the motor. If the motor is within the original warranty period, the service center shall dismantle and inspect the motor, and prepare a standard EASA Warranty Repair Report. Fax the report to TWMC's Warranty Department at **(512) 218-7378** for review of the failure and determination if the failure will be covered under terms of the TWMC standard warranty.

WARRANTY DETERMINATION

If the motor failure is determined to be a warranty failure, a Warranty Claim Authourization (WCA) number will be assigned to the claim. The WCA number represents the credit memo number for any motor not repaired, as well as the purchase order number for inspection, and/or repair charges for motors to be replaced or repaired. Charges for inspections and/or repairs to motors outside the warranty period or for failures not resulting from material or workmanship issues are the sole responsibility of the end user.

For Warranty Repairs: The original EASA Warranty Repair Report, along with pictures documenting the failure, shall be submitted to the TWMC's Warranty Department, along with an invoice for all repair charges. All reports and invoices submitted require an RMA number for processing. Claims submitted without RMA numbers will be denied.

For Warranty Credit: The original EASA Warranty Repair Report, pictures, invoice and the original nameplate off the motor must be returned to TWMC's Warranty Department prior to issuance of credit. All claims and invoices submitted require an WCA number for processing. Claims submitted without WCA numbers will be denied. An invoice must be received for payment of inspection charges. Invoice only for inspection charges. Credit will be issued to the buyers account for any motor determined not repairable.

Request for warranty replacements: In special circumstances, TWMC's Warranty Department can approve replacement orders, if an exact replacement motor/component is in stock. If a warranty replacement motor is needed and approved, a new purchase order, with reference to the warranty claim number will need to be emailed to **orders@tecowestinghouse.com** for processing and shipment. All such orders will be shipped FOB warehouse, and the customer will receive an invoice for the replacement. Upon receipt of the nameplate off the original failed motor, credit will be issued for the failed motor. Freight is not covered under warranty.

NOTE: If the cause of the failure is determined to not be a result of manufacturer's defect or workmanship, all expenses associated with inspection, repair, etc., will be the responsibility of others.

See page xxx for Control Products Return Procedure.

MOTOR AND DRIVE COMBINATION PACKAGES

Effective 03-24-17
Supercedes 06-14-15

Premium Efficient Motor and Drive Combination Packages developed for both constant and variable torque applications

APPLICABLE MOTORS

- Rolled Steel and Cast Iron ODP
  - 143T through 5009B Frame
  - 1 to 500 HP
  - 1200, 1800, and 3600 RPM
- MAX-E1® type AEHE, AEHH8N
  - 143T through 6808B Frame
  - 1 to 800 HP
  - 900, 1200, 1800, and 3600 RPM

APPLICABLE VARIABLE FREQUENCY DRIVES PRODUCTS

- EQ7 or A510 Drives for Constant Torque Applications
- EQ7 or F 510 Drives for Variable Torque Applications
- 230VAC to 125 HP, 460VAC to 800 HP

- **Single Source Reliability**
- **Additional 5% Discount when purchasing matching motor and drive sets**
- **5 Year Warranty valid on all combination packages.**
- **Select any combination of ODP or MAX-E1® premium Efficient Motors with any power-matched A510, F510, or EQ7 VFD**

**** Use Promo Code "MIPKG2017" when placing motor and Drive Order ****

ASGHPE, NEMA PREMIUM, F#56 (1/4 HP - 3 HP) [DSP]
ASGH, NEMA PREMIUM, F#140T - 280T (1 HP - 40 HP) [DTP]
ASGA, HIGH EFFICIENCY, F#56 (1/3 HP - 3 HP) [DS]
ASGHJP/JM, NEMA PREMIUM, CLOSE COUPLED, (1 HP - 40 HP) [DJPP/DJMP]
ASGAJP/JM, HIGH EFFICIENCY, CLOSE COUPLED, (1 HP - 40 HP)[DJP/DJM]*

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- HVAC Equipment
- Compressors
- Fire Pumps*

FIRE SAFETY

FEATURES:

- Output Range: 1/3 - 40 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Open Drip Proof (IP22)
- Voltage: 230/460V (Usable on 200 & 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Rolled Steel Frame and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Premium - Blue - Munsell 5PB 3/8
High Efficient - Light Gray - Munsell N5.0
- Double Shielded Bearings Pre-Packed with MULTEMP SRL (Non-regreasable)
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(3,4)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP and Larger
- Motors are U.L. Recognized for United States and Canada, CSA Approved and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

* Fire Pump available. See product page for more details.
(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

ROLLED STEEL ODP PREMIUM

ASGHPE, NEMA PREMIUM, F#56 (1/4 HP - 3 HP) [DSP]
ASGH, NEMA PREMIUM, F#140T - 280T (1 HP - 40 HP) [DTP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
DSP0/22	1/4	3600	56	72.0	82.0	0.79	19	243
DSP0/24	1/4	1800	56	72.0	73.0	0.89	20	259
DSP0/26	1/4	1200	56	70.0	61.0	1.10	24	348
DSP0/32	1/3	3600	56	71.5	80.5	1.08	21	243
DSP0/34	1/3	1800	56	75.5	74.5	1.11	22	259
DSP0/36	1/3	1200	56	72.0	61.0	1.42	22	348
DSP0/52	1/2	3600	56	73.4	81.5	1.57	22	259
DSP0/54	1/2	1800	56	78.2	81.0	1.48	22	285
DSP0/56	1/2	1200	56	75.5	63.0	1.97	23	378
DSP0/72	3/4	3600	56	76.8	80.0	2.29	35	291
DSP0/74	3/4	1800	56	81.1	77.5	2.23	23	316
DSP0/76	3/4	1200	56	81.7	67.5	2.55	26	384
DSP0012	1	3600	56	77.0	79.5	3.06	25	338
DTP0012	1	3600	143T	80.0	85.5	2.74	34	356
DSP0014	1	1800	56	83.5	72.0	3.11	25	338
DTP0014	1	1800	143T	85.5	75.5	2.90	42	356
DSP0016	1	1200	56	82.5	66.0	3.44	32	400
DTP0016	1	1200	145T	82.5	66.0	3.44	43	460
DSP1/52	1.5	3600	56	85.5	83.0	3.96	26	362
DTP1/52	1.5	3600	143T	85.5	83.0	3.96	34	380
DSP1/54	1.5	1800	56	86.5	80.5	4.03	30	362
DTP1/54	1.5	1800	145T	86.5	80.5	4.03	47	394
DTP1/56	1.5	1200	182T	86.5	54.0	6.01	94	487
DSP0022	2	3600	56	86.5	85.0	5.09	28	384
DTP0022	2	3600	145T	85.5	89.0	4.92	42	429
DSP0024	2	1800	56	86.5	79.0	5.48	35	384
DTP0024	2	1800	145T	86.5	79.0	5.48	47	418
DTP0026	2	1200	184T	87.5	57.0	7.51	94	533
DSP0032	3	3600	56	86.5	89.0	7.30	36	464
DTP0032	3	3600	145T	85.5	86.0	7.64	42	479
DSP0034	3	1800	56	86.9	80.0	8.08	53	415
DTP0034	3	1800	182T	89.5	73.0	8.60	94	460
DTP0036	3	1200	213T	88.5	69.0	9.20	158	744
DTP0052	5	3600	182T	87.5	88.0	12.2	94	543
DTP0054	5	1800	184T	89.5	77.0	13.6	94	576
DTP0056	5	1200	215T	89.5	73.0	14.3	158	898
DTP7/52	7.5	3600	184T	88.5	90.0	17.6	94	715
DTP7/54	7.5	1800	213T	91.0	81.0	19.1	158	826
DTP7/56	7.5	1200	254T	90.2	77.0	20.2	292	1,340
DTP0102	10	3600	213T	90.2	85.5	24.3	158	898
DTP0104	10	1800	215T	91.7	84.0	24.3	158	979
DTP0106	10	1200	256T	91.7	79.5	25.7	292	1,531
DTP0152	15	3600	215T	91.0	87.0	35.5	158	1,202
DTP0154	15	1800	254T	93.0	83.0	36.4	230	1,349
DTP0156	15	1200	284T	91.7	80.0	38.3	344	2,047
DTP0202	20	3600	254T	91.7	90.0	45.4	292	1,565
DTP0204	20	1800	256T	93.0	83.0	48.5	292	1,667
DTP0206	20	1200	284T	92.4	81.5	49.4	344	2,481
DTP0252	25	3600	256T	91.7	91.0	56.1	292	1,857
DTP0254	25	1800	284T	93.6	85.0	58.8	344	2,060
DTP0302	30	3600	284TS	92.4	90.0	67.6	344	2,296
DTP0304	30	1800	286T	94.1	86.0	69.4	415	2,421
DTP0402	40	3600	286TS	92.4	90.5	89.6	415	2,939

Notes:

(1) DSP0034 is not the same or equivalent (different frame) to DS0034. Shaft diameters are different.

(2) All data subject to change without notice.

ASGA, HIGH EFFICIENCY, F#56 (1/3 HP - 3 HP) [DS]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING WT. (lbs.)	FIRE PUMP LIST PRICE ($)
DS0/32	1/3	3600	A56	68.0	73.8	1.24	21	230
DS0/34	1/3	1800	A56	75.5	73.0	1.13	22	246
DS0/36	1/3	1200	A56	75.5	67.2	1.23	22	330
DS0/52	1/2	3600	A56	72.0	73.8	1.76	22	246
DS0/54	1/2	1800	A56	77.0	68.8	1.77	22	270
DS0/56	1/2	1200	A56	75.5	65.5	1.89	23	359
DS0/72	3/4	3600	A56	75.5	74.2	2.51	35	276
DS0/74	3/4	1800	A56	75.5	70.0	2.66	23	300
DS0/76	3/4	1200	A56	75.5	63.2	2.94	26	364
DS0012	1	3600	A56	74.0	74.0	3.40	25	321
DS0014	1	1800	A56	77.0	75.8	3.20	25	321
DS0016	1	1200	A56	77.0	70.8	3.40	32	380
DS1/52	1.5	3600	A56	77.0	79.2	4.60	26	344
DS1/54	1.5	1800	A56	80.0	80.0	4.40	30	344
DS0022	2	3600	A56	80.0	80.5	5.80	28	364
DS0024	2	1800	B56	81.5	82.0	5.60	35	364
DS0032	3	3600	B56	82.5	85.0	8.00	36	440
DS0034	3	1800	56HZ	86.5	80.5	8.00	53	415

Notes:

(1) Per DOE regulations, this High Efficiency motor line inventory will be available through June 2018, or until current inventory has been depleted. Whichever occurs first.
(2) Once product listed on this page has been depleted from current stock, that model becomes obsolete and can not be re-ordered.
(3) Please see our new line of Premium Efficient 56 frame Rolled Steel ODP motors on page 16.
(4) DSP0034 is not the same or equivalent (different frame) to DS0034. Shaft diameters are different.
(5) All data subject to change without notice.

ROLLED STEEL ODP JP/JM PREMIUM

ASGHJP/JM, NEMA PREMIUM, CLOSE COUPLED, (1 HP - 40 HP) [DJPP/DJMP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.		HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING WT. (lbs.)		LIST PRICE ($)
JP	JM							JP	JM	
DJPP0014	DJMP0014	1	1800	143JP/JM	85.5	75.5	2.90	40	40	426
DJPP0016	DJMP0016	1	1200	145JP/JM	82.5	66.0	3.44	45	45	530
DJPP1/52	DJMP1/52	1.5	3600	143JP/JM	85.5	83.0	3.96	40	40	452
DJPP1/54	DJMP1/54	1.5	1800	145JP/JM	86.5	80.5	4.03	47	47	471
DJPP1/56	DJMP1/56	1.5	1200	182JP/JM	86.5	54.0	6.01	90	83	551
DJPP0022	DJMP0022	2	3600	145JP/JM	86.5	85.0	5.09	45	45	474
DJPP0024	DJMP0024	2	1800	145JP/JM	86.5	79.0	5.48	50	49	474
DJPP0026	DJMP0026	2	1200	184JP/JM	87.5	57.0	7.51	93	89	611
DJPP0032	DJMP0032	3	3600	145JP/JM	85.5	86.0	7.64	50	50	554
DJPP0034	DJMP0034	3	1800	182JP/JM	89.5	73.0	8.60	113	95	534
DJPP0036	DJMP0036	3	1200	213JP/JM	88.5	69.0	9.20	155	146	854
DJPP0052	DJMP0052	5	3600	182JP/JM	87.5	88.0	12.2	95	78	685
DJPP0054	DJMP0054	5	1800	184JP/JM	89.5	77.0	13.6	113	108	630
DJPP0056	DJMP0056	5	1200	215JP/JM	89.5	73.0	14.3	155	146	1,183
DJPP7/52	DJMP7/52	7.5	3600	184JP/JM	88.5	90.0	17.6	100	78	840
DJPP7/54	DJMP7/54	7.5	1800	213JP/JM	91.0	81.0	19.1	155	140	904
DJPP7/56	DJMP7/56	7.5	1200	254JP/JM	90.2	77.0	20.2	265	265	1,463
DJPP0102	DJMP0102	10	3600	213JP/JM	90.2	85.5	24.3	167	165	1,060
DJPP0104	DJMP0104	10	1800	215JP/JM	91.7	84.0	24.3	180	150	1,008
DJPP0106	DJMP0106	10	1200	256JP/JM	91.7	79.5	25.7	290	275	1,706
DJPP0152	DJMP0152	15	3600	215JP/JM	91.0	87.0	35.5	167	165	1,400
DJPP0154	DJMP0154	15	1800	254JP/JM	93.0	83.0	36.4	265	257	1,492
DJPP0156	DJMP0156	15	1200	284JP/JM	91.7	80.0	38.3	375	365	2,179
DJPP0202	DJMP0202	20	3600	254JP/JM	91.7	90.0	45.4	265	250	1,782
DJPP0204	DJMP0204	20	1800	256JP/JM	93.0	83.0	48.5	275	265	1,858
DJPP0206	DJMP0206	20	1200	284JP/JM	92.4	81.5	49.7	410	405	2,769
DJPP0252	DJMP0252	25	3600	256JP/JM	91.7	91.0	56.1	300	275	2,115
DJPP0254	DJMP0254	25	1800	284JP/JM	93.6	85.0	58.8	375	365	2,190
DJPP0302	DJMP0302	30	3600	284JP/JM	92.4	90.0	67.6	370	350	2,464
DJPP0304	DJMP0304	30	1800	286JP/JM	94.1	86.0	69.4	395	370	2,567
DJPP0402	DJMP0402	40	3600	286JP/JM	92.4	90.5	89.6	395	370	3,217

Notes:
(1) All data subject to change without notice.

ROLLED STEEL ODP JP/JM

ASGAJP/JM, HIGH EFFICIENCY, CLOSE COUPLED, (1 HP - 40 HP)[DJP/DJM]

Effective 03-24-17
Supercedes 06-14-15

FIRE SAFETY

CATALOG NO.		HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING WT. (lbs.)		LIST PRICE ($)	FIRE PUMP CATALOG NO.	FIRE PUMP LIST PRICE ($)
JP	JM							JP	JM			
DJP0014	DJM0014	1	1800	143JP/JM	82.5	78.5	2.90	40	40	426	DJP0014FP	469
DJP0016	DJM0016	1	1200	145JP/JM	80.0	72.5	3.20	45	45	534	DJP0016FP	587
DJP1/52	DJM1/52	1.5	3600	143JP/JM	82.5	82.8	4.10	40	40	464	DJP1/52FP	510
DJP1/54	DJM1/54	1.5	1800	145JP/JM	84.0	84.0	4.00	47	47	464	DJP1/54FP	510
DJP1/56P	DJM1/56	1.5	1200	182JP/JM	84.0	55.0	6.08	90	83	551	DJP1/56PFP	606
DJP0022	DJM0022	2	3600	145JP/JM	84.0	83.5	5.30	45	45	474	DJP0022FP	521
DJP0024	DJM0024	2	1800	145JP/JM	84.0	81.0	5.50	50	49	474	DJP0024FP	521
DJP0026	DJM0026	2	1200	184JP/JM	85.5	62.0	7.10	93	89	611	DJP0026FP	672
DJP0032	DJM0032	3	3600	145JP/JM	84.0	87.0	7.70	50	50	601	DJP0032FP	661
DJP0034	DJM0034	3	1800	182JP/JM	86.5	78.0	8.30	113	95	534	DJP0034FP	587
DJP0036	DJM0036	3	1200	213JP/JM	86.5	71.0	9.20	155	146	854	DJP0036FP	939
DJP0052	DJM0052	5	3600	182JP/JM	85.5	90.0	12.2	95	78	747	DJP0052FP	822
DJP0054	DJM0054	5	1800	184JP/JM	87.5	81.5	13.1	113	108	630	DJP0054FP	693
DJP0056	DJM0056	5	1200	215JP/JM	87.5	72.0	14.9	155	146	1,183	DJP0056FP	1,301
DJP7/52	DJM7/52	7.5	3600	184JP/JM	87.5	91.0	17.6	100	78	891	DJP7/52FP	980
DJP7/54	DJM7/54	7.5	1800	213JP/JM	88.5	85.0	18.7	155	140	906	DJP7/54FP	997
DJP7/56	DJM7/56	7.5	1200	254JP/JM	88.5	81.0	19.6	265	265	1,463	DJP7/56FP	1,609
DJP0102	DJM0102	10	3600	213JP/JM	88.5	88.0	24.0	167	165	1,145	DJP0102FP	1,260
DJP0104	DJM0104	10	1800	215JP/JM	89.5	86.5	24.2	180	150	1,008	DJP0104FP	1,109
DJP0106	DJM0106	10	1200	256JP/JM	90.2	81.0	25.6	290	275	1,706	DJP0106FP	1,877
DJP0152	DJM0152	15	3600	215JP/JM	89.5	87.5	35.9	167	165	1,511	DJP0152FP	1,662
DJP0154	DJM0154	15	1800	254JP/JM	91.0	88.0	35.1	265	257	1,492	DJP0154FP	1,641
DJP0156	DJM0156	15	1200	284JP/JM	90.2	83.0	37.5	375	365	2,179	DJP0156FP	2,397
DJP0202	DJM0202	20	3600	254JP/JM	90.2	91.0	45.6	265	250	1,782	DJP0202FP	1,960
DJP0204	DJM0204	20	1800	256JP/JM	91.0	88.0	46.8	275	265	1,858	DJP0204FP	2,044
DJP0206	DJM0206	20	1200	284JP/JM	91.0	84.0	49.0	410	405	2,791	DJP0206FP	3,070
DJP0252	DJM0252	25	3600	256JP/JM	91.0	91.0	56.5	300	275	2,171	DJP0252FP	2,388
DJP0254	DJM0254	25	1800	284JP/JM	91.7	86.0	59.4	375	365	2,190	DJP0254FP	2,409
DJP0302	DJM0302	30	3600	284JP/JM	91.0	89.0	69.4	370	350	2,464	DJP0302FP	2,710
DJP0304	DJM0304	30	1800	286JP/JM	92.4	86.5	70.3	395	370	2,567	DJP0304FP	2,824
DJP0402	DJM0402	40	3600	286JP/JM	91.7	88.0	92.8	395	370	3,363	DJP0402FP	3,699

Notes:

* Fire Pump available as made to order. Fire Pump Certificate complies with ANSI/UL 1004-5. Certificate# 20120717 – EX6569.

(1) Delivery for Fire Pump Duty motor (Catalog Number + FP) is standard 5 - 10 working days after receipt of order if standard motor is in stock; Painting to Fire Safety Red requirement on Fire Pump Duty type motor can be waived in order to expedite delivery upon request.

(2) Fire Pump Duty Motor pricing includes: adding UL nameplate, restamping original nameplate to new "DHP_FP" catalog number, and Fire Safety Red Paint.

(3) Per DOE regulations, this High Efficiency motor line inventory will be available through June 2018, or until current inventory has been depleted. Whichever occurs first.

(4) Once product listed on this page has been depleted from current stock, that model becomes obsolete and can not be re-ordered.

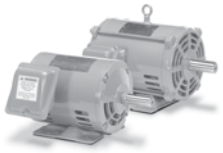
(5) Please see our new line of Premium Efficient JP/JM Rolled Steel ODP motors on page 18.

(6) All data subject to change without notice.

ROLLED STEEL ODP AEGIS® SGR

ASGH, NEMA PREMIUM WITH AEGIS® SGR [DTP_G]

Effective 03-24-17
Supercedes 06-14-15



APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- HVAC Equipment

The AEGIS® SGR Bearing Protection Ring prevents electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground. Using proprietary Electron Transport Technology™, the conductive microfibers inside the AEGIS® SGR provide the most reliable current diversion technology for shaft grounding with a "path of least resistance" to dramatically extend motor life. AEGIS® SGR Rings have a warranty of 1 year.

FEATURES:

- Output Range: 1 - 40 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Open Drip Proof (IP22)
- Voltage: 230/460V (Usable on 200 & 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Grounding Ring Factory Installed Externally on DE Bracket
- Class F Insulation
- NEMA Design B Torques
- Rolled Steel Frame and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Double Shielded Bearings Pre-Packed with MULTEMP SRL (Non-regreasable)
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(3,4)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP and Larger
- Motors are U.L. Recognized for United States and Canada, CSA Approved and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

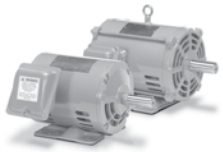
Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(5) AEGIS® SGR Bearing Protection Ring can not be used in Hazardous Locations (i.e. Class I, Div. 2, etc.)

ROLLED STEEL ODP AEGIS® SGR

ASGH, NEMA PREMIUM WITH AEGIS® SGR [DTP_G]

Effective 03-24-17
Supercedes 06-14-15



CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
DTP0012G	1	3600	143T	80.0	85.5	2.74	34	453
DTP0014G	1	1800	143T	85.5	75.5	2.90	42	450
DTP0016G	1	1200	145T	82.5	66.0	3.44	43	570
DTP1/52G	1.5	3600	143T	85.5	83.0	3.96	34	479
DTP1/54G	1.5	1800	145T	86.5	80.5	4.03	47	489
DTP1/56G	1.5	1200	182T	86.5	54.0	6.01	94	629
DTP0022G	2	3600	145T	85.5	89.0	4.92	42	528
DTP0024G	2	1800	145T	86.5	79.0	5.48	47	517
DTP0026G	2	1200	184T	87.5	57.0	7.51	94	700
DTP0032G	3	3600	145T	85.5	86.0	7.64	42	587
DTP0034G	3	1800	182T	89.5	73.0	8.60	94	595
DTP0036G	3	1200	213T	88.5	69.0	9.20	158	975
DTP0052G	5	3600	182T	87.5	88.0	12.2	94	684
DTP0054G	5	1800	184T	89.5	77.0	13.6	94	714
DTP0056G	5	1200	215T	89.5	73.0	14.3	158	1,196
DTP7/52G	7.5	3600	184T	88.5	90.0	17.6	94	871
DTP7/54G	7.5	1800	213T	91.0	81.0	19.1	158	1,003
DTP7/56G	7.5	1200	254T	90.2	77.0	20.2	292	1,574
DTP0102G	10	3600	213T	90.2	85.5	24.3	158	1,085
DTP0104G	10	1800	215T	91.7	84.0	24.3	158	1,165
DTP0106G	10	1200	256T	91.7	79.5	25.7	292	1,761
DTP0152G	15	3600	215T	91.0	87.0	35.5	158	1,405
DTP0154G	15	1800	254T	93.0	83.0	36.4	230	1,584
DTP0156G	15	1200	284T	91.7	80.0	38.3	344	2,331
DTP0202G	20	3600	254T	91.7	90.0	45.4	292	1,817
DTP0204G	20	1800	256T	93.0	83.0	48.5	292	1,916
DTP0206G	20	1200	286T	92.4	81.5	49.4	344	2,797
DTP0252G	25	3600	256T	91.7	91.0	56.1	292	2,115
DTP0254G	25	1800	284T	93.6	85.0	58.8	344	2,346
DTP0302G	30	3600	284TS	92.4	90.0	67.6	344	2,572
DTP0304G	30	1800	286T	94.1	86.0	69.4	415	2,723
DTP0402G	40	3600	286TS	92.4	90.5	89.6	415	3,248

Notes:

(1) AEGIS® SGR Rings have a warranty of 1 year.
(2) All data subject to change without notice.

CAST IRON ODP

ASHH, NEMA PREMIUM [DHP]*

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- HVAC Equipment
- Fire Pumps*

FIRE SAFETY

FEATURES:

- Output Range: 1 - 800 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Open Drip Proof (IP22)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Cast Iron Frame and End Brackets
- Rolled Steel Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Light Gray - Munsell N5.0
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140T - 280T (Non-regreasable)
- High Quality Ball (or Roller) Bearings regreasable with Mobil Polyrex™ EM Grease for F# 280TS and Larger
- Labyrinth Type Metal Flinger on Both Ends for F# 280TS and Larger
- Cast Iron Inner and Outer Bearing Caps for F#280TS and Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- 6 Leads for 150 HP and Larger
- Motors are U.L. Recognized, CSA Approved and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

* Fire Pump available. See product page for more details.

(1) Available in 575V. TWMC carries minimal 575V stock; please check availability to ensure required motors are in stock. Ratings may be available from our Canadian warehouses and/or our factory. Pricing and leadtime may vary.

(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.

(3) Consult a Stock Product Application Specialist for suitability in higher elevations.

(4) Motor service factor is 1.0 when operated on a VFD.

(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

CAST IRON ODP

ASHH, NEMA PREMIUM [DHP]*

Effective 03-24-17
Supercedes 06-14-15

FIRE SAFETY

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)	FIRE PUMP CATALOG NO.	LIST PRICE ($)
DHP0014	1	1800	143T	85.5	78.0	1.41	54	375	DHP0014FP	413
DHP0016	1	1200	145T	82.5	65.5	1.74	75	484	DHP0016FP	532
DHP1/52	1.5	3600	143T	85.5	80.0	2.06	50	400	DHP1/52FP	440
DHP1/54	1.5	1800	145T	86.5	80.5	2.02	60	415	DHP1/54FP	457
DHP1/56	1.5	1200	182T	87.5	63.0	2.55	123	513	DHP1/56FP	564
DHP0022	2	3600	145T	85.5	84.5	2.59	57	452	DHP0022FP	497
DHP0024	2	1800	145T	86.5	79.5	2.72	58	440	DHP0024FP	484
DHP0026	2	1200	184T	87.5	71.0	3.01	130	561	DHP0026FP	617
DHP0032	3	3600	145T	87.5	87.0	3.69	66	504	DHP0032FP	554
DHP0034	3	1800	182T	89.5	81.0	3.88	117	484	DHP0034FP	532
DHP0036	3	1200	213T	88.5	77.0	4.12	183	783	DHP0036FP	861
DHP0052	5	3600	182T	87.5	91.0	5.90	120	572	DHP0052FP	629
DHP0054	5	1800	184T	89.5	84.5	6.19	145	606	DHP0054FP	667
DHP0056	5	1200	215T	89.5	79.0	6.62	195	945	DHP0056FP	1,040
DHP7/52	7.5	3600	184T	88.5	91.5	8.65	134	753	DHP7/52FP	828
DHP7/54	7.5	1800	213T	91.0	86.0	8.97	187	869	DHP7/54FP	956
DHP7/56	7.5	1200	254T	90.2	79.0	9.85	260	1,410	DHP7/56FP	1,551
DHP0102	10	3600	213T	90.2	88.0	11.8	190	945	DHP0102FP	1,040
DHP0104	10	1800	215T	91.7	87.0	11.7	215	1,030	DHP0104FP	1,133
DHP0106	10	1200	256T	91.7	81.0	12.6	329	1,612	DHP0106FP	1,773
DHP0152	15	3600	215T	90.2	87.5	17.8	220	1,265	DHP0152FP	1,392
DHP0154	15	1800	254T	93.0	84.5	17.9	247	1,420	DHP0154FP	1,562
DHP0156	15	1200	284T	91.7	83.0	18.5	367	2,155	DHP0156FP	2,371
DHP0202	20	3600	254T	91.0	90.5	22.8	233	1,647	DHP0202FP	1,812
DHP0204	20	1800	256T	93.0	86.5	23.3	350	1,755	DHP0204FP	1,931
DHP0206	20	1200	286T	92.4	83.5	24.3	392	2,612	DHP0206FP	2,873
DHP0252	25	3600	256T	91.7	92.0	27.7	317	1,955	DHP0252FP	2,151
DHP0254	25	1800	284T	93.6	87.0	28.7	352	2,168	DHP0254FP	2,385
DHP0256	25	1200	324T	93.0	83.0	30.3	640	3,240	DHP0256FP	3,564
DHP0302	30	3600	284TS	92.4	90.5	33.6	405	2,417	DHP0302FP	2,659
DHP0304	30	1800	286T	94.1	87.0	34.3	429	2,548	DHP0304FP	2,803
DHP0306	30	1200	326T	93.6	83.5	35.9	568	3,641	DHP0306FP	4,005
DHP0402	40	3600	286TS	92.4	91.5	44.3	442	3,094	DHP0402FP	3,403
DHP0404	40	1800	324T	94.1	86.0	46.3	608	3,159	DHP0404FP	3,475
DHP0406	40	1200	364T	94.1	87.0	45.7	835	4,543	DHP0406FP	4,997
DHP0502	50	3600	324TS	93.0	86.0	58.5	552	3,810	DHP0502FP	4,191
DHP0504	50	1800	326T	94.5	85.0	58.3	629	3,541	DHP0504FP	3,895
DHP0506	50	1200	365T	94.1	86.0	57.8	766	5,383	DHP0506FP	5,921
DHP0602	60	3600	326TS	93.6	87.0	69.0	614	4,479	DHP0602FP	4,927
DHP0604	60	1800	364T	95.0	85.0	69.6	735	4,492	DHP0604FP	4,941
DHP0606	60	1200	404T	94.5	85.5	69.5	1,100	6,448	DHP0606FP	7,115
DHP0752	75	3600	364TS	94.1	90.5	82.5	704	5,950	DHP0752FP	6,545
DHP0754	75	1800	365T	95.0	86.0	86.0	850	5,322	DHP0754FP	5,854
DHP0754R	75	1800	365T	95.0	86.0	86.0	850	5,322	DHP0754RFP	5,854
DHP0756	75	1200	405T	94.5	86.5	86.0	1,210	7,752	DHP0756FP	8,527
DHP0756R	75	1200	405T	94.5	86.5	86.0	1,210	7,752	DHP0756RFP	8,527

Notes:

* Fire Pump available as made to order. Fire Pump Certificate complies with ANSI/UL 1004-5. Certificate# 20120717 – EX6569.

(1) Delivery for Fire Pump Duty motor (Catalog Number + FP) is standard 5 - 10 working days after receipt of order if standard motor is in stock; Painting to Fire Safety Red requirement on Fire Pump Duty type motor can be waived in order to expedite delivery upon request.

(2) Fire Pump Duty Motor pricing includes: adding UL nameplate, restamping original nameplate to new "DHP_FP" catalog number, and Fire Safety Red Paint.

(3) To order 575V, add "5" to the end of Catalog Number, for example: "DHP00545" for 5 HP, 1800 RPM, 575V.

(4) "R" = Motor stocked standard with a Drive-End Roller Bearing.

(5) All data subject to change without notice.

ASHH, NEMA PREMIUM [DHP] continued...*

Effective 03-24-17
Supercedes 06-14-15

FIRE SAFETY

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)	FIRE PUMP CATALOG NO.	LIST PRICE ($)
DHP1002	100	3600	365TS	94.1	90.5	110	761	7,892	DHP1002FP	8,681
DHP1004	100	1800	404T	95.4	85.5	115	961	6,827	DHP1004FP	7,510
DHP1004R	100	1800	404T	95.4	85.5	115	961	6,827	DHP1004RFP	7,510
DHP1006	100	1200	444T	95.0	82.0	120	1,350	11,276	DHP1006FP	12,404
DHP1006R	100	1200	444T	95.0	82.0	120	1,350	11,276	DHP1006RFP	12,404
DHP1252	125	3600	404TS	94.1	90.5	137	907	9,996	DHP1252FP	10,996
DHP1254	125	1800	405T	95.4	84.5	145	1,109	8,554	DHP1254FP	9,409
DHP1254R	125	1800	405T	95.4	84.5	145	1,109	8,554	DHP1254RFP	9,409
DHP1256	125	1200	445T	95.0	82.0	150	1,605	13,195	DHP1256FP	14,515
DHP1256R	125	1200	445T	95.0	82.0	150	1,605	13,195	DHP1256RFP	14,515
DHP1502	150	3600	405TS	94.5	90.5	164	1,003	12,107	DHP1502FP	13,318
DHP1504	150	1800	444T	95.8	86.0	170	1,540	11,448	DHP1504FP	12,593
DHP1504R	150	1800	444T	95.8	86.0	170	1,540	11,448	DHP1504RFP	12,593
DHP1506	150	1200	445T	95.4	82.5	178	1,705	15,616	DHP1506FP	17,178
DHP1506R	150	1200	445T	95.4	82.5	178	1,705	15,616	DHP1506RFP	17,178
DHP2002	200	3600	444TS	95.0	88.5	223	1,324	15,681	DHP2002FP	17,249
DHP2004	200	1800	445T	95.8	86.5	226	1,577	14,014	DHP2004FP	15,415
DHP2006	200	1200	447T	95.4	83.0	236	2,010	20,785	DHP2006FP	22,864
DHP2006R	200	1200	447T	95.4	83.0	236	2,010	20,785	DHP2006RFP	22,864
DHP2502	250	3600	445TS	95.0	88.5	278	1,470	19,069	DHP2502FP	20,976
DHP2504	250	1800	447T	95.8	87.0	281	1,806	19,839	DHP2504FP	21,823
DHP2504R	250	1800	447T	95.8	87.0	281	1,806	19,839	DHP2504RFP	21,823
DHP2506	250	1200	449T	95.4	83.0	296	2,420	25,983	DHP2506FP	28,581
DHP2506R	250	1200	449T	95.4	83.0	296	2,420	25,983	DHP2506RFP	28,581
DHP3002	300	3600	445TS	95.4	89.0	331	1,320	24,418	DHP3002FP	26,860
DHP3004	300	1800	449T	95.8	87.5	335	2,140	24,271	DHP3004FP	26,689
DHP3006	300	1200	449T	95.4	87.0	338	2,615	31,180	DHP3006FP	34,298
DHP3502	350	3600	447TS	95.4	90.0	382	1,590	27,431	DHP3502FP	30,174
DHP3504	350	1800	449T	95.8	87.5	391	2,310	28,320	DHP3504FP	31,152
DHP3506	350	1200	5009B	95.4	85.0	404	3,715	55,300	~	~
DHP4002	400	3600	449TS	95.8	90.0	434	2,055	31,308	DHP4002FP	34,439
DHP4004	400	1800	449T	95.8	87.7	446	2,445	32,365	DHP4004FP	35,602
DHP4006	400	1200	5009B	95.8	84.5	463	3,835	56,850	~	~
DHP4502	450	3600	449TS	95.8	90.5	486	2,125	36,000	DHP4502FP	39,600
DHP4504	450	1800	5009B	96.2	88.0	498	3,620	52,350	~	~
DHP4506	450	1200	5009B	96.2	84.0	521	3,960	34,750	~	~
DHP5002	500	3600	449TS	95.8	91.2	536	2,225	39,735	DHP5002FP	43,709
DHP5004	500	1800	5009B	96.2	88.0	553	3,790	57,950	~	~
DHP5006	500	1200	5009B	96.2	84.0	579	4,075	67,750	~	~
DHP6002	600	3600	5011A	95.0	87.5	676	3,240	60,252	~	~
DHP6004	600	1800	5011B	96.2	87.8	665	3,650	57,884	~	~
DHP6006	600	1200	5011B	95.8	82.6	710	4,250	68,496	~	~
DHP6006R	600	1200	5011B	95.8	82.6	710	4,250	68,496	~	~
DHP7002	700	3600	5012A	95.0	88.3	781	3,610	68,381	~	~
DHP7004	700	1800	5011B	96.2	86.0	792	3,870	68,034	~	~
DHP7006	700	1200	5810B	95.8	82.6	828	6,450	77,391	~	~
DHP8002	800	3600	5012A	95.0	87.9	897	3,610	71,839	~	~
DHP8004	800	1800	5012B	96.2	86.2	903	4,210	72,887	~	~
DHP8004R	800	1800	5012B	96.2	86.2	903	4,210	72,887	~	~
DHP8006	800	1200	5810B	95.8	82.5	948	6,820	87,890	~	~
DHP8006R	800	1200	5810B	95.8	82.5	948	6,820	87,890	~	~

Notes:

* Fire Pump available as made to order. Fire Pump Certificate complies with ANSI/UL 1004-5. Certificate# 20120717 – EX6569.

(1) Delivery for Fire Pump Duty motor (Catalog Number + FP) is standard 5 - 10 working days after receipt of order if standard motor is in stock; Painting to Fire Safety Red requirement on Fire Pump Duty type motor can be waived in order to expedite delivery upon request.

(2) Fire Pump Duty Motor pricing includes: adding UL nameplate, restamping original nameplate to new "DHP_FP" catalog number, and Fire Safety Red Paint.

(3) To order 575V, add "5" to the end of Catalog Number, for example: "DHP00545" for 5 HP, 1800 RPM, 575V.

(4) "R" = Motor stocked standard with a Drive-End Roller Bearing.

(5) Ratings 150 HP and larger are 460V only.

(6) **Ratings above 500 HP are new offerings and will be available as stock beginning 3rd Quarter 2017.**

(7) All data subject to change without notice.

CAST IRON ODP AEGIS® SGR

ASHH, NEMA PREMIUM WITH AEGIS® SGR [DHP_G]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- HVAC Equipment
- Pumps
- Compressors

The AEGIS® SGR Bearing Protection Ring prevents electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground. Using proprietary Electron Transport Technology™, the conductive microfibers inside the AEGIS® SGR provide the most reliable current diversion technology for shaft grounding with a "path of least resistance" to dramatically extend motor life. AEGIS® SGR Rings have a warranty of 1 year.

FEATURES:

- Output Range: 1 - 75 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Open Drip Proof (IP22)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Grounding Ring Factory Installed Externally on DE Bracket for F# 143T - 286T; Internally on NDE for F# 284TS - 405T
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Cast Iron Frame and End Brackets
- Rolled Steel Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Light Gray - Munsell N5.0
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140T - 280T (Non-regreasable)
- High Quality Ball (or Roller) Bearings regreasable with Mobil Polyrex™ EM Grease for F# 280TS and Larger
- Labyrinth Type Metal Flinger on Both Ends for F# 280TS and Larger
- Cast Iron Inner and Outer Bearing Caps for F#280TS and Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- 6 Leads for 150 HP and Larger
- Motors are U.L. Recognized, CSA Approved and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

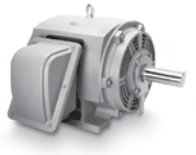
Notes:

(1) Available in 575V. TWMC carries minimal 575V stock; please check availability to ensure required motors are in stock. Ratings may be available from our Canadian warehouses and/or our factory. Pricing and leadtime may vary.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(6) AEGIS® SGR Bearing Protection Ring can not be used in Hazardous Locations (i.e. Class I, Div. 2, etc.)

CAST IRON ODP AEGIS® SGR

ASHH, NEMA PREMIUM WITH AEGIS® SGR [DHP_G]

Effective 03-24-17
Supercedes 06-14-15



CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
DHP0014G	1	1800	143T	85.5	78.0	1.41	54	477
DHP0016G	1	1200	145T	82.5	65.5	1.74	75	601
DHP1/52G	1.5	3600	143T	85.5	80.0	2.06	50	507
DHP1/54G	1.5	1800	145T	86.5	80.5	2.02	60	524
DHP1/56G	1.5	1200	182T	87.5	63.0	2.55	123	668
DHP0022G	2	3600	145T	85.5	84.5	2.59	57	565
DHP0024G	2	1800	145T	86.5	79.5	2.72	58	552
DHP0026G	2	1200	184T	87.5	71.0	3.01	130	800
DHP0032G	3	3600	145T	87.5	87.0	3.69	66	620
DHP0034G	3	1800	182T	89.5	81.0	3.88	117	650
DHP0036G	3	1200	213T	88.5	77.0	4.12	183	1,075
DHP0052G	5	3600	182T	87.5	91.0	5.90	120	750
DHP0054G	5	1800	184T	89.5	84.5	6.19	145	780
DHP0056G	5	1200	215T	89.5	79.0	6.62	195	1,250
DHP7/52G	7.5	3600	184T	88.5	91.5	8.65	134	923
DHP7/54G	7.5	1800	213T	91.0	86.0	8.97	187	1,150
DHP7/56G	7.5	1200	254T	90.2	79.0	9.85	260	1,669
DHP0102G	10	3600	213T	90.2	88.0	11.8	190	1,157
DHP0104G	10	1800	215T	91.7	87.0	11.7	215	1,236
DHP0106G	10	1200	256T	91.7	81.0	12.6	329	1,878
DHP0152G	15	3600	215T	90.2	87.5	17.8	220	1,498
DHP0154G	15	1800	254T	93.0	84.5	17.9	247	1,678
DHP0156G	15	1200	284T	91.7	83.0	18.5	367	2,485
DHP0202G	20	3600	254T	91.0	90.5	22.8	233	1,934
DHP0204G	20	1800	256T	93.0	86.5	23.3	350	2,042
DHP0206G	20	1200	286T	92.4	83.5	24.3	392	2,977
DHP0252G	25	3600	256T	91.7	92.0	27.7	317	2,257
DHP0254G	25	1800	284T	93.6	87.0	28.7	352	2,500
DHP0256G	25	1200	324T	93.0	83.0	30.3	640	3,671
DHP0302G	30	3600	284TS	92.4	90.5	33.6	405	2,746
DHP0304G	30	1800	286T	94.1	87.0	34.3	429	2,903
DHP0306G	30	1200	326T	93.6	83.5	35.9	568	4,098
DHP0402G	40	3600	286TS	92.4	91.5	44.3	442	3,473
DHP0404G	40	1800	324T	94.1	86.0	46.3	608	3,581
DHP0406G	40	1200	364T	94.1	87.0	45.7	835	5,081
DHP0502G	50	3600	324TS	93.0	86.0	58.5	552	4,258
DHP0504G	50	1800	326T	94.5	85.0	58.3	629	3,989
DHP0506G	50	1200	365T	94.1	86.0	57.8	766	5,967
DHP0602G	60	3600	326TS	93.6	87.0	69.0	614	4,981
DHP0604G	60	1800	364T	95.0	85.0	69.6	735	5,024
DHP0606G	60	1200	404T	94.5	85.5	69.5	1,100	7,180
DHP0752G	75	3600	364TS	94.1	90.5	82.5	704	6,544
DHP0754G	75	1800	365T	95.0	86.0	86.0	850	5,898
DHP0756G	75	1200	405T	94.5	86.5	86.0	1,210	8,509

Notes:

(1) Ratings larger than 75 HP with SGR can be quoted and provided upon request.
(2) All data subject to change without notice.

3-PHASE FRACTIONAL HP TEFC

AEGA, FOOTED, HIGH EFFICIENCY [G]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- HVAC Equipment

FEATURES:

- Output Range: 1/3 - 2 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP44)
- Voltage: 230/460V (Usable on 200 & 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Rolled Steel Frame and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- Double Shielded Bearings Pre-Packed with MULTEMP SRL (Non-regreasable)
- Mylar Nameplate
- Rubber Dust Flinger on Drive-End
- 9 Leads

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambient environments.
(2) Please consult factory for suitability in higher elevations.
(3) 1 HP and larger are CSA certified and UL recognized. Motors below 1 HP are CSA certified only.

3-PHASE FRACTIONAL HP TEFC

AEGA, FOOTED, HIGH EFFICIENCY [G]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NUMBER	HP	RPM	FL EFF (%)	FL PF (%)	FL AMPS (230V)	FRAME	APPROX. SHIPPING WT (lbs.)	LIST PRICE ($)
G0/32	1/3	3600	66.0	78.0	1.2	56	24	259
G0/34	1/3	1800	71.0	70.0	1.3	56	26	305
G0/36	1/3	1200	68.0	63.0	1.5	56	26	415
G0/52	1/2	3600	70.0	80.0	1.7	56	26	292
G0/54	1/2	1800	72.0	69.0	1.9	56	26	349
G0/56	1/2	1200	70.0	60.0	2.2	56	30	452
G0/72	3/4	3600	76.0	84.0	2.2	56	26	317
G0/74	3/4	1800	73.0	66.0	2.9	56	30	376
G0/76	3/4	1200	73.0	66.0	2.9	56	32	471
G0012	1	3600	76.0	84.0	2.9	56	26	371
G0014	1	1800	77.0	71.0	3.4	56	33	394
G0016	1	1200	75.0	70.0	3.8	56	35	500
G1/52	1.5	3600	78.0	83.0	4.3	56	30	399
G1/54	1.5	1800	78.0	77.0	4.7	56	39	431
G1/56	1.5	1200	75.0	71.0	5.3	56	39	566
G0022	2	3600	81.0	86.0	5.4	56	39	487
G0024	2	1800	78.5	76.0	6.3	56	39	453

Notes:

(1) Per DOE regulations, this High Efficiency inventory will be available through June 2018, or until current inventory has been depleted. Whichever occurs first.
(2) Once product listed above has been depleted from current stock, that model becomes obsolete and can not be reordered.
(3) Please see our new line of Premium Efficient 3-Phase Fractional Horespower Rolled Steel TEFC motors on page 31.
(4) Cast Iron C-Face kits are available. Please see page 125 for price and part number.
(5) All data subject to change without notice.

ROLLED STEEL TEFC FAMILY

AEGHPE, NEMA PREMIUM, F#56 (1/4 HP - 2 HP) [GH]

AEGH, NEMA PREMIUM, F#140T - 210T (1 HP - 10 HP) [GP]

AEGHPE-CF, NEMA PREMIUM, FOOTED C-FACE, F#56 (1/4 HP - 2 HP) [GH_C]

AETHPE, NEMA PREMIUM, ROUND BODY C-FACE, F#56 (1/4 HP - 2 HP) [GHV_C]

AEGHCF, NEMA PREMIUM, FOOTED C-FACE, F#140T - 210T (1 HP - 10 HP) [GP_C]

AETHCF, NEMA PREMIUM, ROUND BODY C-FACE, F#140T - 210T (1 HP - 10 HP) [GPV_C]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- HVAC Equipment

FEATURES:

- Output Range: 1/4 - 10 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP44)
- Voltage: 230/460V (Usable on 200 & 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Rolled Steel Frame, Fan Cover, and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted Only (F2 not available)
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- Cast Iron End Brackets
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Double Shielded Bearings Pre-Packed with MULTEMP SRL (Non-regreasable)
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(3,4)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP and Larger
- Motors are U.L. Recognized for United States and Canada, CSA Approved and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

ROLLED STEEL TEFC PREMIUM

AEGHPE, NEMA PREMIUM, F#56 (1/4 HP - 2 HP) [GH]
AEGH, NEMA PREMIUM, F#140T - 210T (1 HP - 10 HP) [GP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
GH0/22	1/4	3600	56	72.0	82.0	0.79	25	275
GH0/24	1/4	1800	56	72.0	73.0	0.89	27	326
GH0/26	1/4	1200	56	72.0	71.5	0.91	31	447
GH0/32	1/3	3600	56	72.0	80.5	1.08	25	285
GH0/34	1/3	1800	56	75.5	74.5	1.11	27	336
GH0/36	1/3	1200	56	72.0	61.0	1.42	31	457
GH0/52	1/2	3600	56	74.0	85.0	1.46	26	322
GH0/54	1/2	1800	56	78.5	73.5	1.65	30	384
GH0/56	1/2	1200	56	75.5	63.0	1.97	37	498
GH0/72	3/4	3600	56	77.0	80.5	2.22	28	349
GH0/74	3/4	1800	56	81.5	75.5	2.37	30	414
GH0/76	3/4	1200	56	78.5	72.0	2.48	38	519
GH0012	1	3600	56	80.0	85.5	2.74	31	402
GP0012	1	3600	143T	80.0	85.5	2.74	33	402
GH0014	1	1800	56	85.5	75.5	2.90	41	405
GP0014	1	1800	143T	85.5	75.5	2.90	41	405
GH0016	1	1200	56	82.5	66.0	3.44	45	524
GP0016	1	1200	145T	82.5	66.0	3.44	43	524
GH1/52	1.5	3600	56	85.5	83.0	3.96	35	462
GP1/52	1.5	3600	143T	85.5	83.0	3.96	33	462
GH1/54	1.5	1800	56	86.5	80.5	4.03	44	464
GP1/54	1.5	1800	145T	86.5	80.5	4.03	46	464
GP1/56	1.5	1200	182T	87.5	55.0	5.84	75	545
GH0022	2	3600	56	86.5	85.0	5.09	42	487
GP0022	2	3600	145T	86.5	85.0	5.09	41	487
GH0024	2	1800	56	86.5	79.0	5.48	46	494
GP0024	2	1800	145T	86.5	79.0	5.48	46	494
GP0026	2	1200	184T	88.5	64.5	6.56	97	615
GP0032	3	3600	182T	87.5	87.5	7.34	84	573
GP0034	3	1800	182T	89.5	74.0	8.48	69	560
GP0036	3	1200	213T	89.5	68.0	9.23	145	807
GP0052	5	3600	184T	89.5	90.0	11.6	97	709
GP0054	5	1800	184T	89.5	80.0	13.1	94	646
GP0056	5	1200	215T	90.2	73.5	14.1	189	1156
GP7/52	7.5	3600	213T	90.2	84.5	18.4	141	958
GP7/54	7.5	1800	213T	91.7	83.0	18.5	135	961
GP0102	10	3600	215T	91.0	86.0	23.9	186	1,111
GP0104	10	1800	215T	91.7	85.0	24.0	183	1,156

Notes:
(1) All data subject to change without notice.

ROLLED STEEL TEFC PREMIUM C-FACE

AEGHPE-CF, NEMA PREMIUM, FOOTED C-FACE, F#56 (1/4 HP - 2 HP) [GH_C]
AETHPE, NEMA PREMIUM, ROUND BODY C-FACE, F#56 (1/4 HP - 2 HP) [GHV_C]
AEGHCF, NEMA PREMIUM, FOOTED C-FACE, F#140T - 210T (1 HP - 10 HP) [GP_C]
AETHCF, NEMA PREMIUM, ROUND BODY C-FACE, F#140T - 210T (1 HP - 10 HP) [GPV_C]

Effective 03-24-17
Supercedes 06-14-15

HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	FOOTED C-FACE		ROUND BODY C-FACE		LIST PRICE ($)
						CATALOG NO.	APPROX. SHIPPING WT. (lbs.)	CATALOG NO.	APPROX. SHIPPING WT. (lbs.)	
1/4	3600	56C	72.0	82.0	0.79	GH0/22C	25	GHV0/22C	24	378
1/4	1800	56C	72.0	73.0	0.89	GH0/24C	27	GHV0/24C	26	398
1/4	1200	56C	72.0	71.5	0.91	GH0/26C	30	GHV0/26C	29	498
1/3	3600	56C	72.0	80.5	1.08	GH0/32C	30	GHV0/32C	29	388
1/3	1800	56C	75.5	74.5	1.11	GH0/34C	32	GHV0/34C	31	401
1/3	1200	56C	72.0	61.0	1.42	GH0/36C	36	GHV0/36C	35	503
1/2	3600	56C	74.0	85.0	1.46	GH0/52C	31	GHV0/52C	30	401
1/2	1800	56C	78.5	73.5	1.65	GH0/54C	35	GHV0/54C	34	432
1/2	1200	56C	75.5	63.0	1.97	GH0/56C	42	GHV0/56C	41	523
3/4	3600	56C	77.0	80.5	2.22	GH0/72C	33	GHV0/72C	32	425
3/4	1800	56C	81.5	75.5	2.37	GH0/74C	35	GHV0/74C	34	455
3/4	1200	56C	78.5	72.0	2.48	GH0/76C	42	GHV0/76C	41	545
1	3600	56C	80.0	85.5	2.74	GH0012C	35	GHV0012C	34	462
1	3600	143TC	80.0	85.5	2.74	GP0012C	35	GPV0012C	34	462
1	1800	56C	85.5	75.5	2.90	GH0014C	45	GHV0014C	44	466
1	1800	143TC	85.5	75.5	2.90	GP0014C	45	GPV0014C	44	466
1	1200	56C	82.5	66.0	3.44	GH0016C	42	GHV0016C	41	603
1	1200	145TC	82.5	66.0	3.44	GP0016C	42	GPV0016C	41	603
1.5	3600	56C	85.5	83.0	3.96	GH1/52C	39	GHV1/52C	38	531
1.5	3600	143TC	85.5	83.0	3.96	GP1/52C	39	GPV1/52C	38	531
1.5	1800	56C	86.5	80.5	4.03	GH1/54C	48	GHV1/54C	47	534
1.5	1800	145TC	86.5	80.5	4.03	GP1/54C	48	GPV1/54C	47	534
1.5	1200	182TC	87.5	55.0	5.84	GP1/56C	75	GPV1/56C	74	627
2	3600	56C	86.5	85.0	5.09	GH0022C	46	GHV0022C	45	560
2	3600	145TC	86.5	85.0	5.09	GP0022C	46	GPV0022C	45	560
2	1800	56C	86.5	79.0	5.48	GH0024C	49	GHV0024C	48	568
2	1800	145TC	86.5	79.0	5.48	GP0024C	49	GPV0024C	48	568
2	1200	184TC	88.5	64.5	6.56	GP0026C	132	GPV0026C	97	707
3	3600	182TC	87.5	87.5	7.34	GP0032C	130	GPV0032C	84	659
3	1800	182TC	89.5	74.0	8.48	GP0034C	135	GPV0034C	69	644
3	1200	213TC	89.5	68.0	9.23	GP0036C	164	GPV0036C	145	928
5	3600	184TC	89.5	90.0	11.6	GP0052C	135	GPV0052C	97	815
5	1800	184TC	89.5	80.0	13.1	GP0054C	135	GPV0054C	94	743
5	1200	215TC	90.2	73.5	14.1	GP0056C	210	GPV0056C	189	1,329
7.5	3600	213TC	90.2	84.5	18.4	GP7/52C	180	GPV7/52C	141	1,102
7.5	1800	213TC	91.7	83.0	18.5	GP7/54C	200	GPV7/54C	135	1,105
10	3600	215TC	91.0	86.0	23.9	GP0102C	220	GPV0102C	186	1,278
10	1800	215TC	91.7	85.0	24.0	GP0104C	219	GPV0104C	183	1,329

Notes:
(1) Motors on this page do not include Drip Cover. Drip covers are available. See page 127.
(2) All data subject to change without notice.

ROLLED STEEL TEFC AEGIS® SGR

AEGH, FOOTED, NEMA PREMIUM WITH AEGIS® SGR [GP_G]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- HVAC Equipment
- Pumps
- Compressors

The AEGIS® SGR Bearing Protection Ring prevents electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground. Using proprietary Electron Transport Technology™, the conductive microfibers inside the AEGIS® SGR provide the most reliable current diversion technology for shaft grounding with a "path of least resistance" to dramatically extend motor life. AEGIS® SGR Rings have a warranty of 1 year.

FEATURES:

- Output Range: 1 - 10 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP44)
- Voltage: 230/460V (Usable on 200 & 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Grounding Ring Factory Installed Externally on NDE Bracket
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Rolled Steel Frame, Fan Cover, and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted Only (F2 not available)
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- Cast Iron End Brackets
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Double Shielded Bearings Pre-Packed with MULTEMP SRL (Non-regreasable)
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(3,4)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP and Larger
- Motors are U.L. Recognized for United States and Canada, CSA Approved and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(5) AEGIS® SGR Bearing Protection Ring can not be used in Hazardous Locations (i.e. Class I, Div. 2, etc.)

ROLLED STEEL TEFC AEGIS® SGR

AEGH, FOOTED, NEMA PREMIUM WITH AEGIS® SGR [GP_G]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FL EFF (%)	FL PF (%)	FL AMPS (230V)	FRAME	APPROX SHIPPING WT. (lbs.)	LIST PRICE ($)
GP0012G	1	3600	143T	80.0	85.5	2.74	33	402
GP0014G	1	1800	143T	85.5	75.5	2.90	41	405
GP0016G	1	1200	145T	82.5	66.0	3.44	43	524
GP1/52G	1.5	3600	143T	85.5	83.0	3.96	33	462
GP1/54G	1.5	1800	145T	86.5	80.5	4.03	46	464
GP1/56G	1.5	1200	182T	87.5	55.0	5.84	75	545
GP0022G	2	3600	145T	86.5	85.0	5.09	41	487
GP0024G	2	1800	145T	86.5	79.0	5.48	46	494
GP0026G	2	1200	184T	88.5	64.5	6.56	97	615
GP0032G	3	3600	182T	87.5	87.5	7.34	84	573
GP0034G	3	1800	182T	89.5	74.0	8.48	69	560
GP0036G	3	1200	213T	89.5	68.0	9.23	145	807
GP0052G	5	3600	184T	89.5	90.0	11.6	97	709
GP0054G	5	1800	184T	89.5	80.0	13.1	94	646
GP0056G	5	1200	215T	90.2	73.5	14.1	189	1156
GP7/52G	7.5	3600	213T	90.2	84.5	18.4	141	958
GP7/54G	7.5	1800	213T	91.7	83.0	18.5	135	961
GP0102G	10	3600	215T	91.0	86.0	23.9	186	1,111
GP0104G	10	1800	215T	91.7	85.0	24.0	183	1,156

Notes:
(1) All data subject to change without notice.

MAX-IE3™ METRIC

AESV3W, IEC, IE3 EFFICIENCY [MP]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- Any Application that Requires IEC Mounting Dimensions

FEATURES:

- Output Range: 1 - 150 HP (0.75 - 112 kW)
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 230/460V (Usable on 208V)(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- Cast Iron Frame, End Brackets and Main Conduit Box; Rolled Steel Fan Cover
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F3 Mounted (IM1001)
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 80 - 225 (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with with MULTEMP SRL for F# 250 and Larger
- Oil Seal/V-Ring on Both Ends
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation)(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 6 Leads
- Motors are CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Suitable for Wye/Delta Starting.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD.

AESV3W, IEC, IE3 EFFICIENCY [MP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	KW	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
MP0012	0.75	1	3600	80M	77.0	84.0	1.46	18	420
MP0014	0.75	1	1800	80M	85.5	74.5	1.48	21	422
MP0016	0.75	1	1200	90S	82.5	70.0	1.63	28	504
MP1/52	1.1	1.5	3600	80M	84.0	85.0	1.93	20	471
MP1/54	1.1	1.5	1800	90S	86.5	81.0	1.97	27	471
MP1/56	1.1	1.5	1200	112M	87.5	64.0	2.47	31	597
MP0022	1.5	2	3600	90S	85.5	89.5	2.46	26	504
MP0024	1.5	2	1800	90L	86.5	75.0	2.90	29	501
MP0026	1.5	2	1200	112M	88.5	69.0	3.08	44	651
MP0032	2.2	3	3600	90L	86.5	89.0	3.59	29	606
MP0034	2.2	3	1800	100L	89.5	83.5	3.69	40	587
MP0036	2.2	3	1200	112M	89.5	67.5	4.09	54	847
MP0042	3.0	4	3600	100L	88.5	88.0	4.83	42	742
MP0044	3.0	4	1800	100L	89.5	78.5	5.36	42	686
MP0046	3.0	4	1200	132S	89.5	78.5	5.36	75	1,167
MP5/52	4.0	5.5	3600	112M	88.5	91.0	6.23	52	776
MP5/54	4.0	5.5	1800	112M	89.5	81.5	6.88	53	709
MP5/56	4.0	5.5	1200	132M	89.5	79.5	7.06	92	1,181
MP7/52	5.5	7.5	3600	132S	89.5	86.5	8.92	73	1,013
MP7/54	5.5	7.5	1800	132S	91.7	85.0	8.86	76	1,026
MP7/56	5.5	7.5	1200	132M	91.0	74.5	10.2	91	1,674
MP0102	7.5	10	3600	132S	90.2	87.5	11.9	76	1,167
MP0104	7.5	10	1800	132M	91.7	85.5	12.0	93	1,222
MP0106	7.5	10	1200	160M	91.0	81.5	12.7	135	1,993
MP0152	11	15	3600	160M	91.0	92.5	16.4	130	1,674
MP0154	11	15	1800	160M	92.4	87.0	17.2	130	1,685
MP0156	11	15	1200	160L	91.7	81.5	18.5	150	2,696
MP0202	15	20	3600	160M	91.0	92.5	22.4	130	2,076
MP0204	15	20	1800	160L	93.0	86.5	23.4	150	2,102
MP0206	15	20	1200	180L	91.7	83.0	24.7	205	3,401
MP0252	18.5	25	3600	160L	91.7	93.0	27.2	140	2,735
MP0254	18.5	25	1800	180M	93.6	82.5	30.1	195	2,557
MP0256	18.5	25	1200	200L	93.0	82.0	30.4	270	4,620
MP0302	22	30	3600	180M	91.7	90.0	32.0	180	3,171
MP0304	22	30	1800	180L	93.6	84.0	33.6	205	3,123
MP0306	22	30	1200	200L	93.0	82.0	34.6	290	4,909
MP0402	30	40	3600	200L	92.4	91.0	42.8	265	4,698
MP0404	30	40	1800	200L	94.1	89.5	42.8	285	4,578
MP0406	30	40	1200	225M	94.1	86.5	44.2	385	6,944
MP0502	37	50	3600	200L	93.0	91.0	52.5	300	5,699
MP0504	37	50	1800	225S	94.5	86.5	54.3	350	5,966
MP0506	37	50	1200	250M	94.1	88.0	53.6	460	9,753
MP0602	45	60	3600	225M	93.6	93.5	61.7	340	7,649
MP0604	45	60	1800	225M	95.0	86.5	65.7	360	7,029
MP0606	45	60	1200	280S	94.5	85.5	69.5	600	11,369
MP0752	56	75	3600	250M	93.6	93.0	75.9	465	11,096
MP0754	56	75	1800	250M	95.4	88.0	78.7	480	10,029
MP0756	56	75	1200	280M	94.5	84.5	87.9	660	10,965
MP1002	75	100	3600	280S	94.1	89.5	111	585	15,138
MP1004	75	100	1800	280S	95.4	87.5	112	620	11,953
MP1006	75	100	1200	315S	95.0	84.0	117	900	14,006
MP1252	93	125	3600	280M	95.0	89.5	138	615	15,226
MP1254	93	125	1800	280M	95.4	88.5	139	690	14,280
MP1256	93	125	1200	315M	95.0	84.5	146	960	18,418
MP1502	112	150	3600	315S	95.0	91.0	162	860	18,157
MP1504	112	150	1800	315S	95.8	88.0	167	960	16,225
MP1506	112	150	1200	315M	95.8	84.5	173	1,160	20,516

Notes:

(1) All data subject to change without notice.

CAST IRON TEFC JP/JM

AEHH8NJP/JM, NEMA PREMIUM, CLOSE-COUPLED [JPP/JMP]
AEEAJP/JM, HIGH EFFICIENCY, CLOSE-COUPLED [JPN/JMN]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Pumps

FEATURES:

- Output Range: 3/4 - 50 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP54)
- Voltage: 230/460V (Usable on 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C & D - Temp Code T3C Minimum(5)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Cast Iron Frame, End Brackets & Fan Cover and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Premium - Light Gray - Munsell N5.0
  High Efficient - Dark Gray - Munsell 7.5B 3.5/0.5
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140JP/JM - 280JP/JM (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease for F# 280JP/JM (2P), 320JP/JM and Larger
- Automatic Grease Discharge Fittings on Regreasable Models
- Rubber Dust Flinger on DE for F# 140JP/JM - 280JP/JM
- Labyrinth Type Metal Flinger on Both Ends for F# 280JP/JM (2P), 320JP/JM and Larger
- Cast Iron Inner and Outer Bearing Caps for F# 280JP/JM (2P), 320JP/JM and Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(3,4)
- Inverter Duty Speed Range: 10:1 Variable Torque, 5:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- Motors are U.L. Recognized, CSA Approved and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(5) CSA Certification for Hazardous Location only applies to AEHH8NJP/JM, NEMA premium [JPP/JMP] product line.

AEHH8NJP/JM, NEMA PREMIUM, CLOSE-COUPLED [JPP/JMP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.		HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)		LIST PRICE ($)
JP	JM							JP	JM	
JPP0014	JMP0014	1	1800	143JP/JM	85.5	73.0	1.50	61	61	549
JPP0016	JMP0016	1	1200	145JP/JM	82.5	65.5	1.73	61	61	662
JPP1/52	JMP1/52	1.5	3600	143JP/JM	84.0	83.5	2.00	68	68	599
JPP1/54	JMP1/54	1.5	1800	145JP/JM	86.5	78.0	2.08	61	61	597
JPP1/56	JMP1/56	1.5	1200	182JP/JM	87.5	63.5	2.53	68	68	712
JPP0022	JMP0022	2	3600	145JP/JM	86.5	86.0	2.52	106	106	642
JPP0024	JMP0024	2	1800	145JP/JM	86.5	78.0	2.78	68	68	641
JPP0026	JMP0026	2	1200	184JP/JM	88.5	70.5	3.00	68	68	797
JPP0032	JMP0032	3	3600	182JP/JM	88.5	90.0	3.53	126	126	749
JPP0034	JMP0034	3	1800	182JP/JM	89.5	84.0	3.74	106	106	728
JPP0036	JMP0036	3	1200	213JP/JM	89.5	78.0	4.02	106	106	1,126
JPP0052	JMP0052	5	3600	184JP/JM	88.5	92.5	5.72	186	186	937
JPP0054	JMP0054	5	1800	184JP/JM	89.5	85.5	6.12	126	126	856
JPP0056	JMP0056	5	1200	215JP/JM	91.0	82.5	6.24	126	126	1,460
JPP7/52	JMP7/52	7.5	3600	213JP/JM	91.0	89.0	8.67	213	213	1,156
JPP7/54	JMP7/54	7.5	1800	213JP/JM	91.7	86.5	8.85	186	186	1,114
JPP7/56	JMP7/56	7.5	1200	254JP/JM	91.0	80.5	9.59	186	186	1,972
JPP0102	JMP0102	10	3600	215JP/JM	91.0	89.5	11.5	325	325	1,353
JPP0104	JMP0104	10	1800	215JP/JM	91.7	88.0	11.6	213	213	1,326
JPP0106	JMP0106	10	1200	256JP/JM	91.0	80.5	12.8	213	213	2,456
JPP0152	JMP0152	15	3600	254JP/JM	92.4	91.5	16.6	354	354	1,908
JPP0154	JMP0154	15	1800	254JP/JM	92.4	88.0	17.3	325	325	1,877
JPP0156	JMP0156	15	1200	284JP/JM	92.4	83.5	18.2	325	325	3,214
JPP0202	JMP0202	20	3600	256JP/JM	92.4	92.5	21.9	464	464	2,438
JPP0204	JMP0204	20	1800	256JP/JM	93.0	87.5	23.0	354	354	2,355
JPP0206	JMP0206	20	1200	286JP/JM	91.7	84.0	24.3	354	354	4,026
JPP0252	JMP0252	25	3600	284JP/JM	92.4	91.0	27.8	507	507	2,912
JPP0254	JMP0254	25	1800	284JP/JM	93.6	86.0	29.1	464	4647	2,770
JPP0256	JMP0256	25	1200	324JP/JM	93.0	83.0	30.3	464	464	4,927
JPP0302	JMP0302	30	3600	286JP/JM	93.0	91.0	33.2	694	694	3,386
JPP0304	JMP0304	30	1800	286JP/JM	93.6	87.5	34.3	507	507	3,356
JPP0306	JMP0306	30	1200	326JP/JM	93.0	80.5	37.5	507	507	5,284
JPP0402	JMP0402	40	3600	324JP/JM	94.1	90.0	44.2	784	784	4,463
JPP0404	JMP0404	40	1800	324JP/JM	94.1	86.0	46.3	694	694	4,389
JPP0406	~	40	1200	364JP/JM	94.1	86.5	46.0	694	694	6,734
JPP0502	JMP0502	50	3600	326JP/JM	94.1	91.0	54.7	926	926	5,486
JPP0504	JMP0504	50	1800	326JP/JM	94.5	87.0	56.9	784	784	5,476
JPP0506	~	50	1200	365JP/JM	94.1	86.0	57.8	784	784	8,670

Notes:
(1) Data subject to change without notice.

CAST IRON TEFC JP/JM

AEEAJP/JM, HIGH EFFICIENCY, CLOSE-COUPLED [JPN/JMN]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.		HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)		LIST PRICE ($)
JP	JM							JP	JM	
JPN0/76	JMN0/76	3/4	1200	143JP/JM	74.0	65.5	1.50	101	101	551
JPN0014	JMN0014	1	1800	143JP/JM	82.5	77.0	1.48	60	80	466
JPN0016	JMN0016	1	1200	145JP/JM	80.0	63.5	1.85	110	110	579
JPN1/52	JMN1/52	1.5	3600	143JP/JM	82.5	85.0	2.01	79	75	483
JPN1/54	JMN1/54	1.5	1800	145JP/JM	84.0	80.5	2.08	47	58	513
JPN1/56	JMN1/56	1.5	1200	182JP/JM	85.5	66.5	2.47	139	139	612
JPN0022	JMN0022	2	3600	145JP/JM	84.0	88.5	2.52	81	80	551
JPN0024	JMN0024	2	1800	145JP/JM	84.0	82.5	2.70	85	75	551
JPN0026	JMN0026	2	1200	184JP/JM	86.5	67.0	3.23	152	152	685
JPN0032	JMN0032	3	3600	182JP/JM	85.5	90.0	3.65	108	105	644
JPN0034	JMN0034	3	1800	182JP/JM	87.5	82.5	3.89	110	105	626
JPN0036	JMN0036	3	1200	213JP/JM	87.5	76.5	4.20	184	184	841
JPN0052	JMN0052	5	3600	184JP/JM	87.5	91.5	5.85	125	165	806
JPN0054	JMN0054	5	1800	184JP/JM	87.5	86.5	6.20	130	120	736
JPN0056	JMN0056	5	1200	215JP/JM	87.5	76.5	7.00	223	210	1,256
JPN7/52	JMN7/52	7.5	3600	213JP/JM	88.5	87.0	9.10	178	180	994
JPN7/54	JMN7/54	7.5	1800	213JP/JM	89.5	88.0	8.90	143	180	958
JPN7/56	JMN7/56	7.5	1200	254JP/JM	89.5	81.0	9.70	287	310	1,696
JPN0102	JMN0102	10	3600	215JP/JM	89.5	90.0	11.60	205	205	1,164
JPN0104	JMN0104	10	1800	215JP/JM	89.5	89.5	11.70	235	230	1,140
JPN0106	JMN0106	10	1200	256JP/JM	89.5	82.5	12.70	342	325	2,112
JPN0152	JMN0152	15	3600	254JP/JM	90.2	91.5	17.00	281	246	1,641
JPN0154	JMN0154	15	1800	254JP/JM	91.0	88.0	17.60	340	330	1,614
JPN0156	JMN0156	15	1200	284JP/JM	90.2	83.0	18.8	450	470	2,764
JPN0202	JMN0202	20	3600	256JP/JM	90.2	92.0	22.6	370	307	2,097
JPN0204	JMN0204	20	1800	256JP/JM	91.0	88.0	23.4	370	370	2,025
JPN0206	JMN0206	20	1200	286JP/JM	90.2	83.5	24.9	513	520	3,591
JPN0252	JMN0252	25	3600	284JP/JM	91.0	90.5	28.4	515	470	2,504
JPN0254	JMN0254	25	1800	284JP/JM	92.4	89.0	28.5	431	431	2,382
JPN0256	JMN0256	25	1200	324JP/JM	91.7	81.5	31.3	660	660	4,322
JPN0302	JMN0302	30	3600	286JP/JM	91.0	91.0	33.9	565	535	3,049
JPN0304	JMN0304	30	1800	286JP/JM	92.4	88.0	34.6	574	560	2,865
JPN0306	JMN0306	30	1200	326JP/JM	91.7	80.5	38.1	671	671	4,970
JPN0402	JMN0402	40	3600	324JP/JM	91.7	89.5	45.7	695	695	4,037
JPN0404	JMN0404	40	1800	324JP/JM	93.0	89.0	45.3	715	730	3,863
JPN0406	JMN0406	40	1200	364JP/JM	93.0	86.5	46.6	785	785	6,610
JPN0502	JMN0502	50	3600	326JP/JM	92.4	90.5	56.0	671	671	5,357
JPN0504	JMN0504	50	1800	326JP/JM	93.0	89.5	56.0	741	741	4,914
JPN0506	~	50	1200	365JP/JM	93.0	85.5	59.0	913	N/A	7,644

Notes:

(1) Per DOE regulations, this High Efficiency inventory will be available through June 2018, or until current inventory has been depleted. Whichever occurs first. Please see our new line of Premium Efficient JP/JM Cast Iron TEFC motors on page 80.

(2) Data subject to change without notice.

AEHH8P, NEMA PREMIUM [NP]
AEHH8PCF, NEMA PREMIUM, FOOTED C-FACE [NP_C]
AEUH8PDC, NEMA PREMIUM, ROUND BODY C-FACE [NPV_C]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressors
- Mixers
- Conveyors

FEATURES:

- Output Range: 1 - 200 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP54)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3C Minimum
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum; Various Ratings also Meet Design C
- Cast Iron Frame and End Brackets; Rolled Steel Fan Cover and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140T - 280T (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease for F# 280TS and Larger
- Automatic Grease Discharge Fittings on Regreasable Models
- Labyrinth Type Metal Flinger on Both Ends for F# 280TS and Larger
- Cast Iron Inner and Outer Bearing Caps for F#280TS and Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- 6 Leads for 150 HP and Larger
- Motors are U.L. Recognized, CSA Approved and CE Marked
- Dual Drilled Feet Available on Most Ratings - Longer Frames (i.e. 145T Drilled also for 143T)
- Provisions for Breather Drains for Vertical Mount Down (F# 324T and Larger)
- Rubber Dust Flinger on Drive-End for F# 140T - 280T

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Motors 7.5 HP & up are Suitable for Wye/Delta Starting.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

AEHH8P, NEMA PREMIUM [NP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX SHIPPING WT. (lbs.)	LIST PRICE ($)
NP0012	1	3600	143T	82.5	85.0	1.34	83	387
NP0014(C)	1	1800	143T	85.5	73.0	1.50	48	394
NP0016	1	1200	145T	82.5	65.5	1.73	90	500
NP1/52	1.5	3600	143T	84.0	83.5	2.00	85	442
NP1/54(C)	1.5	1800	145T	86.5	78.0	2.08	78	444
NP1/56	1.5	1200	182T	87.5	63.5	2.53	120	526
NP0022	2	3600	145T	86.5	86.0	2.52	62	469
NP0024(C)	2	1800	145T	86.5	78.0	2.78	90	476
NP0026(C)	2	1200	184T	88.5	70.5	3.00	132	589
NP0032	3	3600	182T	88.5	90.0	3.53	130	552
NP0034(C)	3	1800	182T	89.5	84.0	3.74	135	537
NP0036(C)	3	1200	213T	89.5	78.0	4.02	164	773
NP0052	5	3600	184T	88.5	92.5	5.72	135	679
NP0054(C)	5	1800	184T	89.5	85.5	6.12	133	618
NP0056(C)	5	1200	215T	91.0	82.5	6.24	210	1,109
NP7/52	7.5	3600	213T	91.0	89.0	8.67	180	921
NP7/54(C)	7.5	1800	213T	91.7	86.5	8.85	200	919
NP7/56(C)	7.5	1200	254T	91.0	80.5	9.59	315	1,553
NP0102	10	3600	215T	91.0	89.5	11.5	220	1,071
NP0104(C)	10	1800	215T	91.7	88.0	11.6	219	1,107
NP0106(C)	10	1200	256T	91.0	80.5	12.8	340	1,886
NP0152	15	3600	254T	92.4	91.5	16.6	325	1,500
NP0154(C)	15	1800	254T	92.4	88.0	17.3	316	1,461
NP0156(C)	15	1200	284T	92.4	83.5	18.2	530	2,597
NP0202	20	3600	256T	92.4	92.5	21.9	380	1,911
NP0204(C)	20	1800	256T	93.0	87.5	23.0	395	1,842
NP0206(C)	20	1200	286T	91.7	84.0	24.3	520	3,259
NP0252	25	3600	284TS	92.4	91.0	27.8	460	2,436
NP0254(C)	25	1800	284T	93.6	86.0	29.1	510	2,266
NP0254S(C)	25	1800	284TS	93.6	86.0	29.1	510	2,266
NP0256(C)	25	1200	324T	93.0	83.0	30.3	745	4,074
NP0302	30	3600	286TS	93.0	91.0	33.2	508	2,875
NP0304(C)	30	1800	286T	93.6	87.5	34.3	545	2,750
NP0304S(C)	30	1800	286TS	93.6	87.5	34.3	545	2,750
NP0306(C)	30	1200	326T	93.0	80.5	37.5	775	4,558
NP0402	40	3600	324TS	94.1	90.0	44.2	650	3,808
NP0404(C)	40	1800	324T	94.1	86.0	46.3	710	3,695
NP0404S(C)	40	1800	324TS	94.1	86.0	46.3	710	3,695
NP0406(C)	40	1200	364T	94.1	86.5	46.0	945	5,994
NP0502	50	3600	326TS	94.1	91.0	54.7	775	5,104
NP0504(C)	50	1800	326T	94.5	87.0	56.9	795	4,681
NP0504S(C)	50	1800	326TS	94.5	87.0	56.9	795	4,681
NP0506(C)	50	1200	365T	94.1	86.0	57.8	1040	7,389

Notes:
(1) All data subject to change without notice.
(C) Meets NEMA Design C Torque.

AEHH8P, NEMA PREMIUM [NP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX SHIPPING WT. (lbs.)	LIST PRICE ($)
NP0602	60	3600	364TS	94.1	93.0	64.2	890	6,702
NP0604(C)	60	1800	364T	95.0	86.5	68.4	870	6,024
NP0604S(C)	60	1800	364TS	95.0	86.5	68.4	870	6,024
NP0606(C)	60	1200	404T	94.5	87.0	68.4	1,295	8,786
NP0752	75	3600	365TS	94.5	93.0	79.9	970	8,578
NP0754(C)	75	1800	365T	95.4	86.5	85.1	1,075	7,772
NP0754S(C)	75	1800	365TS	95.4	86.5	85.1	1,075	7,772
NP0754R(C)	75	1800	365T	95.4	86.5	85.1	1,075	7,772
NP0756(C)	75	1200	405T	94.5	86.5	85.9	1,317	10,443
NP0756R(C)	75	1200	405T	94.5	86.5	85.9	1,317	10,443
NP1002	100	3600	405TS	95.4	92.0	107	1,286	11,586
NP1004(C)	100	1800	405T	95.4	87.5	112	1,360	10,801
NP1004S(C)	100	1800	405TS	95.4	87.5	112	1,360	10,801
NP1004R(C)	100	1800	405T	95.4	87.5	112	1,360	10,801
NP1006	100	1200	444T	95.0	82.5	119	1,665	13,339
NP1006R	100	1200	444T	95.0	82.5	119	1,665	13,339
NP1252	125	3600	444TS	95.0	86.0	143	1,530	14,501
NP1254	125	1800	444T	95.4	84.0	146	1,705	13,600
NP1254S	125	1800	444TS	95.4	84.0	146	1,705	13,600
NP1254R	125	1800	444T	95.4	84.0	146	1,705	13,600
NP1256	125	1200	445T	95.0	83.0	148	1,860	17,541
NP1256R	125	1200	445T	95.0	83.0	148	1,860	17,541
NP1502	150	3600	445TS	95.0	87.0	170	1,710	17,292
NP1504	150	1800	445T	95.8	84.0	175	1,865	15,452
NP1504S	150	1800	445TS	95.8	84.0	175	1,865	15,452
NP1504R	150	1800	445T	95.8	84.0	175	1,865	15,452
NP1506	150	1200	447T	95.8	83.5	176	2,230	19,539
NP1506R	150	1200	447T	95.8	83.5	176	2,230	19,539
NP2002	200	3600	447TS	95.4	87.0	226	2,015	23,684
NP2004	200	1800	447T	96.2	84.5	230	2,465	20,282
NP2004S	200	1800	447TS	96.2	84.5	230	2,465	20,282
NP2004R	200	1800	447T	96.2	84.5	230	2,465	20,282
NP2006	200	1200	449T	95.8	84.0	233	2,625	25,554
NP2006R	200	1200	449T	95.8	84.0	233	2,625	25,554

Notes:

(1) All data subject to change without notice.
(2) Ratings 150 HP and Larger are 460V Only.
(C) Meets NEMA Design C Torque.

AEHH8PCF, NEMA PREMIUM, FOOTED C-FACE [NP_C]
AEUH8PDC, NEMA PREMIUM, ROUND BODY C-FACE [NPV_C]

Effective 03-24-17
Supercedes 06-14-15

HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	FOOTED C-FACE		ROUND BODY C-FACE	
							CATALOG NO.	LIST PRICE ($)	CATALOG NO.	LIST PRICE ($))
1	3600	143TC	82.5	85.0	1.34	85	NP0012C	418	NPV0012C	541
1	1800	143TC	85.5	73.0	1.50	50	NP0014C(C)	449	NPV0014C(C)	531
1	1200	145TC	82.5	65.5	1.73	92	NP0016C	577	NPV0016C	655
1.5	3600	143TC	84.0	83.5	2.00	87	NP1/52C	500	NPV1/52C	559
1.5	1800	145TC	86.5	78.0	2.08	80	NP1/54C(C)	508	NPV1/54C(C)	579
1.5	1200	182TC	87.5	63.5	2.53	122	NP1/56C	600	NPV1/56C	769
2	3600	145TC	86.5	86.0	2.52	64	NP0022C	544	NPV0022C	621
2	1800	145TC	86.5	78.0	2.78	92	NP0024C(C)	553	NPV0024C(C)	648
2	1200	184TC	88.5	70.5	3.00	134	NP0026C(C)	680	NPV0026C(C)	867
3	3600	182TC	88.5	90.0	3.53	132	NP0032C	654	NPV0032C	751
3	1800	182TC	89.5	84.0	3.74	137	NP0034C(C)	624	NPV0034C(C)	789
3	1200	213TC	89.5	78.0	4.02	166	NP0036C(C)	987	NPV0036C(C)	1,171
5	3600	184TC	88.5	92.5	5.72	137	NP0052C	771	NPV0052C	886
5	1800	184TC	89.5	85.5	6.12	135	NP0054C(C)	683	NPV0054C(C)	843
5	1200	215TC	91.0	82.5	6.24	212	NP0056C(C)	1,260	NPV0056C(C)	1,404
7.5	3600	213TC	91.0	89.0	8.67	182	NP7/52C	1,066	NPV7/52C	1,197
7.5	1800	213TC	91.7	86.5	8.85	202	NP7/54C(C)	1,065	NPV7/54C(C)	1,292
7.5	1200	254TC	91.0	80.5	9.59	317	NP7/56C(C)	1,743	NPV7/56C(C)	1,910
10	3600	215TC	91.0	89.5	11.50	222	NP0102C	1,239	NPV0102C	1,388
10	1800	215TC	91.7	88.0	11.60	221	NP0104C(C)	1,295	NPV0104C(C)	1,404
10	1200	256TC	91.0	80.5	12.80	342	NP0106C(C)	2,164	NPV0106C(C)	2,414
15	3600	254TC	92.4	91.5	16.60	327	NP0152C	1,745	NPV0152C	1,887
15	1800	254TC	92.4	88.0	17.30	318	NP0154C(C)	1,682	NPV0154C(C)	1,833
15	1200	284TC	92.4	83.5	18.20	532	NP0156C(C)	3,021	NPV0156C(C)	3,146
20	3600	256TC	92.4	92.5	21.90	382	NP0202C	2,235	NPV0202C	2,562
20	1800	256TC	93.0	87.5	23.00	397	NP0204C(C)	2,135	NPV0204C(C)	2,384
20	1200	286TC	91.7	84.0	24.30	522	NP0206C(C)	3,825	NPV0206C(C)	3,434
25	3600	284TSC	92.4	91.0	27.80	462	NP0252C	2,843	NPV0252C	3,059
25	1800	284TC	93.6	86.0	29.10	512	NP0254C(C)	2,653	NPV0254C(C)	2,981
25	1200	324TC	93.0	83.0	30.30	747	NP0256C(C)	4,751	NPV0256C(C)	4,504
30	3600	286TSC	93.0	91.0	33.20	510	NP0302C	3,372	NPV0302C	3,282
30	1800	286TC	93.6	87.5	34.30	547	NP0304C(C)	3,227	NPV0304C(C)	3,158
30	1200	326TC	93.0	80.5	37.50	777	NP0306C(C)	5,372	NPV0306C(C)	5,169
40	3600	324TSC	94.1	90.0	44.20	652	NP0402C	4,278	NPV0402C	4,296
40	1800	324TC	94.1	86.0	46.30	712	NP0404C(C)	4,191	NPV0404C(C)	4,141
40	1200	364TC	94.1	86.5	46.00	947	NP0406C(C)	6,814	NPV0406C(C)	6,574
50	3600	326TSC	94.1	91.0	54.70	777	NP0502C	5,668	NPV0502C	5,590
50	1800	326TC	94.5	87.0	56.90	797	NP0504C(C)	5,264	NPV0504C(C)	5,177
50	1200	365TC	94.1	86.0	57.80	1,042	NP0506C(C)	8,241	NPV0506C(C)	8,564
60	3600	364TSC	94.1	93.0	64.20	892	NP0602C	7,429	NPV0602C	7,030
60	1800	364TC	95.0	86.5	68.40	872	NP0604C(C)	6,848	NPV0604(C)	6,959
60	1200	404TC	94.5	87.0	68.30	1,297	NP0606C(C)	9,922	NPV0606C(C)	9,540
75	3600	365TSC	94.5	93.0	79.90	972	NP0752C	9,510	NPV0752C	8,838
75	1800	365TC	95.4	86.5	85.1	1,077	NP0754C(C)	8,615	NPV0754C(C)	8,631
75	1200	405TC	94.5	86.5	85.9	1,319	NP0756C(C)	11,580	NPV0756C(C)	10,896
100	3600	405TSC	95.4	92.0	107.0	1,288	NP1002C	12,843	NPV1002C	10,951
100	1800	405TC	95.4	87.5	112.0	1,362	NP1004C(C)	12,073	NPV1004C(C)	10,978
100	1200	444TC	95.0	82.5	119.0	1,665	NP1006C	14,673	NPV1006C	13,952
125	3600	444TSC	95.0	86.0	143.0	1,515	NP1252C	15,951	NPV1252C	13,633
125	1800	444TC	95.4	84.0	146.0	1,520	NP1254C	14,960	NPV1254C	13,546
125	1800	444TSC	95.4	84.0	146.0	1,520	NP1254CS	14,960	~	~
125	1200	445TC	95.0	83.0	148.0	1,620	NP1256C	19,295	NPV1256C	15,270
150	3600	445TSC	95.0	87.0	170.0	1,610	NP1502C	19,021	NPV1502C	14,022
150	1800	445TC	95.8	84.0	175.0	1,700	NP1504C	16,997	NPV1504C	14,743
150	1800	445TSC	95.8	84.0	175.0	1,700	NP1504CS	19,667	~	~
150	1200	447TC	95.8	83.5	176.0	2,100	NP1506C	21,493	NPV1506C	17,817
200	3600	447TSC	95.4	87.0	226.0	1,830	NP2002C	26,052	NPV2002C	18,361
200	1800	447TC	96.2	84.5	230.0	2,140	NP2004C	22,310	NPV2004C	18,910
200	1800	447TSC	96.2	84.5	230.0	2,140	NP2004CS	22,310	~	~
200	1200	449TC	95.8	84.0	233.0	2,390	NP2006C	28,109	NPV2006C	19,815

Notes:
(1) All data subject to change without notice.
(2) Ratings 150 HP and Larger are 460V Only.
(C) Meets NEMA Design C Torque.

MAX-PE™ AEGIS® SGR

AEHH8P, NEMA PREMIUM [NP_G]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- HVAC Equipment

The AEGIS® SGR Bearing Protection Ring prevents electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground. Using proprietary Electron Transport Technology™, the conductive microfibers inside the AEGIS® SGR provide the most reliable current diversion technology for shaft grounding with a "path of least resistance" to dramatically extend motor life. AEGIS® SGR Rings have a warranty of 1 year.

FEATURES:

- Output Range: 1 - 75 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP54)
- Voltage: 230/460V (Usable on 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Grounding Ring Factory Installed Externally on DE Bracket for F# 143T - 286T; Internally on NDE for F# 284TS - 405T
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum; Various Ratings also Meet Design C
- Cast Iron Frame and End Brackets; Rolled Steel Fan Cover and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140T - 280T (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease for F# 280TS and Larger
- Automatic Grease Discharge Fittings on Regreasable Models
- Labyrinth Type Metal Flinger on Both Ends for F# 280TS and Larger
- Cast Iron Inner and Outer Bearing Caps for F#280TS and Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- 6 Leads for 150 HP and Larger
- Motors are U.L. Recognized, CSA Approved and CE Marked
- Dual Drilled Feet Available on Most Ratings - Longer Frames (i.e. 145T Drilled also for 143T)
- Provisions for Breather Drains for Vertical Mount Down (F# 324T and Larger)
- Rubber Dust Flinger on Drive-End for F# 140T - 280T

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Motors 7.5 HP & up are Suitable for Wye/Delta Starting.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(6) AEGIS® SGR Bearing Protection Ring can not be used in Hazardous Locations (i.e. Class I, Div. 2, etc.)

MAX-PE™ AEGIS® SGR

AEHH8P, NEMA PREMIUM [NP_G]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX SHIPPING WT. (lbs.)	LIST PRICE ($)
NP0012G	1	3600	143T	82.5	85.0	1.34	83	504
NP0014G(C)	1	1800	143T	85.5	73.0	1.50	48	522
NP0016G	1	1200	145T	82.5	65.5	1.73	90	642
NP1/52G	1.5	3600	143T	84.0	83.5	2.00	85	573
NP1/54G(C)	1.5	1800	145T	86.5	78.0	2.08	78	578
NP1/56G	1.5	1200	182T	87.5	63.5	2.53	120	703
NP0022G	2	3600	145T	86.5	86.0	2.52	62	607
NP0024G(C)	2	1800	145T	86.5	78.0	2.78	90	616
NP0026G(C)	2	1200	184T	88.5	70.5	3.00	132	772
NP0032G	3	3600	182T	88.5	90.0	3.53	130	735
NP0034G(C)	3	1800	182T	89.5	84.0	3.74	135	716
NP0036G(C)	3	1200	213T	89.5	78.0	4.02	164	991
NP0052G	5	3600	184T	88.5	92.5	5.72	135	881
NP0054G(C)	5	1800	184T	89.5	85.5	6.12	133	809
NP0056G(C)	5	1200	215T	91.0	82.5	6.24	210	1,387
NP7/52G	7.5	3600	213T	91.0	89.0	8.67	180	1,178
NP7/54G(C)	7.5	1800	213T	91.7	86.5	8.85	200	1,173
NP7/56G(C)	7.5	1200	254T	91.0	80.5	9.59	315	1,912
NP0102G	10	3600	215T	91.0	89.5	11.5	220	1,340
NP0104G(C)	10	1800	215T	91.7	88.0	11.6	219	1,380
NP0106G(C)	10	1200	256T	91.0	80.5	12.8	340	2,279
NP0152G	15	3600	254T	92.4	91.5	16.6	325	1,853
NP0154G(C)	15	1800	254T	92.4	88.0	17.3	316	1,808
NP0156G(C)	15	1200	284T	92.4	83.5	18.2	530	3,107
NP0202G	20	3600	256T	92.4	92.5	21.9	380	2,309
NP0204G(C)	20	1800	256T	93.0	87.5	23.0	395	2,226
NP0206G(C)	20	1200	286T	91.7	84.0	24.3	520	3,842
NP0252G	25	3600	284TS	92.4	91.0	27.8	460	2,891
NP0254G(C)	25	1800	284T	93.6	86.0	29.1	510	2,718
NP0256G(C)	25	1200	324T	93.0	83.0	30.3	745	4,783
NP0302G	30	3600	286TS	93.0	91.0	33.2	508	3,381
NP0304G(C)	30	1800	286T	93.6	87.5	34.3	545	3,262
NP0306G(C)	30	1200	326T	93.0	80.5	37.5	775	5,299
NP0402G	40	3600	324TS	94.1	90.0	44.2	650	4,445
NP0404G(C)	40	1800	324T	94.1	86.0	46.3	710	4,345
NP0406G(C)	40	1200	364T	94.1	86.5	46.0	945	6,929
NP0502G	50	3600	326TS	94.1	91.0	54.7	775	5,896
NP0504G(C)	50	1800	326T	94.5	87.0	56.9	795	5,440
NP0506G(C)	50	1200	365T	94.1	86.0	57.8	1040	8,477
NP0602G	60	3600	364TS	94.1	93.0	64.2	890	7,674
NP0604G(C)	60	1800	364T	95.0	86.5	68.4	870	6,967
NP0606G(C)	60	1200	404T	94.5	87.0	68.3	1,295	10,101
NP0752G	75	3600	365TS	94.5	93.0	79.9	970	9,761
NP0754G(C)	75	1800	365T	95.4	86.5	85.1	1,075	8,913
NP0756G(C)	75	1200	405T	94.5	86.5	85.9	1,317	11,941

Notes:
(1) All data subject to change without notice.
(C) Meets NEMA Design C Torque.

AEVANE, HIGH EFFICIENCY, ROUND BODY C-FACE [NV_C]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- Crushers
- Mixers
- Conveyors

FEATURES:

- Output Range: 1 - 100 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP54)
- Voltage: 230/460V (Usable on 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Factory Self-Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3C Minimum
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum; Various Ratings also Meet Design C
- Cast Iron Frame, End Brackets, Main Conduit Box; Rolled Steel Fan Cover
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140T - 280T (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease for F# 280TS and Larger
- Automatic Grease Discharge Fittings on Regreasable Models
- Labyrinth Type Metal Flinger on Both Ends for F# 280TS and Larger
- Cast Iron Inner and Outer Bearing Caps for F#280TS and Larger
- Stainless Steel Nameplate
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- Motors are U.L. Recognized, CSA Approved and CE Marked
- Rubber Dust Flinger on Drive-End for F# 140T - 280T

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Factory Self-Certification for 440T/TS frames requires fan change. Please see modifications section; Additional charge for Division II nameplates.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

AEVANE, HIGH EFFICIENCY, ROUND BODY C-FACE [NV_C]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX SHIPPING WT. (lbs.)	LIST PRICE ($)
NV0012C	1	3600	143TC	77.0	84.5	1.44	85	387
NV0014C(C)	1	1800	143TC	82.5	77.0	1.48	50	394
NV0016C	1	1200	145TC	80.0	63.3	3.69	56	500
NV1/52C	1.5	3600	143TC	82.5	85.0	2.01	50	442
NV1/54C(C)	1.5	1800	145TC	84.0	80.5	2.08	54	444
NV1/56C	1.5	1200	182TC	85.5	66.5	4.94	79	526
NV0022C	2	3600	145TC	84.0	88.5	2.52	53	469
NV0024C(C)	2	1800	145TC	84.0	82.5	2.70	80	476
NV0026C(C)	2	1200	184TC	86.5	67.0	6.46	104	589
NV0032C	3	3600	182TC	85.5	90.0	3.65	135	552
NV0034C(C)	3	1800	182TC	87.5	82.5	3.89	122	537
NV0036C(C)	3	1200	213TC	89.5	76.5	8.39	158	773
NV0052C	5	3600	184TC	87.5	91.5	5.85	145	679
NV0054C(C)	5	1800	184TC	87.5	86.5	6.20	150	618
NV0056C(C)	5	1200	215TC	87.5	76.5	14.0	176	1,109
NV7/52C	7.5	3600	213TC	88.5	87.0	9.10	190	921
NV7/54C(C)	7.5	1800	213TC	89.5	88.0	8.90	198	919
NV7/56C(C)	7.5	1200	254TC	89.5	81.0	19.4	274	1,553
NV0102C	10	3600	215TC	89.5	90.0	11.6	218	1,071
NV0104C(C)	10	1800	215TC	89.5	89.5	11.7	221	1,107
NV0106C(C)	10	1200	256TC	89.5	92.5	25.4	324	1,886
NV0152C	15	3600	254TC	90.2	91.5	17.0	350	1,500
NV0154C(C)	15	1800	254TC	91.0	88.0	17.6	365	1,461
NV0156C(C)	15	1200	284TC	90.2	83.0	37.0	425	2,597
NV0202C	20	3600	256TC	90.2	92.0	22.6	375	1,911
NV0204C(C)	20	1800	256TC	91.0	88.0	23.4	410	1,842
NV0206C(C)	20	1200	286TC	90.2	83.5	49.7	470	3,259
NV0252C	25	3600	284TSC	91.0	90.5	28.4	444	2,436
NV0254C(C)	25	1800	284TC	92.4	89.0	28.5	515	2,266
NV0256C(C)	25	1200	324TC	91.7	91.5	62.6	606	4,074
NV0302C	30	3600	286TSC	91.0	91.0	33.9	555	2,875
NV0304C(C)	30	1800	286TC	92.4	88.0	34.6	503	2,750
NV0306C(C)	30	1200	326TC	91.7	80.5	76.1	699	4,558
NV0402C	40	3600	324TSC	91.7	89.5	45.7	625	3,808
NV0404C(C)	40	1800	324TC	93.0	89.0	45.3	740	3,695
NV0406C(C)	40	1200	364TC	93.0	86.5	93.1	766	5,994
NV0502C	50	3600	326TSC	92.4	90.5	56.0	706	5,104
NV0504C(C)	50	1800	326TC	93.0	89.5	56.0	835	4,681
NV0506C(C)	50	1200	365TC	93.0	85.5	118.0	837	7,389
NV0602C	60	3600	364TSC	93.0	93.0	65.0	910	6,702
NV0604C(C)	60	1800	364TC	93.6	86.5	69.5	915	6,024
NV0606C(C)	60	1200	404TC	93.6	88.0	136	972	8,786
NV0752C	75	3600	365TSC	93.0	93.5	81.0	871	8,578
NV0754C(C)	75	1800	365TC	94.1	87.5	85.5	1,035	7,772
NV0756C(C)	75	1200	405TC	93.6	88.5	170	1,304	10,443
NV1002C	100	3600	405TSC	93.6	91.5	110	1,203	11,586
NV1004C(C)	100	1800	405TC	94.5	89.0	112	1,365	10,801

Notes:

(1) Motors on this page do not include Drip Cover. Drip covers are available. See page 127.
(2) Per DOE regulations, this High Efficiency inventory will be available through June 2018, or until current inventory has been depleted. Whichever occurs first.
(3) Once product listed above has been depleted from current stock, that model becomes obsolete and can not be reordered.
(4) Please see our new line of Premium Efficient MAX-PE Round Body C-face motors on page 44.
(C) Meets NEMA Design C Torque.

AEHH8N, NEMA PREMIUM (1 HP - 500 HP) [EP]
AEHE, HIGH EFFICIENCY [E]
AEHH8NCF, NEMA PREMIUM, FOOTED C-FACE (1 HP - 300 HP) [EP_C]
AEUH8NDC, NEMA PREMIUM, ROUND BODY C-FACE (1 HP - 300 HP) [EPV_C]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressors
- Mixers
- Conveyors
- Any Severe Duty/ Petro-Chem/ Pulp & Paper Application

FEATURES:

- Output Range: 3/4 - 800 HP
- Speed: 3600, 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only(1,2)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Maximum(7,8)
- CSA Certified for Class II, Div. 2, Groups F & G - Temp Code T3 Maximum (Frame 444T and Above)(7,8)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum; Various Ratings also Meet Design C
- Cast Iron Frame, End Brackets & Fan Cover and Main Conduit Box(9)
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(3)
- Designed for 3300 ft. Elevation(4)
- Bi-Directional Rotation; Except 2 Pole "Hybrid" and F# 5000 and Larger Ratings are Counter-Clockwise facing the DE
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F# 140T - 449T
  Copper/Copper Alloy Rotor Construction for F# 5000 and Larger(10)
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Light Gray - Munsell N5.0
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140T - 280T (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease for F# 280TS and Larger
- Automatic Grease Discharge Fittings on Regreasable Models
- Labyrinth Type Metal Flinger on Both Ends for F# 280TS and Larger
- Cast Iron Inner and Outer Bearing Caps for F#280TS and Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(5,6)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque (350 HP and Larger are 3:1 Constant Torque)
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- 6 Leads for 150 HP and Larger
- Motors are U.L. Recognized, CSA Approved and CE Marked
- Dual Drilled Feet Available on Most Ratings - Longer Frames (i.e. 145T Drilled also for 143T)
- Insulated Non-Drive End Bearing on 2-Pole Motors 600 HP and Larger
- Rubber Dust Flinger on Drive-End for F# 140T - 280T

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) TWMC carries minimal MAX-E1® 575V stock; please check availability to ensure required motors are available. Ratings may be available from our Canadian warehouses at a higher price or from our factory with a longer lead time. Pricing and lead time may vary.
(2) Motors 7.5 HP & up are Suitable for Wye/Delta Starting.
(3) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(4) Consult a Stock Product Application Specialist for suitability at higher elevations.
(5) Motor service factor is 1.0 when operated on a VFD.
(6) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(7) Catalog# EP3502 & EP3504 are "Hybrid" ratings; Not CSA Certified (Self-Certify Only) for hazardous locations, and not dual drilled.
(8) Catalog# EP3006 also not CSA Certified for Hazardous Locations (Self-Certify Only).
(9) F# 5000 and with Larger with Pressed Steel Plate Main Conduit Box.
(10) F# 5007 - 5011 8 Pole Ratings are Aluminum Die Cast Squirrel Cage Rotor Construction.

AEHH8N, NEMA PREMIUM (1 HP - 500 HP) [EP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
EP0012	1	3600	143T	82.5	85.0	1.34	65	423
EP0014(C)	1	1800	143T	85.5	73.0	1.50	58	426
EP0016	1	1200	145T	82.5	65.5	1.73	83	552
EP0018	1	900	182T	77.0	58.5	2.08	105	917
EP1/52	1.5	3600	143T	84.0	83.5	2.00	56	486
EP1/54(C)	1.5	1800	145T	86.5	78.0	2.08	80	488
EP1/56	1.5	1200	182T	87.5	63.5	2.53	125	574
EP1/58	1.5	900	184T	78.5	60.5	2.96	125	1,093
EP0022	2	3600	145T	86.5	86.0	2.52	95	513
EP0024(C)	2	1800	145T	86.5	78.0	2.78	68	520
EP0026(C)	2	1200	184T	88.5	70.5	3.00	136	647
EP0028(C)	2	900	213T	85.5	68.0	3.22	173	1,272
EP0032	3	3600	182T	88.5	90.0	3.53	125	603
EP0034(C)	3	1800	182T	89.5	81.5	3.85	130	589
EP0036(C)	3	1200	213T	89.5	78.0	4.02	180	849
EP0038(C)	3	900	215T	85.5	66.0	4.98	192	1,675
EP0052	5	3600	184T	88.5	92.5	5.72	145	746
EP0054(C)	5	1800	184T	89.5	85.5	6.12	150	680
EP0056(C)	5	1200	215T	91.0	82.5	6.24	225	1,217
EP0058	5	900	254T	87.5	72.0	7.43	305	2,279
EP7/52	7.5	3600	213T	91.0	89.0	8.67	200	1,008
EP7/54(C)	7.5	1800	213T	91.7	86.5	8.85	510	1,012
EP7/56(C)	7.5	1200	254T	91.0	80.5	9.59	325	1,712
EP7/58(C)	7.5	900	256T	87.5	74.0	10.8	365	2,901
EP0102	10	3600	215T	91.0	89.5	11.5	235	1,169
EP0104(C)	10	1800	215T	91.7	88.0	11.6	265	1,217
EP0106(C)	10	1200	256T	91.0	80.5	12.8	380	2,082
EP0108(C)	10	900	284T	90.2	73.5	14.1	445	3,655
EP0152	15	3600	254T	92.4	91.5	16.6	345	1,653
EP0154(C)	15	1800	254T	92.4	88.0	17.3	360	1,609
EP0156(C)	15	1200	284T	92.4	83.5	18.2	460	2,851
EP0158	15	900	286T	90.2	78.0	20.0	510	4,794
EP0202	20	3600	256T	92.4	92.5	21.9	405	2,102
EP0204(C)	20	1800	256T	93.0	87.5	23.0	410	2,028
EP0206(C)	20	1200	286T	91.7	84.0	24.3	550	3,595
EP0208(C)	20	900	324T	91.0	81.0	25.4	585	5,780
EP0252	25	3600	284TS	92.4	91.0	27.8	498	2,694
EP0254(C)	25	1800	284T	93.6	86.0	29.1	520	2,474
EP0254S(C)	25	1800	284TS	93.6	86.0	29.1	520	2,474
EP0256(C)	25	1200	324T	93.0	83.0	30.3	725	4,456
EP0258(C)	25	900	326T	91.0	80.0	32.2	684	6,832
EP0302	30	3600	286TS	93.0	91.0	33.2	530	3,204
EP0304(C)	30	1800	286T	93.6	87.5	34.3	558	3,043
EP0304S(C)	30	1800	286TS	93.6	87.5	34.3	558	3,043
EP0306(C)	30	1200	326T	93.0	80.5	37.5	775	5,022
EP0308(C)	30	900	364T	93.0	78.0	38.7	898	7,945
EP0402	40	3600	324TS	94.1	90.0	44.2	755	4,186
EP0404(C)	40	1800	324T	94.1	86.0	46.3	750	4,039
EP0404S(C)	40	1800	324TS	94.1	86.0	46.3	750	4,039
EP0406(C)	40	1200	364T	94.1	86.5	46.0	1025	6,587
EP0408(C)	40	900	365T	93.0	78.0	51.6	1035	9,813

Notes:

(1) To check stock or order 575V motors, add "5" to the end of Catalog Number, for example: "EP00545" for 5 HP, 1800 RPM, 575V.
(2) All data subject to change without notice.
(C) Meets NEMA Design C Torque.

AEHH8N, NEMA PREMIUM (1 HP - 500 HP) [EP] continued...

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
EP0502	50	3600	326TS	94.1	91.0	54.7	815	5,580
EP0504(C)	50	1800	326T	94.5	87.0	56.9	845	5,129
EP0504S(C)	50	1800	326TS	94.5	87.0	56.9	845	5,129
EP0506(C)	50	1200	365T	94.1	86.0	57.8	1105	8,125
EP0508(C)	50	1200	404T	93.0	81.0	62.1	1098	11,578
EP0602	60	3600	364TS	94.1	93.0	64.2	960	7,353
EP0604(C)	60	1800	364T	95.0	86.5	68.4	945	6,626
EP0604S(C)	60	1800	364TS	95.0	86.5	68.4	945	6,626
EP0606(C)	60	1200	404T	94.5	87.0	68.3	1,305	9,552
EP0608(C)	60	900	405T	93.0	81.0	74.6	1,410	13,414
EP0752	75	3600	365TS	94.5	93.0	79.9	995	9,391
EP0754(C)	75	1800	365T	95.4	86.5	85.1	1,045	8,463
EP0754S(C)	75	1800	365TS	95.4	86.5	85.1	1,045	8,463
EP0754R(C)	75	1800	365T	95.4	86.5	85.1	1,045	8,463
EP0756(C)	75	1200	405T	94.5	86.5	85.9	1,440	11,376
EP0756R(C)	75	1200	405T	94.5	86.5	85.9	1,440	11,376
EP0758	75	900	444T	93.6	79.0	95.0	1,790	16,933
EP0758R	75	900	444T	93.6	79.0	95.0	1,790	16,933
EP1002	100	3600	405TS	95.4	92.0	107	1,386	12,737
EP1004(C)	100	1800	405T	95.4	87.5	112	1,415	11,874
EP1004S(C)	100	1800	405TS	95.4	87.5	112	1,415	11,874
EP1004R(C)	100	1800	405T	95.4	87.5	112	1,415	11,874
EP1006	100	1200	444T	95.0	82.5	119	1,783	14,615
EP1006R	100	1200	445T	95.0	82.5	119	1,783	14,615
EP1008	100	900	445T	93.6	79.0	127	2,088	21,995
EP1008R	100	900	445T	93.6	79.0	127	2,088	21,995
EP1252	125	3600	444TS	95.0	86.0	143	1,656	15,835
EP1254	125	1800	444T	95.4	85.0	144	1,830	14,741
EP1254S	125	1800	444TS	95.4	85.0	144	1,830	14,741
EP1254R	125	1800	444T	95.4	85.0	144	1,830	14,741
EP1256	125	1200	445T	95.0	83.0	148	2,193	19,182
EP1256R	125	1200	445T	95.0	83.0	148	2,193	19,182
EP1258	125	900	447T	94.1	80.0	155	2,490	25,292
EP1258R	125	900	447T	94.1	80.0	155	2,490	25,292
EP1502	150	3600	445TS	95.0	87.0	170	1,783	18,964
EP1504	150	1800	445T	95.8	85.0	172	2,005	16,982
EP1504S	150	1800	445TS	95.8	85.0	172	2,005	16,982
EP1504R	150	1800	445T	95.8	85.0	172	2,005	16,982
EP1506	150	1200	447T	95.8	83.5	176	2,547	21,458
EP1506R	150	1200	447T	95.8	83.5	176	2,547	21,458
EP1508	150	900	449T	94.1	80.0	187	2,389	30,378
EP1508R	150	900	449T	94.1	80.0	187	2,389	30,378
EP2002	200	3600	447TS	95.4	89.0	221	2,444	25,973
EP2004	200	1800	447T	96.2	87.0	224	2,547	22,203
EP2004S	200	1800	447TS	96.2	87.0	224	2,547	22,203
EP2004R	200	1800	447T	96.2	87.0	224	2,547	22,203
EP2006	200	1200	449T	95.8	84.0	233	2,785	28,028
EP2006R	200	1200	449T	95.8	84.0	233	2,785	28,028
EP2008T	200	900	449T	94.5	80.0	248	2,706	35,922
EP2008TR	200	900	449T	94.5	80.0	248	2,706	35,922
EP2008	200	900	5007B	94.5	81.0	304	3,400	38,215
EP2008R	200	900	5007C	94.5	81.0	304	3,400	38,215

Notes:

(1) To check stock or order 575V motors, add "5" to the end of Catalog Number, for example: "EP00545" for 5 HP, 1800 RPM, 575V.
(2) All data subject to change without notice.
(C) Meets NEMA Design C Torque.

AEHH8N, NEMA PREMIUM (1 HP - 500 HP) [EP] continued...

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
EP2502	250	3600	449TS	95.8	89.8	272	2,547	33,849
EP2504	250	1800	449T	96.2	88.0	277	2,720	28,550
EP2506	250	1200	449T	95.8	84.5	289	2,925	29,353
EP2506R	250	1200	449T	95.8	84.5	289	2,925	29,353
EP2508	250	900	5009B	95.0	81.0	304	4,200	42,984
EP2508R	250	900	5009C	95.0	81.0	304	4,200	42,984
EP3002	300	3600	449TS	95.8	90.2	325	2,647	36,455
EP3004	300	1800	449T	96.2	88.0	332	2,855	29,897
EP3004R	300	1800	449T	96.2	88.0	332	2,855	29,867
EP3006	300	1200	449T	95.8	84.5	347	3,430	30,784
EP3006R	300	1200	449T	95.8	84.5	347	3,430	30,784
EP3008	300	900	5009B	95.0	81.0	365	4,410	47,183
EP3008R	300	900	5009C	95.0	81.0	365	4,410	47,183
EP3502	350	3600	449TS	95.8	90.2	379	2,785	38,480
EP3504	350	1800	449T	96.2	88.0	387	3,280	32,346
EP3504R	350	1800	449T	96.2	88.0	387	3,280	32,346
EP3506	350	1200	5011B	95.8	87.0	393	5,565	50,932
EP3506R	350	1200	5011C	95.8	87.0	393	5,565	50,932
EP3508	350	900	5011B	95.0	81.0	426	5,040	57,973
EP3508R	350	900	5011C	95.0	81.0	426	5,040	57,973
EP4002T(2,3,4)	400	3600	449TS	95.8	92.5	423	2,950	43,545
EP4002	400	3600	5009A	95.8	91.6	427	3,623	51,490
EP4004T(2,3,4)	400	1800	449T	96.2	90.0	433	3,500	36,902
EP4004	400	1800	5009B	96.2	90.0	433	4,025	45,886
EP4004R	400	1800	5009C	96.2	90.0	433	4,025	45,886
EP4006	400	1200	5011B	95.8	87.0	449	5,803	58,597
EP4006R	400	1200	5011C	95.8	87.0	449	5,803	58,597
EP4008	400	900	5808B	95.0	82.5	478	5,355	74,687
EP4008R	400	900	5808C	95.0	82.5	478	5,355	74,687
EP4502	450	3600	5011A	95.8	91.7	480	4,410	60,575
EP4504	450	1800	5011B	96.2	90.0	487	5,040	54,819
EP4504R	450	1800	5011C	96.2	90.0	487	5,040	54,819
EP4506	450	1200	5808B	95.8	88.0	500	5,803	65,680
EP4506R	450	1200	5808C	95.8	88.0	500	5,803	65,680
EP4508	450	900	5808B	95.0	82.5	535	5,723	77,582
EP4508R	450	900	5808C	95.0	82.5	535	5,723	77,582
EP5002	500	3600	5011A	95.8	91.7	533	4,830	63,570
EP5004	500	1800	5011B	96.2	90.0	541	5,250	60,227
EP5004R	500	1800	5011C	96.2	90.0	541	5,250	60,227
EP5006	500	1200	5808B	95.8	88.0	555	6,330	71,086
EP5006R	500	1200	5808C	95.8	88.0	555	6,330	71,086
EP5008	500	900	5810B	95.0	83.0	594	6,300	83,031
EP5008R	500	900	5810C	95.0	83.0	594	6,300	83,031

Notes:

(1) To check stock or order 575V motors, add "5" to the end of Catalog Number, for example: "EP00545" for 5 HP, 1800 RPM, 575V.
(2) Not suitable for Class I, Division 2 or Class II, Division 2.
(3) No 50Hz data (380V) on nameplate.
(4) Not Suitable for VFD.
(5) All data subject to change without notice.

AEHE, HIGH EFFICIENCY [E]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
E0/78	3/4	900	145T	70.0	53.5	1.90	85	780
E0018	1	900	182T	77.0	58.5	2.08	105	917
E1/58	1.5	900	184T	77.0	60.5	3.02	125	1,093
E0028(C)	2	900	213T	85.5	64.0	3.42	173	1,272
E0038(C)	3	900	215T	85.5	66.0	5.00	192	1,675
E0058	5	900	254T	86.5	72.0	7.50	305	2,279
E7/58(C)	7.5	900	256T	85.5	71.5	11.5	365	2,901
E0108(C)	10	900	284T	89.5	73.5	14.3	445	3,655
E0158	15	900	286T	89.5	78.0	20.1	510	4,794
E0208(C)	20	900	324T	90.2	81.0	25.7	585	5,780
E0258(C)	25	900	326T	90.2	79.5	32.7	684	6,832
E0308(C)	30	900	364T	93.0	77.5	39.0	898	7,945
E0408(C)	40	900	365T	91.7	76.5	53.5	1020	9,813
E0508(C)	50	900	404T	93.0	80.5	65.2	1,098	11,578
E0608(C)	60	900	405T	93.0	81.0	74.5	1,410	13,414
E0758	75	900	444T	93.0	79.0	95.6	1,790	16,933
E0758R	75	900	444T	93.0	79.0	95.6	1,790	16,933
E1008	100	900	445T	93.0	79.0	127.0	2,088	21,995
E1008R	100	900	445T	93.0	79.0	127.0	2,088	21,995
E1258	125	900	447T	93.6	80.0	156.0	2,490	25,292
E1258R	125	900	447T	93.6	80.0	156.0	2,490	25,292
E1508	150	900	449T	93.6	80.0	188.0	2,903	30,378
E1508R	150	900	449T	93.6	80.0	188.0	2,903	30,378
E2008	200	900	5007B	94.4	82.0	242.0	3,570	38,215
E2008R	200	900	5007C	94.4	82.0	242.0	3,570	38,215
E2508	250	900	5009B	94.5	81.0	306.0	4,200	42,984
E2508R	250	900	5009C	94.5	81.0	306.0	4,200	42,984
E3008	300	900	5009B	94.6	81.0	366.0	4,410	47,183
E3008R	300	900	5009C	94.6	81.0	366.0	4,410	47,183
E3508	350	900	5011B	94.8	81.0	426.0	5,040	57,973
E3508R	350	900	5011C	94.8	81.0	426.0	5,040	57,973
E4008	400	900	5808B	94.8	82.5	478.0	5,355	74,687
E4008R	400	900	5808C	94.8	82.5	478.0	5,355	74,687
E4508	450	900	5808B	95.0	82.5	537.0	5,723	77,582
E4508R	450	900	5808C	95.0	82.5	537.0	5,723	77,582
E5008	500	900	5810B	95.2	82.5	596	6,300	83,031
E5008R	500	900	5810C	95.2	82.5	596	6,300	83,031
E6002	600	3600	5810A	95.4	90.5	650	6,355	72,975
E6004	600	1800	5808B	95.5	90.0	654	6,360	68,099
E6004R	600	1800	5808C	95.5	90.0	654	6,360	68,099
E6006	600	1200	5810B	95.6	86.8	677	6,720	80,584
E6006R	600	1200	5810C	95.6	86.8	677	6,720	80,584
E6008	600	900	6808B	95.5	84.0	700	8,750	98,305
E6008R	600	900	6808C	95.5	84.0	700	8,750	98,305
E7002	700	3600	5810A	95.5	90.5	758	6,500	80,449
E7004	700	1800	5810B	95.6	90.0	762	7,140	80,040
E7004R	700	1800	5810C	95.6	90.0	762	7,140	80,040
E7006	700	1200	5810B	95.8	86.8	788	7,245	91,049
E7006R	700	1200	5810C	95.8	86.8	788	7,245	91,049
E7008	700	900	6808B	95.6	84.0	816	8,925	105,385
E7008R	700	900	6808C	95.6	84.0	816	8,925	105,385
E8002	800	3600	6808A	95.5	90.5	867	8,750	107,856
E8004	800	1800	5810B	95.6	90.5	866	7,613	85,750
E8004R	800	1800	5810C	95.6	90.5	866	7,613	85,750
E8006	800	1200	6808B	96.0	87.0	897	8,000	103,401
E8006R	800	1200	6808C	96.0	87.0	897	8,400	103,401
E8008	800	900	6808B	95.6	84.0	933	9,293	111,433
E8008R	800	900	6808C	95.6	84.0	933	9,293	111,433

Notes:

(1) To check stock or order 575V motors, add "5" to the end of Catalog Number, for example: "EP00545" for 5 HP, 1800 RPM, 575V.

(2) Ratings above 600 HP ("E" motors) do not have a NEMA Premium requirement and therefore will continue to be stock items.

(3) Per DOE regulations, this High Efficiency inventory (Ratings Below 600 HP) will be available through June 2018, or until current inventory has been depleted. Whichever occurs first. Please see our new line of Premium Efficient 8 pole MAX-E1® motors on page(s) 50-52.

(4) All data subject to change without notice.

(C) Meets NEMA Design C Torque..

AEHH8NCF, NEMA PREMIUM, FOOTED C-FACE (1 HP - 300 HP) [EP_C]
AEUH8NDC, NEMA PREMIUM, ROUND BODY C-FACE (1 HP - 300 HP) [EPV_C]

Effective 03-24-17
Supercedes 06-14-15

HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	SHIPPING WT. (lbs.)	FOOTED C-FACE		ROUND BODY C-FACE	
							CATALOG NO.	LIST PRICE ($)	CATALOG NO.	SHIPPING WT. (lbs.)
1	3600	143TC	82.5	85.0	1.34	59	EP0012C	503	EPV0012C	575
1	1800	143TC	85.5	73.0	1.50	59	EP0014C(C)	531	EPV0014C(C)	607
1	1200	145TC	82.5	65.5	1.73	88	EP0016C	689	EPV0016C	749
1.5	3600	143TC	84.0	83.5	2.00	59	EP1/52C	607	EPV1/52C	693
1.5	1800	145TC	86.5	78.0	2.08	65	EP1/54C(C)	609	EPV1/54C(C)	696
1.5	1200	182TC	87.5	63.5	2.53	133	EP1/56C	716	EPV1/56C	818
2	3600	145TC	86.5	86.0	2.52	65	EP0022C	641	EPV0022C	732
2	1800	145TC	86.5	78.0	2.78	65	EP0024C(C)	649	EPV0024C(C)	741
2	1200	184TC	88.5	70.5	3.00	145	EP0026C(C)	806	EPV0026C(C)	922
3	3600	182TC	88.5	90.0	3.53	100	EP0032C	751	EPV0032C	858
3	1800	182TC	89.5	81.5	3.85	100	EP0034C(C)	734	EPV0034C(C)	839
3	1200	213TC	89.5	78.0	4.02	191	EP0036C(C)	1,059	EPV0036C(C)	1,338
5	3600	184TC	88.5	92.5	5.72	120	EP0052C	886	EPV0052C	1,012
5	1800	184TC	89.5	85.5	6.12	120	EP0054C(C)	843	EPV0054C(C)	963
5	1200	215TC	91.0	82.5	6.24	239	EP0056C(C)	1,405	EPV0056C(C)	1,605
7.5	3600	213TC	91.0	89.0	8.67	175	EP7/52C	1,197	EPV7/52C	1,368
7.5	1800	213TC	91.7	86.5	8.85	175	EP7/54C(C)	1,202	EPV7/54C(C)	1,374
7.5	1200	254TC	91.0	80.5	9.59	345	EP7/56C(C)	1,910	EPV7/56C(C)	2,183
10	3600	215TC	91.0	89.5	11.5	198	EP0102C	1,387	EPV0102C	1,586
10	1800	215TC	91.7	88.0	11.6	198	EP0104C(C)	1,405	EPV0104C(C)	1,605
10	1200	256TC	91.0	80.5	12.8	403	EP0106C(C)	2,247	EPV0106C(C)	2,568
15	3600	254TC	92.4	91.5	16.6	310	EP0152C	1,888	EPV0152C	2,157
15	1800	254TC	92.4	88.0	17.3	310	EP0154C(C)	1,833	EPV0154C(C)	2,095
15	1200	284TC	92.4	83.5	18.2	488	EP0156C(C)	3,146	EPV0156C(C)	3,595
20	3600	256TC	92.4	92.5	21.9	350	EP0202C	2,292	EPV0202C	2,619
20	1800	256TC	93.0	87.5	23.0	350	EP0204C(C)	2,219	EPV0204C(C)	2,536
20	1200	286TC	91.7	84.0	24.3	583	EP0206C(C)	3,932	EPV0206C(C)	4,269
25	3600	284TSC	92.4	91.0	27.8	430	EP0252C	3,090	EPV0252C	3,254
25	1800	284TC	93.6	86.0	29.1	441	EP0254C(C)	2,910	EPV0254C(C)	3,065
25	1200	324TC	93.0	83.0	30.3	769	EP0256C(C)	4,888	EPV0256C(C)	5,147
30	3600	286TSC	93.0	91.0	33.2	469	EP0302C	3,562	EPV0302C	3,751
30	1800	286TC	93.6	87.5	34.3	490	EP0304C(C)	3,427	EPV0304C(C)	3,609
30	1200	326TC	93.0	80.5	37.5	822	EP0306C(C)	5,393	EPV0306C(C)	5,679
40	3600	324TSC	94.1	90.0	44.2	635	EP0402C	4,663	EPV0402C	4,910
40	1800	324TC	94.1	86.0	46.3	682	EP0404C(C)	4,494	EPV0404C(C)	4,733
40	1200	364TC	94.1	86.5	46.0	1,018	EP0406C(C)	7,135	EPV0406C(C)	7,513
50	3600	326TSC	94.1	91.0	54.7	710	EP0502C	6,067	EPV0502C	6,389
50	1800	326TC	94.5	87.0	56.9	744	EP0504C(C)	5,618	EPV0504C(C)	5,916
50	1200	365TC	94.1	86.0	57.8	1,172	EP0506C(C)	8,651	EPV0506C(C)	9,111
60	3600	364TSC	94.1	93.0	64.2	839	EP0602C	7,865	EPV0602C	8,034
60	1800	364TC	95.0	86.5	68.4	920	EP0604C(C)	7,247	EPV0604C(C)	7,403
60	1200	404TC	94.5	87.0	68.3	1,384	EP0606C(C)	10,449	EPV0606C(C)	10,674
75	3600	365TSC	94.5	93.0	79.9	903	EP0752C	9,887	EPV0752C	10,100
75	1800	365TC	95.4	86.5	85.1	1,050	EP0754C(C)	8,988	EPV0754C(C)	9,182
75	1200	405TC	94.5	86.5	85.9	1,527	EP0756C(C)	12,191	EPV0756C(C)	12,453
100	3600	405TSC	95.4	92.0	107	1,183	EP1002C	13,370	EPV1002C	13,658
100	1800	405TC	95.4	87.5	112	1,310	EP1004C(C)	12,583	EPV1004C(C)	12,854
100	1200	444TC	95.0	82.5	119	1,750	EP1006C	15,125	EPV1006C	15,374
125	3600	444TSC	95.0	86.0	143	1,654	EP1252C	17,350	EPV1252C	17,795
125	1800	444TC	95.4	85.0	144	1,650	EP1254C	16,650	EPV1254C	17,077
125	1800	444TSC	95.4	85.0	144	1,650	EP1254CS	16,650	~	~
125	1200	445TC	95.0	83.0	148	1,750	EP1256C	20,585	EPV1256C	21,113
150	3600	445TSC	95.0	87.0	170	1,740	EP1502C	20,100	EPV1502C	20,615
150	1800	445TC	95.8	85.0	172	1,830	EP1504C	18,580	EPV1504C	19,056
150	1800	445TSC	95.8	85.0	172	1,830	EP1504CS	18,580	~	~
150	1200	447TC	95.8	83.5	176	2,230	EP1506C	22,800	EPV1506C	23,385
200	3600	447TSC	95.4	89.0	221	1,960	EP2002C	26,810	EPV2002C	27,497
200	1800	447TC	96.2	87.0	224	2,270	EP2004C	23,640	EPV2004C	24,246
200	1800	447TSC	96.2	87.0	224	2,270	EP2004CS	23,640	~	~
200	1200	449TC	95.8	84.0	233	2,520	EP2006C	28,500	EPV2006C	29,231
250	3600	449TSC	95.8	89.8	272	2,400	EP2502C	33,500	EPV2502C	34,359
250	1800	449TC	96.2	88.0	277	2,550	EP2504C	29,000	EPV2504C	29,744
250	1800	449TSC	96.2	88.0	277	2,550	EP2504CS	29,000	~	~
250	1200	449TC	95.8	84.5	289	2,630	EP2506C	29,695	EPV2506C	30,456
300	3600	449TSC	95.8	90.2	325	2,640	EP3002C	35,750	EPV3002C	36,667
300	1800	449TC	96.2	88.0	332	2,680	EP3004C	30,200	EPV3004C	30,974
300	1800	449TSC	96.2	88.0	332	2,680	EP3004CS	30,200	~	~

Notes:

(1) Meets NEMA Design C Torque. All other motors are NEMA Design B Torque up to 100 HP.
(2) Ratings 150 HP and larger are 460V only.
(C) Meets NEMA Design C Torque.

KEYLESS SHAFT MOTOR

AEHHSY, NEMA PREMIUM (200 HP - 500 HP) [EPY]
AEHESY, HIGH EFFICIENCY [EY]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- Mixers
- Any Severe Duty/ Petro-Chem Pulp & Paper Application

FEATURES:

- Output Range: 200 - 800 HP
- Speed: 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 460V Only(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Maximum(3)
- CSA Certified for Class II, Div. 2, Groups F & G - Temp Code T3 Maximum(3)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Cast Iron Frame, End Brackets & Fan Cover and Main Conduit Box(5)
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction or Copper/Copper Alloy Rotor Construction. See product page for more details.
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Light Gray - Munsell N5.0
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings on Regreasable Models
- Labyrinth Type Metal Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque (350 HP and Larger are 3:1 Constant Torque)
- 6 Leads
- Motors are U.L. Recognized, CSA Approved and CE Marked
- Provisions for Bearing RTD's, both End Brackets Pre-Drilled and Plugged; F#5000 and Larger Only

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) CSA Certification for Hazardous Locations only applies to select ratings. See product page for select details.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(6) F# 5000 and Larger with Pressed Steel Plate Main Conduit Box.

KEYLESS SHAFT MOTOR

AEHHSY, NEMA PREMIUM (200 HP - 500 HP) [EPY]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	SHAFT DIAMETER (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
EPY2006[2]	200	1200	449TY	95.8	84.0	233	3.875	2,685	29,479
EPY2008[2]	200	900	449TY	94.5	80.0	248	3.875	3,090	41,364
EPY2504[2]	250	1800	449TY	96.2	88.0	277	3.875	2,720	30,001
EPY2506[2]	250	1200	449TY	95.8	84.5	289	3.875	2,925	30,804
EPY2508[2]	250	900	5009UZ	95.0	81.0	304	5.000	4,200	46,133
EPY3004[2]	300	1800	449TY	96.2	88.0	332	3.875	2,855	31,348
EPY3006	300	1200	449TY	95.8	84.5	347	3.875	3,100	32,235
EPY3008	300	900	5009UZ	95.0	81.0	365	5.000	4,410	50,332
EPY3504	350	1800	449TY	96.2	88.0	387	3.875	3,280	33,797
EPY3506[2]	350	1200	5011UZ	95.8	87.0	393	5.000	4,950	54,081
EPY3508	350	900	5011UZ	95.0	81.0	426	5.000	5,040	61,122
EPY4004[2]	400	1800	5009UZ	96.2	90.0	433	5.000	4,025	49,035
EPY4006	400	1200	5011UZ	95.8	87.0	449	5.000	4,950	61,746
EPY4008	400	900	5808UZ	95.0	82.5	478	5.750	5,590	82,584
EPY4504[2]	450	1800	5011UZ	96.2	90.0	487	5.000	5,040	57,968
EPY4506	450	1200	5808UZ	95.8	88.0	500	5.750	5,550	73,577
EPY4508	450	900	5808UZ	95.0	82.5	538	5.750	6,320	85,479
EPY5004[2]	500	1800	5011UZ	96.2	90.0	541	5.000	5,300	63,376
EPY5006	500	1200	5808UZ	95.8	88.0	555	5.750	5,900	78,983
EPY5008	500	900	5810UZ	95.0	83.0	594	5.750	6,950	90,928

Notes:

(1) Noted ratings CSA Certified for Hazardous Locations.
(2) Noted ratings with Copper/Copper Alloy Rotor Construction.
(3) Data subject to change without notice.

KEYLESS SHAFT MOTOR

AEHESY, HIGH EFFICIENCY [EY]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	SHAFT DIAMETER (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
EY2006	200	1200	449TZ	95.8	84.0	233	3.875	2,685	45,811
EY2008	200	900	449TZ	94.5	80.0	248	3.875	3,090	51,136
EY2504	250	1800	449TZ	96.2	88.0	277	3.875	2,720	46,232
EY2506	250	1200	449TZ	95.8	84.5	289	3.875	2,925	46,350
EY2508	250	900	5009UZ	94.5	81.0	304	5.000	4,200	55,048
EY3004	300	1800	449TZ	96.2	88.0	332	3.875	2,855	46,850
EY3006	300	1200	449TZ	95.8	84.5	347	3.875	3,100	47,500
EY3008[2]	300	900	5009UZ	94.6	81.0	365	5.000	4,410	59,220
EY3504	350	1800	449TZ	96.2	88.0	387	3.875	3,280	47,250
EY3506	350	1200	5011UZ	95.0	88.0	393	5.000	4,950	67,430
EY3508[2]	350	900	5011UZ	94.8	81.0	426	5.000	5,040	70,679
EY4004	400	1800	5009UZ	95.2	90.0	433	5.000	4,025	57,417
EY4006[2]	400	1200	5011UZ	95.0	88.0	449	5.000	4,950	72,943
EY4008[2,3]	400	900	5808UZ	94.8	82.0	476	5.750	5,590	97,775
EY4504	450	1800	5011UZ	95.2	90.0	487	5.000	5,040	66,240
EY4506[2,3]	450	1800	5808UZ	95.0	88.0	500	5.750	5,550	86,823
EY4508[2,3]	450	1800	5808UZ	95.0	82.5	535	5.750	6,320	100,064
EY5004	500	1800	5011UZ	95.3	90.0	541	5.750	5,300	71,029
EY5006[2,3]	500	1200	5808UZ	95.4	86.5	555	5.750	5,900	92,480
EY5008[2,3]	500	900	5810UZ	95.2	82.5	590	5.750	6,950	107,468
EY6004[2,3,4]	600	1800	5808UZ	95.5	90.0	654	5.750	6,250	89,738
EY6006[2,3,4]	600	1200	5810UZ	95.6	86.8	677	5.750	6,550	107,989
EY6008[2,3,4]	600	900	6808UZ	95.5	84.0	700	5.750	8,600	120,188
EY7004[2,3,4]	700	1800	5810UZ	95.6	90.0	762	5.750	7,350	105,051
EY7006[2,3,4]	700	1200	5810UZ	95.8	86.8	788	5.750	7,450	123,842
EY7008[2,3,4]	700	900	6808UZ	95.6	84.0	816	5.750	9,050	128,631
EY8004[2,3,4]	800	1800	5810UZ	95.6	90.5	866	5.750	7,800	112,345
EY8006[2,3,4]	800	1200	6808UZ	96.0	87.0	897	5.750	8,550	134,617
EY8008[2,3,4]	800	900	6808UZ	95.6	84.0	933	5.750	9,400	138,201

Notes:

(1) Per DOE regulations, this High Efficiency inventory will be available through June 2018, or until current inventory has been depleted. Whichever occurs first. Please see our new line of Premium Efficient Keyless Shaft motors on page 56.
(2) Noted ratings CSA Certified for Hazardous Locations.
(3) Noted ratings with Copper/Copper Alloy Rotor Construction.
(4) Ratings do not have a DOE mandated NEMA Premium requirement and therefore will continue to be stock items. No change to current design.
(5) Data subject to change without notice.

MAX-E2/841® LITE

AEHH, NEMA PREMIUM [HH]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressors
- Mixers
- Conveyors
- Severe Duty/ Petro-Chem
- Pulp & Paper Application
- Marine Duty

FEATURES:

- Output Range: 1 - 300 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 460V Only
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Maximum
- IEEE 841 Ready
- Meets IEEE 45 Marine Duty
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum; Various Ratings also Meet Design C
- Cast Iron Frame, End Brackets & Fan Cover and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box with additional Foot Grounding Provision
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: 2 Part Epoxy
- Paint Color: Blue - Munsell 5PB 3/8
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings
- Rubber Dust Flinger on DE for F# 140T - 280T
- Oil Seal/V-Ring on Both Ends for F# 320T - 400T
- Labyrinth Type Metal Flinger on Both Ends for F# 440T and Larger
- Cast Iron Inner and Outer Bearing Caps for F# 400T and Larger
- Stainless Steel Nameplate and Hardware
- Stainless Steel Automatic Breather Drain
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(3,4)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque (350 HP and Larger are 3:1 Constant Torque)
- Motors are U.L. Recognized, CSA Approved
- 3 Leads Only
- Dual Drilled Feet Available on Most Ratings - Longer Frames (i.e. 145T Drilled also for 143T)
- Vibration Not to Exceed 0.08 Inches Per Second
- Noise Level Not to Exceed 85 dB(A) at 1 Meter Unloaded

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

AEHH, NEMA PREMIUM [HH]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	SHIPPING WT. (lbs.)	LIST PRICE ($)
HH0012	1	3600	143T	1.3	82.50	85.0	58	510
HH0014(C)	1	1800	143T	1.5	85.50	73.0	58	488
HH0016	1	1200	145T	1.7	82.50	65.5	97	608
HH1/52	2	3600	143T	2.0	84.00	83.5	58	528
HH1/54(C)	2	1800	145T	2.1	86.50	78.0	65	560
HH1/56	2	1200	182T	2.5	87.50	63.5	130	628
HH0022	2	3600	145T	2.5	86.50	86.0	78	572
HH0024(C)	2	1800	145T	2.8	86.50	78.0	97	597
HH0026(C)	2	1200	184T	3.0	88.50	70.5	150	721
HH0032	3	3600	182T	3.5	88.50	90.0	100	667
HH0034(C)	3	1800	182T	3.7	89.50	84.0	130	673
HH0036(C)	3	1200	213T	4.0	89.50	78.0	220	935
HH0052	5	3600	184T	5.7	88.50	92.5	140	832
HH0054(C)	5	1800	184T	6.1	89.50	85.5	150	794
HH0056(C)	5	1200	215T	6.2	91.00	82.5	235	1,359
HH7/52	7.5	3600	213T	8.7	91.00	89.0	202	1,121
HH7/54(C)	7.5	1800	213T	8.9	91.70	86.5	202	1,127
HH7/56(C)	7.5	1200	254T	9.6	91.00	80.5	323	1,885
HH0102	10	3600	215T	11.5	91.00	89.5	224	1,306
HH0104(C)	10	1800	215T	11.6	91.70	88.0	224	1,341
HH0106(C)	10	1200	256T	12.8	91.00	80.5	380	2,304
HH0152	15	3600	254T	16.6	92.40	91.5	323	1,829
HH0154(C)	15	1800	254T	17.3	92.40	88.0	345	1,780
HH0156(C)	15	1200	284T	18.2	92.40	83.5	540	3,098
HH0202	20	3600	256T	21.9	92.40	92.5	367	2,296
HH0204(C)	20	1800	256T	23.0	93.00	87.5	425	2,243
HH0206(C)	20	1200	286T	24.3	91.70	84.0	565	3,839
HH0252	25	3600	284TS	27.8	92.40	91.0	490	2,854
HH0254(C)	25	1800	284T	29.1	93.60	86.0	555	2,684
HH0256(C)	25	1200	324T	30.3	93.00	83.0	759	4,635
HH0302	30	3600	286TS	33.2	93.00	91.0	535	3,356
HH0304(C)	30	1800	286T	34.3	93.60	87.5	656	3,317
HH0306(C)	30	1200	326T	37.5	93.00	80.5	795	5,299
HH0402	40	3600	324TS	44.2	94.10	90.0	755	4,404
HH0404(C)	40	1800	324T	46.3	94.10	86.0	740	4,247
HH0406(C)	40	1200	364T	46	94.10	86.5	898	7,080
HH0502	50	3600	326TS	54.7	94.10	91.0	782	5,720
HH0504(C)	50	1800	326T	56.9	94.50	87.0	845	5,215
HH0506(C)	50	1200	365T	57.8	94.10	86.0	1,110	8,426
HH0602	60	3600	364TS	64.2	94.10	93.0	853	7,747
HH0604(C)	60	1800	364T	68.4	95.00	86.5	955	7,475
HH0606(C)	60	1200	404T	68.3	94.50	87.0	1,355	10,057
HH0752	75	3600	365TS	79.9	94.50	93.0	1,015	9,648
HH0754(C)	75	1800	365T	85.1	95.40	86.5	1,040	9,377
HH0756(C)	75	1200	405T	85.9	94.50	86.5	1,363	11,619
HH1002	100	3600	405TS	107	95.40	92.0	1,330	13,107
HH1004(C)	100	1800	405T	112	95.40	87.5	1,385	12,093
HH1006	100	1200	444T	119	95.00	82.5	1,833	16,171
HH1252	125	3600	444TS	143	95.00	86.0	1,783	17,123
HH1254	125	1800	444T	146	95.40	84.0	1,833	15,900
HH1256	125	1200	445T	148	95.00	83.0	1,961	19,949
HH1502	150	3600	445TS	170	95.00	87.0	1,808	20,521
HH1504	150	1800	445T	175	95.80	84.0	2,037	18,516
HH1506	150	1200	447T	176	95.80	83.5	2,400	22,327
HH2002	200	3600	447TS	226	95.40	87.0	2,317	26,548
HH2004	200	1800	447T	230	96.20	84.5	2,426	22,960
HH2006	200	1200	449T	233	95.80	84.0	2,801	28,796
HH2502	250	3600	449TS	278	95.80	88.0	2,725	34,416
HH2504	250	1800	449T	285	96.20	85.5	2,710	29,277
HH2506	250	1200	449T	289	95.80	84.5	3,080	37,099
HH3002	300	3600	449TS	333	95.80	88.0	2,928	41,240
HH3004	300	1800	449T	342	96.20	85.5	2,980	35,320

Notes:

(1) Meets NEMA Design C Torque. All other motors are NEMA Design B Torque.
(2) All data subject to change without notice.
(C) Meets NEMA Design C Torque.

AEHH8B, NEMA PREMIUM [HB]
AEHH8BCF, NEMA PREMIUM, FOOTED C-FACE (1 HP - 100 HP) [HB_C]
AEUH8BDC, NEMA PREMIUM, ROUND BODY C-FACE (1 HP - 100 HP) [HBV_C]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressors
- Mixers
- Conveyors
- Severe Duty/ Petro-Chem/
- Pulp & Paper Application
- Marine Duty

FEATURES:

- Output Range: 1 - 500 HP
- Speed: 3600, 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP56)
- Voltage: 460V Only(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Maximum(6,7)
- CSA Certified for Class II, Div. 2, Groups F & G - Temp Code T3 Maximum (Frame 444T and Above)(6,7)
- Meets or Exceeds IEEE 841 Standards
- Meets IEEE 45 Marine Duty and ABS Design Assessment up to 150 HP
- Extended Warranty - 60 Months from Date of Manufacture
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum; Various Ratings also Meet Design C
- Cast Iron Frame, End Brackets & Fan Cover and Main Conduit Box(8)
- Grounding Terminal Inside Main Conduit Box with additional Foot Grounding Provision
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 50˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation; Except 2 Pole "Hybrid" and F# 5000 and Larger Ratings are Counter-Clockwise facing the DE
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F# 140T - 449T
  Copper/Copper Alloy Rotor Construction for F# 5000 and Larger(9)
- Paint System: 2 Part Epoxy
- Paint Color: Blue - Munsell 5PB 3/8
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings
- VBXX INPRO™ Seals Installed on Both Ends
- Stainless Steel Nameplate and Hardware
- Stainless Steel Automatic Breather Drain
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque (350 HP and Larger are 3:1 Constant Torque)
- Motors are U.L. Recognized, CSA Approved
- 3 Leads Only
- Dual Drilled Feet Available on Most Ratings - Longer Frames (i.e. 145T Drilled also for 143T)
- Vibration Not to Exceed 0.08 Inches Per Second
- Noise Level Not to Exceed 85 dB(A) at 1 Meter Unloaded

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) TWMC carries minimal MAX-E2® 575V stock; please check availability to ensure required motors are available. Ratings may be available from our Canadian Warehouses at a higher price or from our factory with a longer lead time. Pricing and lead time may vary.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(6) Catalog# HB3502 & HB3504 are "Hybrid" ratings; Not CSA Certified (Self-Certify Only) for hazardous locations, and not dual drilled.
(7) Catalog# HB3006 also not CSA Certified for hazardous locations (Self-Certify Only).
(8) F# 5000 and with Larger with Pressed Steel Plate Main Conduit Box.
(9) F# 5007 - 5011 8 Pole Ratings are Aluminum Die Cast Squirrel Cage Rotor Construction.

AEHH8B, NEMA PREMIUM [HB]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
HB0012	1	3600	143T	82.50	85.0	1.3	58	969
HB0014(C)	1	1800	143T	85.50	73.0	1.5	58	928
HB0016	1	1200	145T	82.50	65.5	1.7	97	1,013
HB0018	1	900	182T	77.00	58.5	2.1	115	1,223
HB1/52	1.5	3600	143T	84.00	83.5	2.0	58	958
HB1/54(C)	1.5	1800	145T	86.50	78.0	2.1	65	970
HB1/56	1.5	1200	182T	87.50	63.5	2.5	130	1,120
HB1/58	1.5	900	184T	78.50	60.5	3.0	125	1,368
HB0022	2	3600	145T	86.50	86.0	2.5	78	978
HB0024(C)	2	1800	145T	86.50	78.0	2.8	97	985
HB0026(C)	2	1200	184T	88.50	70.5	3.0	150	1,233
HB0028	2	900	213T	85.50	64.0	5.0	173	1,814
HB0032	3	3600	182T	88.50	90.0	3.5	100	1,154
HB0034(C)	3	1800	182T	89.50	84.0	3.7	130	1,126
HB0036(C)	3	1200	213T	89.50	78.0	4.0	220	1,620
HB0038	3	900	215T	85.50	66.0	5.0	192	2,009
HB0052	5	3600	184T	88.50	92.5	5.7	140	1,345
HB0054(C)	5	1800	184T	89.50	85.5	6.1	150	1,259
HB0056(C)	5	1200	215T	91.00	82.5	6.2	235	1,962
HB0058	5	900	254T	86.50	72.0	7.5	305	2,659
HB7/52	7.5	3600	213T	91.00	89.0	8.7	202	1,752
HB7/54(C)	7.5	1800	213T	91.70	86.5	8.9	202	1,733
HB7/56(C)	7.5	1200	254T	91.00	80.5	9.6	323	2,754
HB7/58	7.5	900	256T	86.50	71.5	11.5	365	3,077
HB0102	10	3600	215T	91.00	89.5	11.5	224	1,874
HB0104(C)	10	1800	215T	91.70	88.0	11.6	224	1,901
HB0106(C)	10	1200	256T	91.00	80.5	12.8	380	3,182
HB0108	10	900	284T	89.50	73.5	14.2	445	4,000
HB0152	15	3600	254T	92.40	91.5	16.6	323	2,703
HB0154(C)	15	1800	254T	92.40	88.0	17.3	345	2,648
HB0156(C)	15	1200	284T	92.40	83.5	18.2	540	3,901
HB0158	15	900	286T	89.50	78.0	20.1	510	4,923
HB0202	20	3600	256T	92.40	92.5	21.9	367	3,232
HB0204(C)	20	1800	256T	93.00	87.5	23.0	425	3,120
HB0206(C)	20	1200	286T	91.70	84.0	24.3	565	4,596
HB0208	20	900	324T	90.20	81.0	25.6	585	5,759
HB0252	25	3600	284TS	92.40	91.0	27.8	490	3,816
HB0254(C)	25	1800	284T	93.60	86.0	29.1	555	3,689
HB0256(C)	25	1200	324T	93.00	83.0	30.3	759	5,758
HB0258	25	900	326T	90.20	79.5	25.6	684	6,500
HB0302	30	3600	286TS	93.00	91.0	33.2	535	4,062
HB0304(C)	30	1800	286T	93.60	87.5	34.3	656	3,963
HB0306(C)	30	1200	326T	93.00	80.5	37.5	795	6,131
HB0308	30	900	364T	93.00	77.5	39.0	898	8,814
HB0402	40	3600	324TS	94.10	90.0	44.2	755	5,547
HB0404(C)	40	1800	324T	94.10	86.0	46.3	740	5,434
HB0406(C)	40	1200	364T	94.10	86.5	46.0	898	9,137
HB0408	40	900	365T	91.70	76.5	53.4	1,035	10,818
HB0502	50	3600	326TS	94.10	91.0	54.7	835	6,590
HB0504(C)	50	1800	326T	94.50	87.0	56.9	835	6,088
HB0506(C)	50	1200	365T	94.10	86.0	57.8	963	10,292
HB0508	50	900	404T	93.00	80.5	53.4	1,098	12,314

Notes:

(1) To check stock or order 575V motors, add "5" to the end of Catalog Number, for example: "HB00545" for 5 HP, 1800 RPM, 575V.
(2) All data subject to change without notice.
(C) Meets NEMA Design C Torque.

AEHH8B, NEMA PREMIUM [HB] continued…

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
HB40602	60	3600	364TS	94.10	93.0	64.2	920	10,067
HB0604(C)	60	1800	364T	95.00	86.5	68.4	930	9,568
HB0606(C)	60	1200	404T	94.50	87.0	68.3	1,201	11,631
HB0608	60	900	405T	93.00	81.0	74.6	1,410	13,364
HB0752	75	3600	365TS	94.50	93.0	79.9	1,005	11,405
HB0754(C)	75	1800	365T	95.40	86.5	85.1	1,040	10,645
HB0756(C)	75	1200	405T	94.50	86.5	85.9	1,363	12,840
HB0758	75	900	444T	93.60	79.0	95.6	1,790	16,705
HB1002	100	3600	405TS	95.40	92.0	107	1,330	14,432
HB1004(C)	100	1800	405T	95.40	87.5	112	1,385	13,108
HB1006	100	1200	444T	95.00	82.5	119	1,833	17,430
HB1008	100	900	445T	93.60	79.0	127	2,088	20,259
HB1252	125	3600	444TS	95.00	86.0	143	1,783	18,290
HB1254	125	1800	444T	95.40	84.0	146	1,833	17,381
HB1256	125	1200	445T	95.00	83.0	148	1,961	21,576
HB1258	125	900	447T	94.10	80.0	156	2,490	23,436
HB1502	150	3600	445TS	95.00	87.0	170	1,808	21,197
HB1504	150	1800	445T	95.80	84.0	175	2,037	19,269
HB1506	150	1200	447T	95.80	83.5	176	2,400	22,978
HB1508	150	900	449T	94.10	80.0	242	2,903	32,107
HB2002	200	3600	447TS	95.40	87.0	226	2,160	27,075
HB2004	200	1800	447T	96.20	84.5	230	2,426	23,132
HB2006	200	1200	449T	95.80	84.0	233	2,675	29,166
HB2008	200	900	449T	94.50	80.0	242	2,670	36,273
HB2502	250	3600	449TS	95.80	88.0	278	2,595	35,116
HB2504	250	1800	449T	96.20	85.5	285	2,801	31,548
HB2506	250	1200	449T	95.80	84.5	289	2,955	37,791
HB2508	250	900	5009B	95.00	81.0	304	4,200	55,777
HB3002	300	3600	449TS	95.80	88.0	326	2,928	43,497
HB3004	300	1800	449T	96.20	85.5	342	2,930	37,085
HB3006	300	1200	449T	95.80	86.5	339	3,450	56,232
HB3008	300	900	5009B	95.00	81.0	365	4,410	58,514
HB3502	350	3600	449TS	95.80	91.6	373	3,100	55,397
HB3504	350	1800	449T	96.20	90.0	379	3,350	51,913
HB3506	350	1200	5011B	95.80	87.0	393	4,200	77,184
HB3508	350	900	5011B	95.00	81.0	426	5,040	81,043
HB4002	400	3600	5009A	95.80	91.6	427	3,450	76,400
HB4004	400	1800	5009B	96.20	90.0	433	3,700	71,099
HB4006	400	1200	5011B	95.80	87.0	449	4,900	85,011
HB4008	400	900	5808B	95.40	82.5	476	5,355	87,561
HB4502	450	3600	5011A	95.80	91.7	480	4,200	84,588
HB4504	450	1800	5011B	96.20	90.0	487	4,800	80,510
HB4506	450	1200	5808B	95.80	88.0	500	5,250	101,369
HB4508	450	900	5808B	95.40	82.5	535	5,723	105,423
HB5002	500	3600	5011A	95.80	91.7	533	4,600	93,063
HB5004	500	1800	5011B	96.20	90.0	541	5,000	85,644
HB5006	500	1200	5808B	95.80	88.0	555	5,600	103,997
HB5008	500	900	5810C	95.60	83.0	590	6,300	107,117

Notes:

(1) To check stock or order 575V motors, add "5" to the end of Catalog Number, for example: "HB00545" for 5 HP, 1800 RPM, 575V.
(2) All data subject to change without notice.
(C) Meets NEMA Design C Torque.

AEHH8BCF, NEMA PREMIUM, FOOTED C-FACE (1 HP - 100 HP) [HB_C]
AEUH8BDC, NEMA PREMIUM, ROUND BODY C-FACE (1 HP - 100 HP) [HBV_C]

Effective 03-24-17
Supercedes 06-14-15

HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	SHIPPING WT. (lbs.)	FOOTED C-FACE		ROUND BODY C-FACE	
							CATALOG NO.	LIST PRICE ($)	CATALOG NO.	SHIPPING WT. (lbs.)
1	3600	143TC	82.5	85.0	1.34	58	HB0012C	1,113	HBV0012C	1,173
1	1800	143TC	85.5	73.0	1.50	58	HB0014C(C)	1,107	HBV0014C(C)	1,168
1	1200	145TC	82.5	65.5	1.73	97	HB0016C	1,187	HBV0016C	1,248
1.5	3600	143TC	84.0	83.5	2.00	65	HB1/52C	1,125	HBV1/52C	1,186
1.5	1800	145TC	86.5	78.0	2.08	65	HB1/54C(C)	1,176	HBV1/54C(C)	1,240
1.5	1200	182TC	87.5	63.5	2.53	137	HB1/56C	1,370	HBV1/56C	1,457
2	3600	145TC	86.5	86.0	2.52	78	HB0022C	1,159	HBV0022C	1,224
2	1800	145TC	86.5	78.0	2.78	97	HB0024C(C)	1,193	HBV0024C(C)	1,256
2	1200	184TC	88.5	70.5	3.00	150	HB0026C(C)	1,547	HBV0026C(C)	1,631
3	3600	182TC	88.5	90.0	3.53	100	HB0032C	1,370	HBV0032C	1,457
3	1800	182TC	89.5	84.0	3.74	130	HB0034C(C)	1,370	HBV0034C(C)	1,457
3	1200	213TC	89.5	78.0	4.02	220	HB0036C(C)	2,164	HBV0036C(C)	2,268
5	3600	184TC	88.5	92.5	5.72	140	HB0052C	1,587	HBV0052C	1,669
5	1800	184TC	89.5	85.5	6.12	150	HB0054C(C)	1,542	HBV0054C(C)	1,626
5	1200	215TC	91.0	82.5	6.24	235	HB0056C(C)	2,324	HBV0056C(C)	2,425
7.5	3600	213TC	91.0	89.0	8.67	202	HB7/52C	2,067	HBV7/52C	2,175
7.5	1800	213TC	91.7	86.5	8.85	202	HB7/54C(C)	2,101	HBV7/54C(C)	2,208
7.5	1200	254TC	91.0	80.5	9.59	323	HB7/56C(C)	3,203	HBV7/56C(C)	3,339
10	3600	215TC	91.0	89.5	11.50	224	HB0102C	2,215	HBV0102C	2,317
10	1800	215TC	91.7	88.0	11.60	224	HB0104C(C)	2,255	HBV0104C(C)	2,360
10	1200	256TC	91.0	80.5	12.80	380	HB0106C(C)	3,706	HBV0106C(C)	3,834
15	3600	254TC	92.4	91.5	16.60	323	HB0152C	3,146	HBV0152C	3,285
15	1800	254TC	92.4	88.0	17.30	345	HB0154C(C)	3,135	HBV0154C(C)	3,274
15	1200	284TC	92.4	83.5	18.20	540	HB0156C(C)	4,539	HBV0156C(C)	4,704
20	3600	256TC	92.4	92.5	21.90	367	HB0202C	3,757	HBV0202C	3,883
20	1800	256TC	93.0	87.5	23.00	425	HB0204C(C)	3,706	HBV0204C(C)	3,834
20	1200	286TC	91.7	84.0	24.30	565	HB0206C(C)	5,476	HBV0206C(C)	5,623
25	3600	284TSC	92.4	91.0	27.80	490	HB0252C	4,287	HBV0252C	4,452
25	1800	284TC	93.6	86.0	29.10	555	HB0254C(C)	4,238	HBV0254C(C)	4,399
25	1200	324TC	93.0	83.0	30.30	759	HB0256C(C)	6,525	HBV0256C(C)	6,725
30	3600	286TSC	93.0	91.0	33.20	535	HB0302C	4,569	HBV0302C	4,725
30	1800	286TC	93.6	87.5	34.30	656	HB0304C(C)	4,569	HBV0304C(C)	4,725
30	1200	326TC	93.0	80.5	37.50	795	HB0306C(C)	6,984	HBV0306C(C)	7,177
40	3600	324TSC	94.1	90.0	44.20	755	HB0402C	6,326	HBV0402C	6,530
40	1800	324TC	94.1	86.0	46.30	740	HB0404C(C)	6,155	HBV0404C(C)	6,362
40	1200	364TC	94.1	86.5	46.00	898	HB0406C(C)	10,337	HBV0406C(C)	10,576
50	3600	326TSC	94.1	91.0	54.70	782	HB0502C	7,282	HBV0502C	7,467
50	1800	326TC	94.5	87.0	56.90	845	HB0504C(C)	7,122	HBV0504C(C)	7,309
50	1200	365TC	94.1	86.0	57.80	1,110	HB0506C(C)	12,006	HBV0506C(C)	12,213
60	3600	364TSC	94.1	93.0	64.20	853	HB0602C	11,133	HBV0602C	11,355
60	1800	364TC	95.0	86.5	68.40	955	HB0604C(C)	10,807	HBV0604(C)	11,034
60	1200	404TC	94.5	87.0	68.30	1,355	HB0606C(C)	13,459	HBV0606C(C)	13,744
75	3600	365TSC	94.5	93.0	79.90	1,015	HB0752C	12,614	HBV0752C	12,807
75	1800	365TC	95.4	86.5	85.1	1,040	HB0754C(C)	12,061	HBV0754C(C)	12,266
75	1200	405TC	94.5	86.5	85.9	1,363	HB0756C(C)	14,652	HBV0756C(C)	14,918
100	3600	405TSC	95.4	92.0	107.0	1,330	HB1002C	15,829	HBV1002C	16,070
100	1800	405TC	95.4	87.5	112.0	1,385	HB1004C(C)	14,774	HBV1004C(C)	15,033

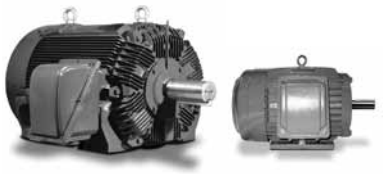
Notes:

(1) To check stock or order 575V motors, add "5" to the end of Catalog Number, for example: "HB00545" for 5 HP, 1800 RPM, 575V.
(2) All data subject to change without notice.
(C) Meets NEMA Design C Torque.

MAX-HT™ LOW VOLTAGE CRUSHER DUTY

AEHHGD, NEMA PREMIUM, DESIGN C (20 HP - 200 HP) [CDP]
AEEAGD, HIGH EFFICIENCY, DESIGN C [CD]

Effective 03-24-17
Supercedes 06-14-15



APPLICATIONS:

- Crushers
- Impactors
- Chippers/ Shredders
- Ball Mills/ Rolling Mills
- Any High Torque Application

FEATURES:

- Output Range: 20 - 600 HP
- Speed: 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Maximum(6)
- CSA Certified for Class II, Div. 2, Groups F & G - Temp Code T3 Maximum (Frame 444T - 449T Only)(6)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design C Torques; Equal or Greater Than 200% Starting Torque / 250% Breakdown Torque
- Cast Iron Frame, End Brackets, Main Conduit Box; Rolled Steel Fan Cover(7)
- Grounding Terminal Inside Main Conduit Box(8)
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- High Strength 4140 AISI Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5 BG 3.5/0.5
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings
- Gamma (Axial Face) Seal on Both Ends for F# 140T - 400T
- Labyrinth Type Metal Flinger on Both Ends for F# 440T and Larger
- Cast Iron Inner and Outer Bearing Caps for F# 320T and Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque (350 HP and Larger are 3:1 Constant Torque)
- 12 Leads for 125 HP and Smaller;
- 6 Leads for 150 HP and Larger
- Standard With Thermistors (PTC 140˚C) 1 per Phase
- Locknut and Washer on NDE for Vertical Shaft Down Applications on F# 440 and Larger
- Drain Holes / Plugs on Both End Brackets for Vertical Applications
- Threaded One Way Breather Drains for Horizontal Mount Applications

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

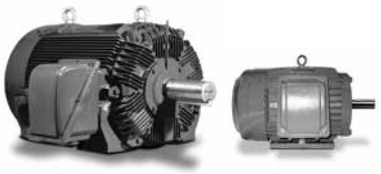
Notes:

(1) 575V motors available on a made-to order basis. Consult a Stock Product Application Specialist for details.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(6) CSA Certification for Hazardous Locations only applies to AEHHGD, NEMA Premium Type.
(7) F# 5000 and with Larger with Pressed Steel Plate Main Conduit Box.
(8) Additional Foot Grounding Provision for F# 440 and Larger.

MAX-HT™ LOW VOLTAGE CRUSHER DUTY

AEHHGD, NEMA PREMIUM, DESIGN C (20 HP - 200 HP) [CDP]

Effective 03-24-17
Supercedes 06-14-15



CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
CDP0204	20	1800	256T	93.0	86.0	23.4	395	2,715
CDP0206	20	1200	286T	91.7	84.0	24.3	520	3,288
CDP0208	20	900	324T	91.0	81.0	25.4	557	5,309
CDP0254	25	1800	284T	93.6	86.0	29.1	510	3,027
CDP0256	25	1200	324T	93.0	83.0	30.3	745	5,089
CDP0258	25	900	326T	91.0	80.0	32.2	665	5,927
CDP0304	30	1800	286T	93.6	87.5	34.3	545	3,446
CDP0306	30	1200	326T	93.0	80.5	37.5	775	5,139
CDP0308	30	900	364T	93.0	78.0	38.7	718	6,302
CDP0308R	30	900	364T	93.0	78.0	38.7	718	6,302
CDP0404	40	1800	324T	91.4	86.0	46.3	710	4,534
CDP0406	40	1200	364T	91.4	86.5	46.0	945	6,995
CDP0406R	40	1200	364T	91.4	86.5	46.0	945	6,995
CDP0408	40	900	365T	93.0	78.0	52.0	807	9,649
CDP0408R	40	900	365T	93.0	78.0	52.0	807	9,649
CDP0504	50	1800	326T	94.5	87.0	57.0	795	5,286
CDP0506	50	1200	365T	94.1	86.0	58.0	1,040	8,261
CDP0506R	50	1200	365T	94.1	86.0	58.0	1,040	8,261
CDP0508	50	900	404T	93.0	81.0	62.0	868	11,086
CDP0508R	50	900	404T	93.0	81.0	62.0	868	11,086
CDP0604	60	1800	364T	95.0	86.5	68.0	870	7,439
CDP0604R	60	1800	364T	95.0	86.5	68.0	870	7,439
CDP0606	60	1200	404T	94.5	87.0	68.0	1,295	10,950
CDP0606R	60	1200	404T	94.5	87.0	68.0	1,295	10,950
CDP0608	60	900	405T	93.0	81.0	75.0	1,243	12,400
CDP0608R	60	900	405T	93.0	81.0	75.0	1,243	12,400
CDP0754	75	1800	365T	95.4	86.5	85.0	1,075	9,513
CDP0754R	75	1800	365T	95.4	86.5	85.0	1,075	9,513
CDP0756	75	1200	405T	94.5	86.5	86.0	1,317	11,524
CDP0756R	75	1200	405T	94.5	86.5	86.0	1,317	11,524
CDP0758	75	900	444T	93.6	73.0	103	1,600	24,730
CDP0758R	75	900	444T	93.6	73.0	103	1,600	24,730
CDP1004	100	1800	405T	95.4	87.5	112	1,360	11,870
CDP1004R	100	1800	405T	95.4	87.5	112	1,360	11,870
CDP1006	100	1200	444T	95.0	82.5	119	1,665	20,931
CDP1006R	100	1200	444T	95.0	82.5	119	1,665	20,931
CDP1008	100	900	445T	93.6	78.0	128	1,800	26,371
CDP1008R	100	900	445T	93.6	78.0	128	1,800	26,371
CDP1254	125	1800	444T	95.4	85.0	144	1,705	21,154
CDP1254R	125	1800	444T	95.4	85.0	144	1,705	21,154
CDP1256	125	1200	445T	95.0	83.0	148	1,995	25,836
CDP1256R	125	1200	445T	95.0	83.0	148	1,995	25,836
CDP1258	125	900	447T	94.1	80.0	155	2,450	29,819
CDP1258R	125	900	447TZ	94.1	80.0	155	2,450	29,819
CDP1504	150	1800	445T	95.8	85.0	172	1,865	22,163
CDP1504R	150	1800	445T	95.8	85.0	172	1,865	22,163
CDP1506	150	1200	447T	95.8	83.5	176	2,363	27,903
CDP1506R	150	1200	447TZ	95.8	83.5	176	2,363	27,903
CDP1508	150	900	449T	94.1	80.0	187	2,800	34,657
CDP1508R	150	900	449TZ	94.1	80.0	187	2,800	34,657
CDP2004	200	1800	447T	95.4	87.0	226	2,465	24,572
CDP2004R	200	1800	447TZ	95.4	87.0	226	2,465	24,572
CDP2006T	200	1200	449T	95.8	84.0	233	2,783	28,499
CDP2006TR	200	1200	449TZ	95.8	84.0	233	2,783	28,499
CDP2008T	200	900	449T	94.5	82.5	240	2,875	28,987
CDP2008TR	200	900	449TZ	94.5	82.5	240	2,875	28,987

Notes:

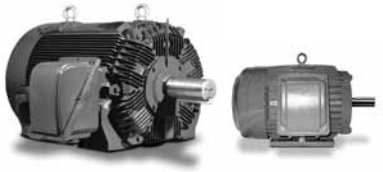
(1) AEHHGD "CDP" motors replace AEEAGD "CD" motor line in compliance to new DOE standards.
(2) All data subject to change without notice.

MAX-HT™ LOW VOLTAGE CRUSHER DUTY

CCOO2A

AEEAGD, HIGH EFFICIENCY, DESIGN C [CD]

Effective 03-24-17
Supercedes 06-14-15



CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
CD0204	20	1800	256T	91.0	90.0	22.9	395	1,898
CD0206	20	1200	286T	90.2	83.5	24.9	520	2,999
CD0208	20	900	324T	90.2	81.0	25.7	557	4,938
CD0254	25	1800	284T	92.4	86.5	29.3	510	2,357
CD0256	25	1200	324T	91.7	81.5	31.3	745	3,911
CD0258	25	900	326T	90.2	79.5	32.7	665	5,709
CD0304	30	1800	286T	92.4	88.0	34.6	545	2,860
CD0306	30	1200	326T	91.7	80.5	38.1	775	4,580
CD0308	30	900	364T	91.7	77.5	39.6	718	6,996
CD0404	40	1800	324T	93.0	90.0	44.8	710	3,700
CD0406	40	1200	364T	93.0	86.5	46.6	945	6,174
CD0406R	40	1200	364T	93.0	86.5	46.6	945	6,174
CD0408	40	900	365T	92.4	76.5	53.0	807	8,668
CD0408R	40	900	365T	92.4	76.5	53.0	807	8,668
CD0504	50	1800	326T	93.0	90.0	56.0	795	4,805
CD0506	50	1200	365T	93.0	85.5	59.0	1,040	7,463
CD0506R	50	1200	365T	93.0	85.5	59.0	1,040	7,463
CD0508	50	900	404T	93.0	80.5	62.5	868	9,688
CD0508R	50	900	404T	93.0	80.5	62.5	868	9,688
CD0604	60	1800	364T	93.6	87.0	69.0	870	6,505
CD0604R	60	1800	364T	93.6	87.0	69.0	870	6,505
CD0606	60	1200	404T	93.6	88.0	68.0	1,295	9,665
CD0606R	60	1200	404T	93.6	88.0	68.0	1,295	9,665
CD0608	60	900	405T	93.0	81.0	74.5	1,243	10,837
CD0608R	60	900	405T	93.0	81.0	74.5	1,243	10,837
CD0754	75	1800	365T	94.1	88.0	85.0	1,075	8,316
CD0754R	75	1800	365T	94.1	88.0	85.0	1,075	8,316
CD0756	75	1200	405T	93.6	88.5	85.0	1,317	10,025
CD0756R	75	1200	405T	93.6	88.5	85.0	1,317	10,025
CD0758	75	900	444T	92.4	79.5	95.6	1,600	22,041
CD0758R	75	900	444T	92.4	79.5	95.6	1,600	22,041
CD1004	100	1800	405T	94.5	90.0	110	1,360	10,477
CD1004R	100	1800	405T	94.5	90.0	110	1,360	10,477
CD1006	100	1200	444T	94.1	83.5	119	1,665	18,802
CD1006R	100	1200	444T	94.1	83.5	119	1,665	18,802
CD1008	100	900	445T	92.4	80.0	127	1,800	23,252
CD1008R	100	900	445T	92.4	80.0	127	1,800	23,252
CD1254	125	1800	444T	94.5	87.5	142	1,705	19,231
CD1254R	125	1800	444T	94.5	87.5	142	1,705	19,231
CD1256	125	1200	445T	94.1	83.0	150	1,995	23,027
CD1256R	125	1200	445T	94.1	83.0	150	1,995	23,027
CD1258	125	900	447T	93.0	81.0	155	2,450	27,108
CD1258R	125	900	447TZ	93.0	81.0	155	2,450	27,108

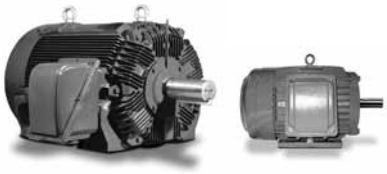
Notes:

(1) Per DOE regulations, this High Efficiency inventory in 256T - 449T frame will be available through June 2018, or until current inventory has been depleted. Whichever occurs first. Please see our new line of 256T - 449T frame Premium Efficient Crusher Duty (AEHHGD) motors on page 69.

(2) All data subject to change without notice.

AEEAGD, HIGH EFFICIENCY, DESIGN C [CD] continued...

Effective 03-24-17
Supercedes 06-14-15



CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
CD1504	150	1800	445T	95.0	88.0	168	1,865	20,148
CD1504R	150	1800	445T	95.0	88.0	168	1,865	20,148
CD1506	150	1200	447T	95.0	86.5	171	2,363	25,167
CD1506R	150	1200	447TZ	95.0	86.5	171	2,363	25,167
CD1508	150	900	449T	93.0	81.5	185	2,800	31,506
CD1508R	150	900	449TZ	93.0	81.5	185	2,800	31,506
CD2004R	200	1800	447TZ	95.0	88.5	223	2,465	21,900
CD2006R	200	1200	449TZ	95.0	86.5	228	2,783	25,400
CD2006RZ	200	1200	505UZ	95.0	85.0	231	3,500	25,386
CD2008R	200	900	5007C	94.1	80.0	249	3,728	38,080
CD2504TB	250	1800	449T	95.4	88.5	277	2,708	22,780
CD2504TR	250	1800	449TZ	95.4	88.5	277	2,708	22,780
CD2504R	250	1800	5007C	95.0	88.0	280	3,570	25,386
CD2504RZ	250	1800	505UZ	95.0	88.0	280	3,150	24,750
CD2506TR	250	1200	449TZ	95.4	88.5	277	2,800	26,917
CD2506R	250	1200	5007C	95.0	85.0	290	3,500	27,978
CD2506RZ	250	1200	586/7UZ	95.0	85.0	290	4,750	36,278
CD2508R	250	900	5009C	94.5	80.0	310	4,200	42,402
CD3004TR	300	1800	449TZ	95.4	88.5	333	2,800	26,683
CD3004R	300	1800	5007C	95.4	88.5	333	3,585	28,336
CD3004RZ	300	1800	586/7UZ	95.4	88.5	333	4,748	36,273
CD3006TR	300	1200	449TZ	95.4	88.5	333	3,100	32,582
CD3006R	300	1200	5009C	95.0	85.0	348	4,175	35,337
CD3006RZ	300	1200	586/7UZ	95.0	85.0	348	5,100	41,711
CD3008R(1)	300	900	5806C	94.5	81.0	367	5,093	52,832
CD3504TR	350	1800	449TZ	95.4	88.5	388	3,100	29,548
CD3504R	350	1800	5009C	95.4	88.5	388	3,945	31,563
CD3504RZ	350	1800	586/7UZ	95.4	88.5	388	5,093	39,012
CD3506R	350	1200	5806C	95.0	85.0	406	4,750	42,540
CD3506RZ	350	1200	586/7UZ	95.0	85.0	406	5,565	44,637
CD3508R(1)	350	900	5808C	94.5	81.0	427	5,610	55,371
CD4004R	400	1800	5806C	95.4	89.0	441	4,748	40,207
CD4004RZ	400	1800	586/7UZ	95.4	89.0	441	5,445	43,050
CD4006R(1)	400	1200	5808C	95.0	85.5	461	5,100	47,753
CD4006RZ(1)	400	1200	586/7UZ	95.0	85.5	461	6,020	47,753
CD4008R1	400	900	5808C	95.0	81.0	487	5,828	67,089
CD4504R	450	1800	5808C	95.4	89.5	493	5,093	44,765
CD4504RZ	450	1800	586/7UZ	95.4	89.5	493	6,510	44,765
CD4506R(1)	450	1200	5808C	95.4	85.5	517	5,565	51,871
CD5004R	500	1800	5808C	95.8	89.5	547	5,445	46,164
CD5006R(1)	500	1200	5808C	95.4	85.5	574	6,020	55,165
CD6004R(1)	600	1800	5808C	95.8	89.5	655	6,510	65,799
CD6006R(1)	600	1200	5810C	95.4	85.5	689	6,898	79,125

Notes:

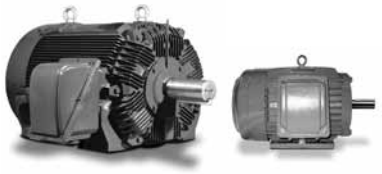
(1) Ratings not have a DOE mandated NEMA Premium requirement and therefore will continue to be stock items. No change to current design.
(2) Per DOE regulations, the non-exempt High Efficiency inventory will be available through June 2018, or until current inventory has been depleted. Whichever occurs first. Please see our new line of Design A Premium Efficient Crusher Duty (AEHHGD) motors on page 69.
(3) All data subject to change without notice.

MAX-HT™ LOW VOLTAGE CRUSHER DUTY

NEMA Premium ee CCOO2A

AEHHGD, NEMA PREMIUM, DESIGN A [CDP]

Effective 03-24-17
Supercedes 06-14-15



APPLICATIONS:

- Crushers
- Impactors
- Chippers/ Shredders
- Ball Mills/ Rolling Mills
- Any High Torque Application

FEATURES:

- Output Range: 200 - 500 HP
- Speed: 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 460V(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design C Torques; Equal or Greater Than 150% Starting Torque/ 250% Breakdown Torque
- Cast Iron Frame, End Brackets; Pressed Steel Plate Main Conduit Box and Fan Cover
- Grounding Terminal Inside Main Conduit Box with additional Foot Grounding Provision
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- High Strength 4140 AISI Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5 BG 3.5/0.5
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings
- Labyrinth Type Metal Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(4,5)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque (350 HP and Larger are 3:1 Constant Torque)
- 6 Leads
- Standard With Thermistors (PTC 140˚C) 1 per Phase
- Locknut and Washer on NDE for Vertical Shaft Down Applications
- Drain Holes / Plugs on Both End Brackets for Vertical Applications
- Threaded One Way Breather Drains for Horizontal Mount Applications

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) 575V motors available on a made-to order basis. Consult a Stock Product Application Specialist for details.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

MAX-HT™ LOW VOLTAGE CRUSHER DUTY

NEMA Premium ee CCOO2A

AEHHGD, NEMA PREMIUM, DESIGN A [CDP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING. WT. (lbs.)	LIST PRICE ($)
CDP2006RZ	200	1200	505UZ	95.8	79.9	245	3,200	31,647
CDP2008R	200	900	5007C	94.5	79.1	251	2,000	43,272
CDP2008RZ	200	900	586/7UZ	94.5	76.6	259	2,370	55,130
CDP2504TB	250	1800	449T	96.2	85.0	286	2,750	25,886
CDP2504TR	250	1800	449TZ	96.2	85.0	286	2,760	25,886
CDP2504R	250	1800	5007C	96.2	82.4	295	3,620	32,852
CDP2504RZ	250	1800	505UZ	96.2	82.4	295	3,250	31,412
CDP2506TR	250	1200	449TZ	95.8	78.5	311	2,925	28,483
CDP2506R	250	1200	5007C	95.8	79.3	308	3,760	34,972
CDP2506RZ	250	1200	586/7UZ	95.8	79.5	307	4,850	51,031
CDP2508R	250	900	5009C	95.0	78.3	315	2,250	48,184
CDP2508RZ	250	900	586/7UZ	95.0	76.5	322	2,450	58,205
CDP3004TR	300	1800	449TZ	96.2	84.0	348	2,865	32,503
CDP3004R	300	1800	5007C	96.2	82.5	352	3,750	35,420
CDP3004RZ	300	1800	586/7UZ	96.2	81.4	359	4,900	55,252
CDP3006TR	300	1200	449TZ	95.8	82.5	355	3,450	37,025
CDP3006R	300	1200	5009C	95.8	82.3	356	4,350	40,156
CDP3006RZ	300	1200	586/7UZ	95.8	80.9	362	4,950	53,374
CDP3504TR	350	1800	449TZ	96.2	88.5	385	3,290	32,503
CDP3504R	350	1800	5009C	96.2	85.8	397	4,140	33,901
CDP3504RZ	350	1800	586/7UZ	96.2	82.7	412	5,050	55,786
CDP3506R	350	1200	5806C	95.8	79.5	430	5,680	56,949
CDP3506RZ	350	1200	586/7UZ	95.8	79.5	430	5,100	57,101
CDP4004R	400	1800	5806C	96.2	81.6	477	5,650	57,211
CDP4004RZ	400	1800	586/7UZ	96.2	81.6	477	5,200	59,696
CDP4504R	450	1800	5808C	96.2	82.5	531	5,650	60,419
CDP4504RZ	450	1800	586/7UZ	96.2	82.8	529	5,300	61,981
CDP5004R	500	1800	5808C	96.2	82.4	590	5,860	65,165
CDP5004RZ	500	1800	586/7UZ	96.2	82.4	590	5,450	66,069

Notes:
(1) All data subject to change without notice.

MAX-HT™ MEDIUM VOLTAGE CRUSHER DUTY

AEHAGD, ENERGY EFFICIENCT, HIGH TORQUE [KD]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Mills
- Grinders
- Compressors
- Crushers
- Impacters
- Ball Mills
- Shredders
- High Torque Applications

FEATURES:

- Output Range: 100 - 900 HP
- Speed: 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 2300/4000V(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Maximum
- CSA Certified for Class II, Div. 2, Groups F & G - Temp Code T3 Maximum
- Class F Insulation
- Class B Temperature Rise
- NEMA Design C Torques; Equal or Greater Than 200% Starting Torque / 250% Breakdown Torque
- Cast Iron Frame, End Brackets; Pressed Steel Plate Main Conduit Box and Fan Cover(5)
- Grounding Terminal Inside Main Conduit Box with additional Foot Grounding Provision
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- High Strength 4140 AISI Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5 BG 3.5/0.5
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings
- Labyrinth Type Metal Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Stainless Steel Nameplate
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-16
- Inverter Duty Speed Range: 10:1 Variable Torque, 3:1 Constant Torque
- 6 Leads
- CSA Approved
- Locknut and Washer on NDE for Vertical Shaft Down Applications
- Drain Holes / Plugs on Both End Brackets for Vertical Applications
- Threaded One Way Breather Drains for Horizontal Mount Applications
- 100 Ohm Platinum Stator RTD's (2/Phase); in separate Auxiliary Box
- Space Heaters (120V); in separate Auxiliary Box(4)
- Mounting Provisions for Bearing RTD's and Vibration Detectors on F# 5007 and Larger

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Suitable for Full Voltage Direct On-Line Connection, Wye-Delta Start, Reduced Voltage Start or VFD.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Space Heaters are Low Temperature Type; Suitable for Hazardous Location Division 2 Environments
(5) F# 447T(Z) - 449T(Z) with Cast Iron Main Conduit Box and Cast Iron Fan Cover.
(6) Motor service factor is 1.0 when operated on a VFD.

MAX-HT™ MEDIUM VOLTAGE CRUSHER DUTY

AEHAGD, ENERGY EFFICIENCT, HIGH TORQUE [KD]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (2300V)	APPROX. SHIPPING. WT. (lbs.)	LIST PRICE ($)
KD1004	100	1800	447T	24.0	94.50	84.2	2,220	37,674
KD1006R	100	1200	447TZ	27.0	94.10	73.8	2,175	38,750
KD1008R	100	900	447TZ	28.0	93.00	73.6	2,400	39,560
KD1254	125	1800	447T	29.0	94.50	84.6	2,350	41,805
KD1256R	125	1200	449TZ	31.0	94.10	77.5	2,625	42,350
KD1258R	125	900	449TZ	33.0	93.60	74.2	2,575	49,499
KD1504	150	1800	449T	35.0	95.00	84.4	2,550	48,650
KD1506R	150	1200	449TZ	38.0	95.00	77.2	3,830	53,750
KD1508R	150	900	5007C	41.0	93.60	73.8	3,650	57,401
KD2004	200	1800	5007C	48.0	95.00	83.4	3,970	54,989
KD2006R	200	1200	5007C	54.0	95.00	74.4	3,950	66,263
KD2008R	200	900	5009C	52.0	94.10	77.6	3,875	72,421
KD2504	250	1800	5007C	59.0	95.00	84.0	4,050	66,796
KD2506R	250	1200	5009C	64.0	95.00	76.9	4,080	73,025
KD2508R	250	900	5009C	65.0	94.50	75.8	4,210	82,899
KD3004	300	1800	5009C	70.0	95.40	83.6	4,155	69,754
KD3006R	300	1200	5009C	75.0	95.00	77.9	4,235	78,896
KD3008R	300	900	5011C	77.0	94.50	76.3	4,660	88,395
KD3504	350	1800	5009C	81.0	95.40	84.9	4,305	78,962
KD3506R	350	1200	5011C	92.0	95.00	75.5	4,460	85,429
KD3508R	350	900	5808C	95.0	94.50	73.3	5,825	106,705
KD4004	400	1800	5011C	93.0	95.40	85.4	4,490	83,342
KD4006R	400	1200	5011C	109.0	95.00	73.8	4,725	91,999
KD4008R	400	900	5808C	109.0	94.50	74.1	6,280	114,632
KD4504	450	1800	5011C	106.0	95.40	85.5	4,620	87,954
KD4506R	450	1200	5808C	114.0	95.00	79.3	5,400	102,771
KD4508R	450	900	5810C	127.0	94.50	71.6	6,585	115,296
KD5004	500	1800	5011C	116.0	95.80	85.4	4,845	93,587
KD5006R	500	1200	5810C	128.0	95.00	78.3	5,710	112,994
KD5008R	500	900	5810C	135.0	94.50	74.4	7,040	121,193
KD6004	600	1800	5810C	138.0	95.80	86.2	6,115	109,159
KD6006R	600	1200	5810C	151.0	95.00	79.4	6,160	127,982
KD6008R	600	900	6808C	162.0	94.50	74.7	7,830	161,655
KD7004	700	1800	5810C	160.0	95.80	85.8	6,610	125,162
KD7006R	700	1200	6808C	170.0	95.00	81.4	8,260	148,272
KD7008R	700	900	6808C	184.0	94.50	75.8	8,755	162,724
KD8004	800	1800	6808C	197.0	95.80	80.4	7,900	141,626
KD8006R	800	1200	6808C	198.0	95.00	81.0	8,955	162,411
KD9004	900	1800	6808C	218.0	95.80	81.3	8,360	151,741

Notes:
(1) All data subject to change without notice.

STAINLESS STEEL WASHDOWN

AEGP, NEMA PREMIUM, FOOTED C-FACE [WFP/WP]
AEGPCW, NEMA PREMIUM, ROUND BODY C-FACE [WFPV/WPV]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Any Application Where the Motor Will be Subjected to High Pressure Spray Down
- Marine Duty
- Food Processing and Packaging

FEATURES:

- Output: 1/2 - 10 HP
- Speed: 3600 & 1800 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP56) (IEEE 45)
- Voltage: 230/460V (Usable on 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Stainless Steel Frame, End Brackets and Hardware
- Grounding Terminal Inside Main Conduit Box
- Stainless Steel Oversized Main Conduit Box - F3 Mounted (IM1001)
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- SUS304 Stainless Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Double Shielded Bearings Pre-Packed with MULTEMP SRL
- Contact Lip Type Seal on Both Ends
- Etched Nameplate on the Stainless Steel Frame
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(3,4)
- Inverter Duty Speed Range: 10:1 Variable Torque, 4:1 Constant Torque
- 9 Leads
- Two Drain Holes on Bottom of Frame and one in the C-Flange
- Motors are U.L. Recognized, CSA Approved and CE Marked
- Department of Energy Efficiency Certificate # CC082A
- Encapsulated Windings as Option(5)

EXTRAS/ OPTIONS:

- Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(5) Consult a Stock Product Application Specialist for encapsulated winding quote.

STAINLESS STEEL WASHDOWN

AEGP, NEMA PREMIUM, FOOTED C-FACE [WFP/WP]
AEGPCW, NEMA PREMIUM, ROUND BODY C-FACE [WFPV/WPV]

Effective 03-24-17
Supercedes 06-14-15

HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	FOOTED C-FACE		ROUND BODY C-FACE	
							CATALOG NO.	LIST PRICE ($)	CATALOG NO.	LIST PRICE ($)
1/2	3600	A56C	75.0	79.0	0.8	37	WFP0/52C	710	WFPV0/52C	710
1/2	1800	A56C	80.0	65.0	0.9	37	WFP0/54C	725	WFPV0/54C	725
3/4	3600	A56C	77.0	84.0	1.1	39	WFP0/72C	775	WFPV0/72C	775
3/4	1800	A56C	80.0	68.0	1.3	39	WFP0/74C	800	WFPV0/74C	800
1	3600	A56C	77.0	90.0	1.4	37	WFP0012C	955	WFPV0012C	955
1	3600	143TC	77.0	90.0	1.4	46	WP0012C	955	WPV0012C	955
1	1800	B56C	85.5	70.0	1.6	44	WFP0014C	985	WFPV0014C	985
1	1800	143TC	85.5	70.0	1.6	46	WP0014C	985	WPV0014C	985
1.5	3600	B56C	84.0	90.0	2.0	45	WFP1/52C	1,035	WFPV1/52C	1,035
1.5	3600	143TC	84.0	90.0	2.0	50	WP1/52C	1,035	WPV1/52C	1,035
1.5	1800	C56C	86.5	73.0	2.2	55	WFP1/54C	1,022	WFPV1/54C	1,022
1.5	1800	145TC	86.5	73.0	2.2	58	WP1/54C	1,022	WPV1/54C	1,022
2	3600	C56C	85.5	91.0	2.4	52	WFP0022C	1,238	WFPV0022C	1,238
2	3600	145TC	85.5	91.0	2.4	58	WP0022C	1,238	WPV0022C	1,238
2	1800	C56C	86.5	75.0	3.0	62	WFP0024C	1,215	WFPV0024C	1,215
2	1800	145TC	86.5	75.0	3.0	65	WP0024C	1,215	WPV0024C	1,215
3	3600	182TC	86.5	88.0	4.1	80	WP0032C	2,345	WPV0032C	2,345
3	1800	182TC	86.5	78.0	4.0	115	WP0034C	2,390	WPV0034C	2,390
5	3600	184TC	88.5	91.0	6.1	128	WP0052C	2,730	WPV0052C	2,730
5	1800	184TC	89.5	85.0	6.3	128	WP0054C	2,750	WPV0054C	2,750
7.5	3600	213TC	89.5	85.0	9.5	175	WP7/52C	4,228	WPV7/52C	4,228
7.5	1800	213TC	91.7	82.0	9.3	190	WP7/54C	4,650	WPV7/54C	4,650
10	3600	215TC	90.2	87.0	12.2	210	WP0102C	4,283	WPV0102C	4,283
10	1800	215TC	91.7	84.0	12.2	225	WP0104C	4,847	WPV0104C	4,847

Notes:

(1) Select catalog numbers have changed in order to follow the following format:
"WFPV" = 56 Frame Round Body C-Face
"WFP" = 56 Frame Footed C-Face
"WPV" = F#140TC - F#210TC Round Body C-Face
"WP" = F#140TC - F#210TC Footed C-Face

(2) Data subject to change without notice.

HVAC SINGLE PHASE ODP

BSGS39, NEMA PREMIUM [SP/SPH]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans
- Pumps
- Compresssors
- Air Conditioning Blowers
- Heating
- Ventillation

FEATURES:

- Output Range: 1/4 - 3 HP
- Speed: 3600 & 1800 RPM
- Enclosure: Open Drip Proof (IP22)
- Voltage: 115/208/230V (Tri-Voltage)
- Single Phase, 60 Hz; 1.15 Service Factor for 115V & 230V or 1.0 Service Factor for 208V
- Capacitor Start, Capacitor Run
- Class F Insulation
- Automatic Reset Overload
- Class B Temperature Rise
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- Rolled Steel Frame
- Cast Aluminum Terminal Box
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Lacquer Top Coat
- Paint Color: Blue - Munsell 5 PB 3/8
- Double Shielded Bearings Pre-Packed with Lithium Base Grease
- No Terminals; Lead End Peel-Off Insulation
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- Motors are UL Recognized for United States and Canada

EXTRAS/ OPTIONS:

- Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.

HVAC SINGLE PHASE ODP

BSGS39, NEMA PREMIUM [SP/SPH]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING. WT. (lbs.)	LIST PRICE ($)
SP0/22	1/4	3600	48	66.0	90.0	1.31	25	285
SPH0/22	1/4	3600	56	66.0	90.0	1.31	26	310
SP0/24	1/4	1800	48	68.5	81.0	1.41	26	290
SPH0/24	1/4	1800	56	68.5	81.0	1.41	26	316
SP0/32	1/3	3600	48	70.5	90.0	1.71	26	301
SPH0/32	1/3	3600	56	70.5	90.0	1.71	26	314
SP0/34	1/3	1800	48	72.4	81.0	1.85	27	308
SPH0/34	1/3	1800	56	72.4	81.0	1.85	31	321
SP0/52	1/2	3600	48	72.4	90.0	2.47	29	323
SPH0/52	1/2	3600	56	72.4	90.0	2.47	29	375
SP0/54	1/2	1800	48	76.2	83.0	2.54	34	345
SPH0/54	1/2	1800	56	76.2	83.0	2.54	34	407
SP0/72	3/4	3600	48	76.2	92.0	3.41	33	357
SPH0/72	3/4	3600	56	76.2	92.0	3.41	33	410
SP0/74	3/4	1800	56H	81.8	90.0	3.25	42	445
SPH0/74	3/4	1800	143T	81.8	90.0	3.25	44	478
SPH0012	1	3600	56H	80.4	92.0	4.41	37	468
SP0012	1	3600	143T	80.4	92.0	4.41	38	492
SPH0014	1	1800	56H	82.6	90.0	4.39	47	527
SP0014	1	1800	143T	82.6	90.0	4.39	47	566
SPH1/52	1.5	3600	56H	81.5	96.0	6.11	42	542
SP1/52	1.5	3600	143T	81.5	96.0	6.11	42	558
SPH1/54	1.5	1800	56H	83.8	96.0	5.94	55	583
SP1/54	1.5	1800	145T	83.8	96.0	5.94	55	641
SPH0022	2	3600	56H	82.9	96.0	8.19	45	624
SP0022	2	3600	145T	82.9	96.0	8.19	45	628
SPH0024	2	1800	56H	84.5	96.0	8.04	62	667
SP0024	2	1800	145T	84.5	96.0	8.04	63	738
SPH0032	3	3600	56H	84.1	98.0	11.6	55	655
SP0032	3	3600	145T	84.1	98.0	11.6	55	670

Notes:
(1) Data subject to change without notice.

HVAC SINGLE PHASE TEFC

BEGS39, NEMA PREMIUM (1/4 HP - 3 HP) [SPT/SPHT]
BEGS19, ENERGY EFFICIENT (3 HP - 10 HP) [ST]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans
- Pumps
- Compresssors
- Air Conditioning Blowers
- Heating
- Ventillation

FEATURES:

- Output Range: 1/4 - 10 HP
- Speed: 3600 & 1800 RPM
- Enclosure: Totally Encolsed Fan Cooled (IP44)
- Voltage: 115/208/230V (Tri-Voltage); 3 HP and Larger are 208-230V
- Single Phase, 60 Hz; 1.15 Service Factor for 115V & 230V or 1.0 Service Factor for 208V
- Capacitor Start, Capacitor Run
- Class F Insulation
- Automatic Reset Overload
- Class B Temperature Rise
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- Rolled Steel Frame
- Cast Aluminum Terminal Box
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Lacquer Top Coat
- Paint Color: Blue - Munsell 5 PB 3/8
- Double Shielded Bearings Pre-Packed with Lithium Base Grease
- No Terminals; Lead End Peel-Off Insulation
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- Motors are UL Recognized for United States and Canada

EXTRAS/ OPTIONS:

- Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.

HVAC SINGLE PHASE TEFC

BEGS39, NEMA PREMIUM (1/4 HP - 3 HP) [SPT/SPHT]
BEGS19, ENERGY EFFICIENT (3 HP - 10 HP) [ST]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING. WT. (lbs.)	LIST PRICE ($)
SPT0/22	1/4	3600	48	68.0	90.0	1.28	23	356
SPHT0/22	1/4	3600	56	68.0	90.0	1.28	23	370
SPT0/24	1/4	1800	48	70.0	83.0	1.35	24	372
SPHT0/24	1/4	1800	56	70.0	83.0	1.35	24	386
SPT0/32	1/3	3600	48	72.0	90.0	1.68	24	371
SPHT0/32	1/3	3600	56	72.0	90.0	1.68	24	386
SPT0/34	1/3	1800	48	74.0	83.0	1.77	25	375
SPHT0/34	1/3	1800	56	74.0	83.0	1.77	25	409
SPT0/52	1/2	3600	48	74.0	90.0	2.42	27	403
SPHT0/52	1/2	3600	56	74.0	90.0	2.42	27	418
SPT0/54	1/2	1800	48	77.0	85.0	2.46	29	411
SPHT0/54	1/2	1800	56	77.0	85.0	2.46	29	415
SPT0/72	3/4	3600	48	77.0	92.0	3.38	30	434
SPHT0/72	3/4	3600	56	77.0	92.0	3.38	30	448
SPT0/74	3/4	1800	48	78.5	87.0	3.50	32	441
SPHT0/74	3/4	1800	56	78.5	87.0	3.50	32	455
SPHT0012	1	3600	56H	78.5	92.0	4.51	38	486
SPT0012	1	3600	143T	78.5	92.0	4.51	38	498
SPHT0014	1	1800	56H	80.0	90.0	4.53	41	547
SPT0014	1	1800	143T	80.0	90.0	4.53	42	559
SPHT1/52	1.5	3600	56H	81.5	96.0	6.11	42	531
SPT1/52	1.5	3600	143T	81.5	96.0	6.11	43	543
SPHT1/54	1.5	1800	56H	81.5	92.0	6.38	46	621
SPT1/54	1.5	1800	145T	81.5	92.0	6.38	47	633
SPHT0022	2	3600	56H	82.5	96.0	8.23	45	578
SPT0022	2	3600	145T	82.5	96.0	8.23	45	590
SPHT0024	2	1800	56H	82.5	92.0	8.59	54	698
SPT0024	2	1800	145T	82.5	92.0	8.59	54	710
SPHT0032	3	3600	56H	84.0	98.0	11.70	56	611
SPT0032	3	3600	145T	84.0	98.0	11.70	56	623
ST0034[1]	3	1800	182T	82.5	92.0	12.6	97	977
ST0052[1]	5	3600	184T	82.0	98.0	20.0	112	1,038
ST0054[1]	5	1800	184T	84.0	94.0	20.4	117	1,155
ST7/52[1]	7.5	3600	213T	84.5	98.0	28.9	160	1,696
ST7/54[1]	7.5	1800	213T	82.0	94.0	31.1	188	2,004
ST0102[1]	10	3600	215T	86.0	98.0	38.7	195	1,976
ST0104[1]	10	1800	215T	83.5	94.0	41.6	215	2,375

Notes:
(1) All data subject to change without notice.
(2) Data subject to change without notice.

FARM DUTY SINGLE PHASE

BEGCFD, HIGH EFFICIENCY (1/3 HP - 1 HP) [S]
BECCFD, HIGH EFFICIENCY (1.5 HP) [S]
BECSFD, HIGH EFFICIENCY (2 HP -10 HP) [S]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- Farm Equipment
- Machine Tools

FEATURES:

- Output Range: 1/3 - 10 HP
- Speed: 1800 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP44)
- Voltage: 115/230V (3 HP and Larger are 230V Only)
- Single Phase, 60 Hz, 1.15 Service Factor (Continuous)
- Definite Purpose High Torque Farm Duty Design
- Capacitor Start, Induction Run - 1/3 HP to 1.5 HP
- Capacitor Start, Permanent Split Capacitor Run - 2 HP to 10 HP
- Class B Insulation from 1/3 HP to 3 HP
- Class F Insulation from 5 HP to 10 HP
- Manual Reset Overload with Outside Rubber Boot
- Class B Temperature Rise
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- Rolled Steel Frame for 1/3 - 1 HP
- Cast Iron Frame for 1.5 - 10 HP
- Rolled Steel Terminal Box
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Green - Munsell 5G 4/4
- Double Shielded Bearings Pre-Packed with MULTEMP SRL (Non-Regreasable)
- Rubber Dust Flinger on DE
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate Frames 143T and Larger
- Motors are U.L. Recognized and CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability in higher elevations.

FARM DUTY SINGLE PHASE

BEGCFD, HIGH EFFICIENCY (1/3 HP - 1 HP) [S]
BECCFD, HIGH EFFICIENCY (1.5 HP) [S]
BECSFD, HIGH EFFICIENCY (2 HP -10 HP) [S]

Effective 03-24-17
Supercedes 06-14-15

HP	RPM	FL EFF (%)	FL PF (%)	FRAME MATERIAL[4]	FOOTED FRAME				ROUND BODY C-FACE			
					FRAME	CATALOG NO.	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)	FRAME	CATALOG NO.	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
1/3	1800	51.0	47.0	RS	56	S0/34[1]	29	353	56C	S0/34C[1]	29	511
1/2	1800	58.0	58.0	RS	56	S0/54[1]	33	375	56C	S0/54C[1]	33	533
3/4	1800	65.0	63.0	RS	56	S0/74[1]	38	398	56C	S0/74C[1]	38	556
1	1800	69.0	68.0	RS	56	S0014[1]	50	427	56C	S0014C[1]	50	585
1.5	1800	70.0	63.0	CI	145T	S1/54[1]	73	516	145TC	S1/54C[1]	73	674
2	1800	73.0	63.5	CI	182T	S0024[2]	120	718	182TC	S0024C[2]	120	935
3	1800	74.0	63.0	CI	182T	S0034[2,3]	120	816	182TC	S0034C[2,3]	120	1,033
5	1800	78.5	69.0	CI	184T	S0054[2,3]	135	931	184TC	S0054C[2,3]	135	1,148
7.5	1800	80.0	84.5	CI	213T	S7/54[2,3]	200	1,583	213TC	S7/54C[2,3]	200	1,807
10	1800	78.5	87.0	CI	215T	S0104[2,3]	210	1,885	215TC	S0104C[2,3]	210	2,109

Notes:

(1) BEGCFD and BECCFD are capacitor start, induction run.
(2) BECSFD is capacitor start and permanent split capacitor run.
(3) Ratings 3 HP and Larger are 230V only.
(4) Frame Material: RS = Rolled Steel; CI = Cast Iron
(5) Data subject to change without notice.

OIL WELL PUMP ODP

CCOO2A

ASFAFP, STANDARD EFFICIENCY, DESIGN D [Q]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Oil Well Pumps
- Any Applications Requiring NEMA Design D Torques

FEATURES:

- Output Range: 5 - 125 HP
- Speed: 1200 RPM
- Enclosure: Open Drip Proof (IP22)
- Voltage: 230/460/796V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design D Torques
- Cast Iron Frame, End Brackets and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box with additional Foot Grounding Provision
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F2 Mounted, F1 Available with Modification
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: White - Munsell N9.5
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 280T and Smaller (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease for F# 320T and Larger
- Labyrinth Type Metal Flinger on Both Ends for Frames F# 320T and Larger
- Cast Iron Inner and Outer Bearing Caps for F# 324T and Larger
- Stainless Steel Nameplate
- 12 Leads
- Standard with Klixon 9700K Temperature Limiting Switch, 1 Per Phase
- 5% Minimum Slip
- Rodent Screens

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.

OIL WELL PUMP ODP

ASFAFP, STANDARD EFFICIENCY, DESIGN D [Q]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
Q0056	5	1200	215T	81.5	77.0	7.45	205	1,154
Q7/56	7.5	1200	254T	85.5	82.0	10.0	270	1,470
Q0106	10	1200	256T	85.5	85.0	12.9	335	1,797
Q0156	15	1200	284T	87.5	86.0	18.7	410	2,574
Q0206	20	1200	286T	85.5	89.0	24.6	453	3,175
Q0256	25	1200	324T	86.5	89.0	30.4	620	3,807
Q0306	30	1200	326T	86.5	90.0	36.1	700	4,121
Q0406	40	1200	365T	89.5	90.0	46.5	795	5,723
Q0506	50	1200	404T	88.5	89.5	59.1	1,075	7,053
Q0606	60	1200	404T	89.5	90.0	70.0	1,165	8,096
Q0756	75	1200	405T	88.5	91.0	87.5	1,245	9,606
Q1006R	100	1200	444T	86.5	82.0	132	1,585	12,636
Q1256R	125	1200	445T	87.0	82.0	164	1,725	13,693

Notes:

(1) "R" = Motor stocked standard with a drive-end roller bearing.
(2) All motors are NEMA Design D torque.

OIL WELL PUMP TEFC

CCOO2A

AEEAFP, STANDARD EFFICIENCY, DESIGN D [QT]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Oil Well Pumps
- Any Applications Requiring NEMA Design D Torques

FEATURES:

- Output Range: 5 - 125 HP
- Speed: 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP54)
- Voltage: 230/460V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design D Torques
- Cast Iron Frame, End Brackets, Fan Cover and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box with additional Foot Grounding Provision
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F2 Mounted, F1 Available with Modification
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint System: Phenolic Rust Proof Base with Alkyd Finish
- Paint Color: Dark Blue (Munsell 5PB 4.5/2)
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 280T and Smaller (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease for F# 320T and Larger
- Labyrinth Type Metal Flinger on Both Ends for Frames F# 320T and Larger
- Cast Iron Inner and Outer Bearing Caps for F# 324T and Larger
- Stainless Steel Nameplate
- 12 Leads
- Standard with Klixon 9700K Temperature Limiting Switch, 1 Per Phase
- 5% Minimum Slip

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.

OIL WELL PUMP TEFC

CCOO2A

AEEAFP, STANDARD EFFICIENCY, DESIGN D [QT]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
QT0056	5	1200	215T	83.5	81.5	6.88	155	1,450
QT7/56	7.5	1200	254T	83.5	83.0	10.1	270	1,700
QT0106	10	1200	256T	84.0	84.0	13.3	335	2,250
QT0156	15	1200	284T	85.5	88.0	18.7	410	2,800
QT0206	20	1200	286T	86.5	89.0	24.3	453	3,500
QT0256	25	1200	324T	87.0	88.0	30.6	620	4,100
QT0306	30	1200	326T	87.5	90.5	35.5	700	4,900
QT0406	40	1200	365T	88.5	89.0	47.5	795	6,600
QT0506	50	1200	404T	89.5	92.0	56.9	1,075	8,150
QT0606	60	1200	405T	90.0	92.0	67.8	1,165	9,250
QT0756	75	1200	444T	90.0	88.5	88.2	1,245	15,700
QT1006	100	1200	445T	90.5	89.0	116	1,585	19,200
QT1006R	100	1200	445T	90.5	89.0	116	1,585	19,200
QT1256	125	1200	447T	91.5	89.0	144	1,785	22,000
QT1256R	125	1200	447T	91.5	89.0	144	1,785	22,000

Notes:
(1) "R" = Motor stocked standard with a drive-end roller bearing.
(2) All motors are NEMA Design D torque.

2 SPEED, 1 WINDING, VARIABLE TORQUE

AECA, HIGH EFFICIENCY [CP]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Fans & Blowers
- Pumps
- Cooling Towers

FEATURES:

- Output Range: 100 - 300 HP
- Speeds: 1800 / 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 460V Only
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- Self-Certified for Class I, Div. 2, Groups B, C, D
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum
- Cast Iron Frame, End Brackets, Fan Cover and Main Conduit Box(4)
- Grounding Terminal Inside Main Conduit Box with additional Foot Grounding Provision
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: 2 Part Epoxy
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- Epoxy Coated Internals
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings
- Stainless Steel Nameplate and Hardware
- Stainless Steel Automatic Breather Drain
- 6 Leads Only
- Noise Level Not to Exceed 85 dB(A) at 1 Meter Unloaded
- 2 Speed, 1 Winding - Variable Torque
- High Efficiency, Severe Duty

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitablity in higher ambients.
(2) Please consult factory for suitablity in higher elevations.
(3) Additional charge for Division II nameplate - See Modification Pricing.
(4) Catalog# CP3004/8 (F#5009B) will have steel fan cover.
(5) Multi-speed motors are exempt from (DOE) Depatment of Energy premium efficiency requirements.

2 SPEED, 1 WINDING, VARIABLE TORQUE

AECA, HIGH EFFICIENCY [CP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
CP1004/8	100 / 25	1800/900	444T	92.5 / 88.0	90.0 / 62.0	112 / 42.9	1,855	19,404
CP1254/8	125 / 31	1800/900	445T	92.5 / 88.0	90.0 / 62.0	141 / 53.2	2,105	23,770
CP1504/8	150 / 37	1800/900	447T	93.0 / 90.0	90.0 / 62.0	168 / 62.9	2,647	29,106
CP2004/8	200 / 50	1800/900	449T	93.5 / 90.0	90.5 / 62.0	221 / 83.9	2,820	34,927
CP2504/8	250 / 62.5	1800/900	449T	94.0 / 90.0	90.5 / 62.0	275 / 105	2,820	43,659
CP3004/8	300 / 75	1800/900	5009B	94.5 / 92.0	91.0 / 72.0	327 / 106	4,125	47,540

Notes:
(1) Data subject to change without notice.

TEXP EXPLOSION PROOF FAMILY

Effective 03-24-17
Supercedes 06-14-15

AEHHXV/AEHHXU, NEMA PREMIUM [XP]
AEHHXG/AEHHXF, NEMA PREMIUM, FOOTED C-FACE (1 HP - 100 HP)[XP_C]
AEUHXG/AEUHXF, NEMA PREMIUM, ROUND BODY C-FACE (1 HP - 75 HP)[XPV_C]

APPLICATIONS:

- Grain Elevators
- Pumps
- Blowers
- Applications Where Explosive Gases are Present
- Applications Where Explosive Dusts/ Grains are Present

FEATURES:

- Output Range: 1 - 400 HP
- Speed: 3600, 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled - Explosion Proof (IP55)
- Voltage: 230/460V (Usable on 208V); 150 HP and Larger is 460V Only(1)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- Class I, Div. 1, Group C & D and Class II, Groups E, F and G - Temp Code T2D/T3B Up to and Including F# 256T
- Class I, Div. 1, Group D and Class II, Groups E, F and G - Temp Code T2D/T3B for F# 284T and Larger
- UL File: E84757
- CSA File: #64671
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Standard with Klixon 9700K Temperature Limiting Switch, 1 per Phase
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- Cast Iron Frame, Fan Cover, End Brackets and Main Conduit Box
- Capable of Withstanding Explosion Force as Required by UL
- Stainless Steel Breather Drains with Bronze Filters (For Horizontal Mount Only)
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Blue - Munsell 5 PB 4.5/2
- Double Shielded Bearings Pre-Packed with MULTEMP SRL for F# 140T - 280T (Non-regreasable)
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease for F# 280TS and Larger
- Bronze Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps for F#280TS and Larger
- Stainless Steel Nameplate
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1(4,5)
- UL Listed for Inverter Duty(4,5)
- Inverter Duty Magnet Wire Capable of Withstanding Voltage Spikes of up to 2200 Volts
- Inverter Duty Speed Ranges: VT = 3 - 60 Hz; CT for 140T - 210T Frames = 10 - 60 Hz; CT for 250T - 320T Frames = 13 - 60 Hz; CT for 260T - 440T Frames = 16 - 60 Hz
- 9 Leads for 5 HP and Smaller;
- 12 Leads for 7.5 HP to 125 HP;
- 6 Leads for 150 HP and Larger

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed. - Note (6)

Notes:

(1) Available in 575V. TWMC carries minimal 575V stock; please check availability to ensure required motors are in stock. Ratings may be available from our Canadian warehouses and/or our factory. Pricing and leadtime may vary.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor Service Factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(6) Extras/Modification options are limited on TEXP Products. See page 127 for additional details.

TEXP EXPLOSION PROOF

AEHHXV/AEHHXU, NEMA PREMIUM [XP]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
XP0014	1	1800	143T	85.5	68.0	1.61	64	695
XP0016	1	1200	145T	82.5	66.0	1.72	93	806
XP0018	1	900	182T	77.0	58.5	2.08	108	1,125
XP1/52	1.5	3600	143T	84.0	84.0	1.99	78	791
XP1/54	1.5	1800	145T	86.5	75.5	2.15	80	788
XP1/56	1.5	1200	182T	87.5	63.0	2.55	125	873
XP1/58	1.5	900	184T	78.5	60.5	2.96	120	1,261
XP0022	2	3600	145T	85.5	87.0	2.52	68	819
XP0024	2	1800	145T	86.5	78.0	2.78	80	782
XP0026	2	1200	184T	88.5	69.0	3.07	148	1,009
XP0028	2	900	213T	84.0	64.0	3.48	187	1,840
XP0032	3	3600	182T	87.5	90.0	3.57	130	944
XP0034	3	1800	182T	89.5	81.0	3.87	135	948
XP0036	3	1200	213T	89.5	80.0	3.92	240	1,276
XP0038	3	900	215T	85.5	66.0	4.98	211	2,109
XP0052	5	3600	184T	88.5	91.0	5.81	153	1,165
XP0054	5	1800	184T	89.5	84.0	6.23	145	1,096
XP0056	5	1200	215T	90.2	81.0	6.41	235	1,643
XP0058	5	900	254T	86.5	72.0	7.52	330	2,779
XP7/52	7.5	3600	213T	89.5	87.0	9.02	235	1,579
XP7/54	7.5	1800	213T	91.7	86.5	8.85	200	1,544
XP7/56	7.5	1200	254T	91.0	82.0	9.41	365	2,145
XP7/58	7.5	900	256T	86.5	81.5	11.4	376	3,311
XP0102	10	3600	215T	90.2	87.0	11.9	250	1,662
XP0104	10	1800	215T	91.7	87.5	11.7	265	1,799
XP0106	10	1200	256T	91.0	81.5	12.6	420	2,627
XP0108	10	900	284T	89.5	73.5	14.2	488	4,203
XP0152	15	3600	254T	91.0	92.0	16.8	400	2,162
XP0154	15	1800	254T	92.4	85.0	17.9	390	2,484
XP0156	15	1200	284T	91.7	83.0	18.5	575	3,587
XP0158	15	900	286T	89.5	78.0	20.1	530	4,787
XP0202	20	3600	256T	91.0	92.0	22.4	440	2,914
XP0204	20	1800	256T	93.0	85.5	23.6	455	2,912
XP0206	20	1200	286T	91.7	84.0	24.3	600	4,066
XP0208	20	900	324T	90.2	81.0	25.6	708	6,490
XP0252	25	3600	284TS	91.7	92.0	27.7	460	3,425
XP0254	25	1800	284T	93.6	85.0	29.4	585	3,599
XP0256	25	1200	324T	93.0	83.0	30.3	825	5,009
XP0258	25	900	326T	90.2	79.5	32.6	781	7,265
XP0302	30	3600	286TS	92.4	92.0	33.0	583	4,044
XP0304	30	1800	286T	93.6	85.5	34.3	565	4,168
XP0306	30	1200	326T	93.0	83.0	36.4	787	6,120
XP0308	30	900	364T	91.7	77.5	39.5	946	9,356
XP0402	40	3600	324TS	93.0	91.0	44.3	805	5,702
XP0404	40	1800	324T	94.1	85.5	46.6	708	5,925
XP0406	40	1200	364T	94.1	86.0	46.3	980	8,047
XP0408	40	900	365T	91.7	76.5	53.4	1,019	11,362
XP0502	50	3600	326TS	93.6	91.0	55.0	890	7,152
XP0504	50	1800	326T	94.5	85.5	57.9	925	6,827
XP0506	50	1200	365T	94.1	83.5	59.6	1,125	8,124
XP0508	50	900	404T	93.0	80.5	62.5	1,287	10,209

Notes:
(1) Data subject to change without notice.

AEHHXV/AEHHXU, NEMA PREMIUM [XP] continued…

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
XP0602	60	3600	364TS	93.6	93.0	64.5	1,015	8,472
XP0604	60	1800	364T	95.0	88.0	67.2	1,010	8,447
XP0606	60	1200	404T	94.5	86.0	69.1	1,322	11,783
XP0608	60	900	405T	93.0	81.0	74.6	1,408	14,360
XP0752	75	3600	365TS	93.6	93.0	80.7	1,085	10,077
XP0754	75	1800	365T	95.4	88.0	83.6	1,110	9,900
XP0756	75	1200	405T	94.5	86.5	85.9	1,540	13,839
XP0758	75	900	444T	93.0	81.0	93.2	1,650	18,134
XP1002	100	3600	405TS	94.5	92.0	108	1,495	15,608
XP1004	100	1800	405T	95.4	90.0	109	1,545	13,836
XP1006	100	1200	444T	95.0	83.5	118	1,920	18,301
XP1006R	100	1200	444T	95.0	83.5	118	1,920	18,301
XP1008	100	900	445T	93.0	81.0	124	1,800	19,377
XP1252	125	3600	444TS	95.0	86.0	143	1,800	20,753
XP1254	125	1800	444T	95.4	85.0	144	1,970	19,269
XP1254R	125	1800	444T	95.4	85.0	144	1,970	19,269
XP1256	125	1200	445T	95.0	84.0	147	2,100	24,513
XP1256R	125	1200	445T	95.0	84.0	147	2,100	24,513
XP1258	125	900	447T	93.6	82.5	152	2,500	40,546
XP1258R	125	900	447T	93.6	82.5	152	2,500	40,546
XP1502	150	3600	445TS	95.0	87.0	170	1,940	24,089
XP1504	150	1800	445T	95.8	85.0	173	2,120	23,406
XP1504R	150	1800	445T	95.8	85.0	173	2,120	23,406
XP1506	150	900	447T	95.8	84.5	174	2,120	39,088
XP1506R	150	900	447T	95.8	84.5	174	2,120	39,088
XP1508	150	900	449T	93.6	82.5	182	2,880	41,236
XP1508R	150	900	449T	93.6	82.5	182	2,880	41,236
XP2002	200	3600	447TS	95.4	89.0	221	2,300	36,794
XP2004	200	1800	447T	96.2	87.0	224	2,620	36,694
XP2006	200	900	449T	95.8	85.0	230	2,850	40,480
XP2006R	200	900	449T	95.8	85.0	230	2,450	40,480
XP2008	200	900	5007B	94.1	80.4	248	3,920	49,236
XP2008R	200	900	5007C	94.1	80.4	248	3,920	49,236
XP2502	250	3600	449TS	95.8	89.8	272	2,720	38,728
XP2504	250	1800	449T	96.2	88.0	277	2,870	39,513
XP2506	250	1200	5007B	95.8	87.0	281	4,010	54,835
XP2506R	250	1200	5007C	95.8	87.0	281	4,010	54,835
XP2508	250	900	5009B	94.5	81.0	306	4,360	53,041
XP2508R	250	900	5009C	94.5	81.0	306	4,360	53,041
XP3002	300	3600	449TS	95.8	90.2	325	2,920	40,492
XP3004	300	1800	449T	96.2	88.0	332	2,950	40,132
XP3006	300	1200	5009B	95.8	87.3	336	4,310	57,694
XP3006R	300	1200	5009C	95.8	87.3	336	4,310	57,694
XP3502	350	3600	5007A	95.8	88.0	389	4,200	52,913
XP3504	350	1800	5007B	96.2	87.7	388	4,400	52,550
XP3506	350	1200	5009B	95.8	87.4	391	4,520	60,656
XP3506R	350	1200	5009C	95.8	87.4	391	4,520	60,656
XP4002	400	3600	5009A	95.8	88.3	443	4,350	77,500
XP4004	400	1800	5009B	96.2	87.7	444	4,500	72,100

Notes:

(1) Data subject to change without notice.

AEHHXG/AEHHXF, NEMA PREMIUM, FOOTED C-FACE (1 HP - 100 HP)[XP_C]
AEUHXG/AEUHXF, NEMA PREMIUM, ROUND BODY C-FACE (1 HP - 75 HP)[XV_C]

Effective 03-24-17
Supercedes 06-14-15

HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	FOOTED C-FACE		ROUND BODY C-FACE	
							CATALOG NO.	LIST PRICE ($)	CATALOG NO.	LIST PRICE ($)
1	1800	143TC	85.5	73.0	1.50	64	XP0014C	983	XPV0014C	870
1	1200	145TC	82.5	65.5	1.70	93	XP0016C	1,121	XPV0016C	992
1.5	3600	143TC	84.0	83.5	2.00	78	XP1/52C	1,101	XPV1/52C	974
1.5	1800	145TC	86.5	78.0	2.10	80	XP1/54C	1,060	XPV1/54C	938
1.5	1200	182TC	87.5	63.5	2.50	125	XP1/56C	1,181	XPV1/56C	1,045
2	3600	145TC	86.5	86.0	2.50	68	XP0022C	1,142	XPV0022C	1,011
2	1800	145TC	86.5	78.0	2.80	80	XP0024C	1,095	XPV0024C	969
2	1200	184TC	88.5	70.5	3.00	148	XP0026C	1,355	XPV0026C	1,199
3	3600	182TC	88.5	90.0	3.50	130	XP0032C	1,271	XPV0032C	1,125
3	1800	182TC	89.5	84.0	3.70	135	XP0034C	1,280	XPV0034C	1,133
3	1200	213TC	89.5	78.0	4.00	240	XP0036C	1,618	XPV0036C	1,432
5	3600	184TC	88.5	92.5	5.70	153	XP0052C	1,494	XPV0052C	1,322
5	1800	184TC	89.5	85.5	6.10	145	XP0054C	1,485	XPV0054C	1,314
5	1200	215TC	91.0	82.5	6.20	235	XP0056C	2,136	XPV0056C	1,890
7.5	3600	213TC	91.0	89.0	8.70	235	XP7/52C	2,002	XPV7/52C	1,772
7.5	1800	213TC	91.7	86.5	8.90	200	XP7/54C	2,092	XPV7/54C	1,851
7.5	1200	254TC	91.0	80.5	9.60	365	XP7/56C	2,707	XPV7/56C	2,396
10	3600	215TC	91.0	89.5	11.50	250	XP0102C	2,254	XPV0102C	1,995
10	1800	215TC	91.7	88.0	11.60	241	XP0104C	2,435	XPV0104C	2,155
10	1200	256TC	91.0	80.5	12.80	420	XP0106C	3,289	XPV0106C	2,911
15	3600	254TC	92.4	91.5	16.60	400	XP0152C	2,724	XPV0152C	2,411
15	1800	254TC	92.4	88.0	17.30	390	XP0154C	3,023	XPV0154C	2,675
15	1200	284TC	92.4	83.5	18.20	575	XP0156C	4,464	XPV0156C	3,950
20	3600	256TC	92.4	92.5	21.90	440	XP0202C	3,634	XPV0202C	3,216
20	1800	256TC	93.0	87.5	23.00	455	XP0204C	3,647	XPV0204C	3,227
20	1200	286TC	91.7	84.0	24.30	600	XP0206C	5,078	XPV0206C	4,702
25	3600	284TSC	92.4	91.0	27.80	460	XP0252C	4,369	XPV0252C	4,045
25	1800	284TC	93.6	86.0	29.10	585	XP0254C	4,461	XPV0254C	4,131
25	1200	324TC	93.0	83.0	30.30	825	XP0256C	6,945	XPV0256C	6,431
30	3600	286TSC	92.4	91.0	33.20	583	XP0302C	5,217	XPV0302C	4,831
30	1800	286TC	93.6	87.5	34.30	565	XP0304C	5,193	XPV0304C	4,808
30	1200	326TC	93.0	80.5	37.50	787	XP0306C	8,057	XPV0306C	7,460
40	3600	324TSC	94.1	90.0	44.20	805	XP0402C	7,408	XPV0402C	6,859
40	1800	324TC	94.1	86.0	46.30	708	XP0404C	7,440	XPV0404C	6,889
40	1200	364TC	94.1	86.5	46.00	980	XP0406C	10,656	XPV0406C	9,867
50	3600	326TSC	94.1	91.0	54.70	890	XP0502C	8,576	XPV0502C	7,941
50	1800	326TC	94.5	87.0	56.90	925	XP0504C	8,447	XPV0504C	7,821
50	1200	365TC	94.1	86.0	57.80	1,125	XP0506C	12,996	XPV0506C	12,033
60	3600	364TSC	94.1	93.0	64.20	1,015	XP0602C	10,787	XPV0602C	9,988
60	1800	364TC	95.0	86.5	68.40	1,010	XP0604C	11,046	XPV0604C	10,228
60	1200	404TC	94.5	87.0	68.30	1,322	XP0606C	15,269	XPV0606C	14,138
75	3600	365TSC	94.5	93.0	79.90	1,085	XP0752C	14,295	XPV0752C	13,236
75	1800	365TC	95.4	86.5	85.1	1,110	XP0754C	13,320	XPV0754C	12,333
75	1200	405TC	94.5	86.5	85.9	1,540	XP0756C	16,569	XPV0756C	15,342
100	3600	405TSC	95.4	92.0	107.0	1,495	XP1002C	18,194	~	~
100	1800	405TC	95.4	87.5	112.0	1,545	XP1004C	16,569	~	~

Notes:

(1) Data subject to change without notice.

GLOBAL MAX ODP

AMHGTK, PREMIUM EFFICIENCY, MEDIUM VOLTAGE [PG]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Pumps
- Fans & Blowers
- Compressors

FEATURES:

- Output Range: 100 - 2000 HP
- Speed: 3600, 1800, 1200 & 900 RPM(1)
- Enclosure: Weather Protected Type I (WPI)
- Voltage: 2300/4000V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- Standard Features: 100 Ohm Platinum Stator RTD's (2 per Phase), Space Heaters (120V)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments Fully Gasketed with NPT Threaded Entrance - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Rotation: Counter-Clockwise (CCW) facing the Drive End; 8 Pole are Bi-Directional
- Cast Iron Frame and End Brackets
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449T and Below
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000 and Larger
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Insulated Non-Drive End Bearing on 3600 RPM Motors; 600 HP and Larger
- Labyrinth Type Metal Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Grounding Terminal Inside Main Box and on Motor Foot
- Stainless Steel Nameplate
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1(4,5)
- 6 Leads
- Motors are CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed. - Note (4)

Notes:

(1) Slower speeds available as Made to Order.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

AMHGTK, PREMIUM EFFICIENCY, MEDIUM VOLTAGE [PG]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
PG1002	100	3600	447TS	92.0	87.2	23.0	1,760	20,487
PG1004	100	1800	447T	93.7	82.5	24.0	2,050	23,289
PG1006	100	1200	447T	94.6	78.1	25.0	1,920	27,118
PG1008	100	900	447T	93.2	74.9	27.0	2,310	29,977
PG1252	125	3600	447TS	93.1	88.4	28.0	1,800	23,697
PG1254	125	1800	447T	94.2	80.5	31.0	2,100	26,101
PG1256	125	1200	449T	94.7	78.9	31.0	2,120	33,447
PG1258	125	900	449T	93.3	77.0	33.0	2,530	34,800
PG1502	150	3600	447TS	93.1	88.0	34.0	1,870	26,581
PG1504	150	1800	449T	94.8	83.9	35.0	2,360	30,346
PG1506	150	1200	449T	94.8	77.9	38.0	2,180	36,390
PG1508	150	900	449T	93.4	75.7	40.0	3,260	38,342
PG2002	200	3600	449TS	93.7	87.4	46.0	1,900	31,736
PG2004	200	1800	449T	94.9	82.3	48.0	2,380	33,831
PG2006	200	1200	449T	94.9	77.9	51.0	2,270	37,382
PG2008	200	900	5009C	93.5	73.0	55.0	3,550	44,738
PG2502	250	3600	449TS	94.5	89.3	55.0	2,020	36,536
PG2504	250	1800	449T	95.0	82.2	60.0	2,490	38,522
PG2506	250	1200	449T	95.0	78.4	63.0	2,340	42,956
PG2508	250	900	5009C	93.6	75.5	66.0	3,990	54,767
PG3002	300	3600	449TS	94.5	89.1	67.0	2,100	39,664
PG3004	300	1800	449T	95.0	83.8	71.0	2,550	39,328
PG3006	300	1200	449T	95.0	77.7	76.0	2,490	46,017
PG3008	300	900	5011C	93.7	75.5	79.0	4,380	64,146
PG3502	350	3600	5009A	94.5	88.1	79.0	3,580	50,103
PG3504	350	1800	5009C	95.0	84.3	82.0	3,330	48,065
PG3506	350	1200	5009C	95.0	76.5	90.0	3,770	54,744
PG3508	350	900	5011C	93.8	75.0	93.0	4,710	69,672
PG4002	400	3600	5009A	94.5	87.9	90.0	3,700	53,144
PG4004	400	1800	5009C	95.0	84.0	94.0	3,420	50,106
PG4006	400	1200	5009C	95.1	76.0	104	3,850	58,395
PG4008	400	900	5012C	93.9	73.5	109	4,820	76,760
PG4502	450	3600	5009A	94.5	87.0	102	3,800	55,833
PG4504	450	1800	5009C	95.0	84.1	105	3,520	51,267
PG4506	450	1200	5011C	95.2	75.0	118	3,720	63,053
PG4508	450	900	5810C	94.0	78.5	114	6,160	86,194
PG5002	500	3600	5011A	94.5	89.2	111	3,900	58,977
PG5004	500	1800	5009C	95.0	84.8	116	3,720	55,308
PG5006	500	1200	5011C	95.3	77.0	128	3,920	66,357
PG5008	500	900	5810C	94.1	77.7	128	6,450	89,580
PG6002	600	3600	5011A	94.6	89.2	133	4,000	65,253
PG6004	600	1800	5011C	95.1	85.5	138	3,770	60,050
PG6006	600	1200	5011C	95.4	77.0	153	4,250	71,450
PG6008	600	900	5810C	94.2	78.0	153	6,600	94,017
PG7002	700	3600	5011A	94.7	89.6	154	4,200	66,576
PG7004	700	1800	5011C	95.2	85.7	161	4,100	65,511
PG7006	700	1200	5012C	95.5	77.3	178	4,850	78,070
PG7008	700	900	5811C	94.3	78.0	178	6,880	99,555
PG8002	800	3600	5011A	94.8	88.6	178	4,400	69,803
PG8004	800	1800	5012C	95.3	85.9	183	4,300	69,785
PG8006	800	1200	5810C	95.6	81.0	193	5,940	86,288
PG8008	800	900	5811C	94.4	79.0	201	7,100	105,054
PG9002	900	3600	5012A	94.9	90.3	197	4,600	80,912
PG9004	900	1800	5012C	95.4	85.5	207	4,400	77,433
PG9006	900	1200	5810C	95.7	81.5	216	6,230	93,993
PG9008	900	900	5812C	94.5	79.1	225	7,700	93,862
PG10002	1000	3600	5012A	95.0	88.5	223	4,730	81,164
PG10004	1000	1800	5810C	95.5	87.9	223	6,890	69,983
PG10006	1000	1200	5811C	95.8	82.3	238	6,980	102,551
PG12502	1250	3600	5810A	95.1	88.5	278	5,740	92,759
PG12504	1250	1800	5811C	95.6	86.1	284	7,070	94,839
PG12506	1250	1200	5812C	95.9	82.9	294	7,660	113,744
PG15004	1500	1800	5812C	95.7	86.7	339	7,790	110,426
PG17504	1750	1800	5813C	95.8	87.1	393	8,390	121,472
PG20004	2000	1800	5813C	95.9	86.4	452	8,400	132,513

Notes:

(1) Data subject to change without notice.

ASHA, HIGH EFFICIENCY, MEDIUM VOLTAGE [P]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Pumps
- Fans & Blowers
- Compressors

FEATURES:

- Output Range: 100 - 1000 HP
- Speed: 3600, 1800, 1200 & 900 RPM(1)
- Enclosure: Weather Protected Type I (WPI)
- Voltage: 2300/4160V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- Standard Features: 100 Ohm Platinum Stator RTD's (2 per Phase), Space Heaters (120V)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments Fully Gasketed with NPT Threaded Entrance - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Rotation: Bi-Directional Except 2 Pole which is Counter-Clockwise (CCW) facing the Drive End
- Cast Iron Frame and End Brackets
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449T and Below
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000 and Above
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Insulated Non-Drive End Bearing on 2 Pole Motors; 600 HP and Larger
- Labyrinth Type Metal Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Grounding Terminal Inside Main Box and on Motor Foot
- Stainless Steel Nameplate
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1(4,5)
- 6 Leads
- Motors are CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed. - Note (4)

Notes:

(1) Slower speeds available as Made to Order.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

ASHA, HIGH EFFICIENCY, MEDIUM VOLTAGE [P]

Effective 03-24-17
Supercedes 06-14-15

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
P1002	100	3600	444TS	91.0	90.2	22.8	1,292	16,146
P1004	100	1800	444T	91.0	87.5	23.5	1,680	16,514
P1006	100	1200	445T	91.0	80.0	25.7	2,205	20,814
P1006R	100	1200	445T	91.0	80.0	25.7	2,205	20,814
P1252	125	3600	444TS	91.0	90.2	28.5	1,370	19,022
P1254	125	1800	444T	91.0	87.5	29.4	1,490	18,672
P1256	125	1200	447TZ	91.7	80.0	32.0	2,139	25,829
P1256R	125	1200	447TZ	91.7	80.0	32.0	2,139	25,829
P1502	150	3600	445TS	91.7	90.2	34.0	1,450	21,542
P1504	150	1800	445T	91.7	87.5	35.0	1,645	21,891
P1506	150	1200	449TZ	91.7	80.0	38.0	2,547	29,441
P1506R	150	1200	449TZ	91.7	80.0	38.0	2,547	29,441
P2002	200	3600	447TS	91.7	90.2	45.0	1,733	26,500
P2004	200	1800	447T	91.7	87.5	47.0	2,050	25,482
P2004R	200	1800	447TZ	91.7	87.5	47.0	2,050	25,482
P2006	200	1200	5007C	91.7	81.5	50.1	3,057	33,741
P2502	250	3600	449TS	92.4	91.0	56.0	2,095	31,582
P2504	250	1800	449TZ	92.4	87.5	58.0	2,668	30,510
P2506	250	1200	5007B	92.4	84.0	60.3	3,362	39,489
P2506R	250	1200	5007C	92.4	84.0	60.3	3,362	39,489
P2508	250	900	5009B	92.4	78.5	64.5	3,990	47,032
P3002	300	3600	449TS	93.0	91.0	66.0	2,280	36,610
P3004	300	1800	5007B	93.0	88.5	68.3	3,255	35,176
P3006	300	1200	5009B	93.0	84.0	71.9	3,945	43,790
P3006R	300	1200	5009C	93.0	84.0	71.9	3,945	43,790
P3008R	300	900	5808C	93.0	80.0	75.5	4,515	52,765
P3502	350	3600	5007A	93.0	90.2	78.1	2,991	41,997
P3504	350	1800	5007B	93.6	88.5	79.1	3,465	40,201
P3506R	350	1200	5009C	93.0	84.0	83.9	3,938	48,812
P4002	400	3600	5009A	93.6	90.5	88.4	3,485	46,306
P4004	400	1800	5009B	93.6	89.5	89.4	4,065	43,790
P4004R	400	1800	5009C	93.6	89.5	89.4	4,065	43,790
P4006	400	1200	5808B	93.6	85.5	93.6	5,055	53,125
P4006R	400	1200	5808C	93.6	85.5	93.6	5,055	53,125
P4008	400	900	5808B	93.0	81.5	98.8	5,250	62,815
P4008R	400	900	5808C	93.0	81.5	98.8	5,250	62,815
P4502	450	3600	5808A	93.6	91.0	98.9	5,145	50,970
P4504	450	1800	5808B	93.6	88.5	102.0	4,200	47,378
P4506	450	1200	5808B	93.6	85.5	105.0	5,640	57,423
P4506R	450	1200	5808C	93.6	85.5	105.0	5,640	57,423
P5002	500	3600	5808A	94.1	91.0	109.0	4,680	55,280
P5004	500	1800	5808B	94.1	89.5	111.0	5,115	50,970
P5006	500	1200	5808B	94.1	85.5	116.0	6,038	61,735
P5006R	500	1200	5808C	94.1	85.5	116.0	6,038	61,735
P5008	500	900	5810B	93.6	82.5	121	6,325	72,503
P6002	600	3600	5808A	94.5	91.3	130	5,135	61,735
P6004	600	1800	5808B	94.1	89.5	133	5,418	57,423
P6006R	600	1200	5810C	94.1	86.5	138	6,120	67,839
P6008	600	900	6806B	94.1	84.0	142	6,983	82,557
P7002	700	3600	5810A	94.5	91.7	151	5,410	66,765
P7004	700	1800	5808B	94.5	90.2	154	5,355	63,177
P7004R	700	1800	5808B	94.5	90.2	154	5,355	63,177
P7006R	700	1200	5810C	94.5	86.5	160	6,625	73,577
P7008	700	900	6808B	94.5	84.0	165	7,860	91,172
P8002	800	3600	5810A	95.0	91.7	172	5,475	69,993
P8004	800	1800	5810B	94.5	90.2	176	5,828	68,204
P8006	800	1200	6806B	94.5	86.5	183	7,770	80,411
P8006R	800	1200	6806C	94.5	86.5	183	7,770	80,411
P8008R	800	900	6808C	94.5	84.5	188	8,820	100,864
P9002	900	3600	5810A	95.0	91.7	193	5,685	82,529
P9004	900	1800	5810B	95.0	90.2	197	6,143	73,945
P9006	900	1200	6806B	95.0	86.5	205	8,190	88,657
P10002	1000	3600	5810A	95.0	90.2	214	5,950	92,425
P10004	1000	1800	6806B	95.0	90.2	219	7,750	79,693
P10006R	1000	1200	6808C	95.0	86.5	228	8,610	95,122

Notes:

(1) Data subject to change without notice.

GLOBAL XPE

AEHGTK, TEFC, NEMA, PREMIUM EFFICIENCY, MEDIUM VOLTAGE (100 HP - 900 HP)[KG]
AEJHTK, TEFC, IEC, HIGH EFFICIENCY, MEDIUM VOLTAGE (800 HP - 2000 HP)[JH]

Effective 03-24-17
Supercedes 06-14-15


APPLICATIONS:

- Pumps
- Fans & Blowers
- Compressors
- Mills
- Grinders

FEATURES:

- Output Range: 100 - 2000 HP
- Speed: 3600, 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 2300/4160V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Group B, C, D - Temp Code T3 Maximum
- Standard Features: 100 Ohm Platinum Stator RTD's (2/Phase), Space Heaters (120V)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments Fully Gasketed with NPT Threaded Entrance - F1 Mounted
- Cast Iron Terminal Box on 444T - 449T Frames
- Steel Plate Terminal Box on 5000 Frames and Above
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation for all 444T - 449T Frames and for 1800 - 900RPM (4 - 8 Pole) 5007 - 6808 Frame Motors
- 5007 - 6808 Frame 3600RPM (2 Pole) Motors have Counter-Clockwise (CCW) Rotation facing the Drive End
- Cast Iron Frame and End Brackets
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction on 444T - 449T Frames
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for on 5007 - 6808 Frames
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Labyrinth Type Metal Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Grounding Terminal Inside Main Box and on Motor Foot
- Stainless Steel Nameplate
- 6 Leads, with Solderless Lug Terminals
- Motors are CSA Approved
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1(3,4)

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed. - Note (4)

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

AEHGTK, TEFC, NEMA, PREMIUM EFFICIENCY, MEDIUM VOLTAGE (100 HP - 900 HP)[KG]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
KG1002	100	3600	444TS	91.7	86.0	23.7	1,470	26,520
KG1004	100	1800	444T	93.0	79.5	25.3	2,079	26,064
KG1006R	100	1200	445T	94.1	81.0	24.6	2,903	30,477
KG1008R	100	900	447T	94.1	74.8	26.6	2,363	34,250
KG1252	125	3600	445TS	92.9	88.0	28.6	1,838	33,134
KG1254	125	1800	445T	93.6	78.0	32.0	1,990	31,300
KG1256R	125	1200	447T	94.7	80.0	30.9	2,415	36,081
KG1258R	125	900	449T	94.7	77.0	32.1	2,835	51,542
KG1502	150	3600	447TS	93.2	90.0	33.5	2,600	35,345
KG1504	150	1800	447T	94.1	80.7	37.0	2,375	34,900
KG1506R	150	1200	449T	94.8	80.0	37.0	2,903	40,156
KG1508R	150	900	5007C	93.6	79.5	37.7	3,780	50,476
KG2002	200	3600	449TS	95.0	88.0	44.8	2,495	41,825
KG2004	200	1800	449T	95.7	81.4	48.0	2,775	40,683
KG2006T	200	1200	449T	96.0	81.0	48.2	2,930	54,553
KG2006R	200	1200	5007C	95.0	86.0	45.9	3,728	55,035
KG2008R	200	900	5009C	94.1	80.0	49.8	4,358	65,333
KG2502T	250	3600	449TS	95.9	88.0	55.5	2,480	49,800
KG2502	250	3600	5007A	95.0	88.5	55.7	3,360	54,779
KG2504T	250	1800	449T	95.7	82.2	59.5	2,640	49,410
KG2504	250	1800	5007B	95.0	90.0	54.8	3,580	54,352
KG2506R	250	1200	5009C	95.0	86.0	57.3	4,305	62,650
KG2508R	250	900	5009C	95.0	80.0	61.6	4,515	79,372
KG3002T	300	3600	449TS	96.0	87.0	67.3	2,950	60,365
KG3002	300	3600	5009A	95.4	90.5	65.1	3,675	66,408
KG3004T	300	1800	449T	95.8	84.0	69.8	3,150	56,750
KG3004	300	1800	5009B	95.4	90.0	65.4	4,200	60,795
KG3006R	300	1200	5009C	95.0	86.2	68.6	4,568	71,058
KG3008R	300	900	5011C	95.0	80.5	73.5	4,988	89,613
KG3502	350	3600	5009A	95.4	90.5	75.9	3,800	72,218
KG3504	350	1800	5009B	95.4	90.0	76.4	4,568	72,631
KG3506R	350	1200	5011C	95.0	86.3	79.9	4,988	81,088
KG3508R	350	900	5808C	95.0	81.0	85.1	5,355	103,265
KG4002	400	3600	5011A	95.4	91.0	86.3	5,040	79,168
KG4004	400	1800	5011B	95.4	90.0	87.2	4,890	78,519
KG4006R	400	1200	5011C	95.0	86.3	91.4	4,725	88,704
KG4008R	400	900	5808C	95.0	81.0	97.3	5,565	118,215
KG4502	450	3600	5011A	95.4	91.0	97.1	4,830	93,474
KG4504	450	1800	5011B	95.4	90.5	97.6	5,035	85,289
KG4506R	450	1200	5808C	95.4	86.5	102	5,565	102,045
KG4508R	450	900	5810C	95.0	81.5	109	6,195	125,388
KG5002	500	3600	5808A	95.4	91.0	108	5,250	101,998
KG5004	500	1800	5808B	95.8	90.5	108	5,250	98,301
KG5006R	500	1200	5810C	95.4	87.0	113	6,495	116,426
KG5008R	500	900	6808C	95.4	85.0	115	7,245	154,089
KG6002[(1)]	600	3600	5810A	95.8	91.0	129	6,248	111,495
KG6004	600	1800	5810B	95.8	90.5	130	7,010	118,295
KG6006R	600	1200	5810C	95.4	87.0	135	6,090	135,274
KG6008R	600	900	6808C	95.4	85.0	139	7,770	163,809
KG7002[(1)]	700	3600	5810A	96.2	91.0	150	6,760	118,011
KG7004	700	1800	5810B	95.8	90.5	151	6,038	136,580
KG7006R	700	1200	6808C	95.8	87.2	157	7,403	150,499
KG7008R	700	900	6808C	95.4	86.0	160	9,083	164,970
KG8002[(1)]	800	3600	6808A	96.2	91.5	170	8,768	161,222
KG8004	800	1800	6808B	95.8	90.5	173	9,275	147,334
KG8006R	800	1200	6808C	95.8	87.2	179	8,820	164,082
KG9004	900	1800	6808B	95.8	90.5	194	8,925	155,419

Notes:

(1) Insulated Non-Drive End Bearing as standard
(2) Data subject to change without notice.

AEJHTK, TEFC, IEC, HIGH EFFICIENCY, MEDIUM VOLTAGE (800 HP - 2000 HP)[JH]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
JH8008	800	900	450C	95.8	87.0	180	9,030	168,977
JH09006	900	1200	450C	95.8	88.0	200	10,890	166,436
JH09008	900	900	500C	95.8	87.5	201	11,550	172,173
JH10004	1000	1800	450C	96.2	90.0	216	10,635	158,813
JH10006	1000	1200	500C	96.2	89.0	219	12,400	180,642
JH10008	1000	900	500C	95.8	87.5	223	14,000	194,940
JH12504	1250	1800	500C	96.2	90.0	270	11,550	165,356
JH12506	1250	1200	500C	96.2	89.5	272	12,180	194,940
JH12508	1250	900	560C	96.0	84.0	290	16,000	212,013
JH15004	1500	1800	500C	96.5	90.0	323	10,600	179,998
JH15006	1500	1200	560C	96.2	86.0	340	12,495	217,705
JH15008	1500	900	560C	96.0	84.0	348	18,000	220,550
JH17504	1750	1800	560C	96.5	90.5	375	13,230	197,783
JH17506	1750	1200	560C	96.2	86.0	396	18,000	221,974
JH20004	2000	1800	560C	96.5	90.5	415	17,000	219,128

Notes:
(1) Product to become obsolete. Replaced by AFHGTK. See page 95/96 for details.
(2) Data subject to change without notice.

AFHGTK, NEMA, PREMIUM EFFICIENCY, MEDIUM VOLTAGE [KF]
AFJHTK, IEC, HIGH EFFICIENCY, MEDIUM VOLTAGE (900 HP - 1750 HP)[JF]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Pumps
- Fans & Blowers
- Compressors
- Mills
- Grinders

FEATURES:

- Output Range: 500 - 2000 HP
- Speed: 3600, 1800, 1200 & 900 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 2300/4000V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Group B, C, D - Temp Code T3 Maximum
- CSA Certified for Class II, Div. 2, Group F & G - T3B Minimum (AFHGTK "KF" Only)
- Standard Features: Provisions for Bearing RTD's, 100 Ohm Platinum Stator RTD's(2/Phase), Space Heaters(120V)
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Fabricated Steel Main Conduit Box Rotatable in 90 Degree Increments Fully Gasketed with NPT Threaded Entrance - F1 Mounted
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Bi-Directional Rotation; except 2 Pole which is Counter-Clockwise (CCW) facing the Drive End
- Cast Iron Frame and End Brackets
- 1045 Carbon Steel Shaft
- Squirrel Cage Copper Bar Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Gray - Munsell 7.5B 3.5/0.5
- High Quality Ball (or Roller) Bearings Regreasable with Mobil Polyrex™ EM Grease
- Bronze Labyrinth Type Metal Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Grounding Terminal Inside Main Box and on Motor Foot
- Stainless Steel Nameplate
- 6 Leads, with Solderless Lug Terminals
- Motors are CSA Approved
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1(3,4)

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 for common modifications that can be performed. - Note (4)

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.

AFHGTK, NEMA, PREMIUM EFFICIENCY, MEDIUM VOLTAGE [KF]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
KF5002	500	3600	5011A	95.0	89.5	111	5,945	74,914
KF5004	500	1800	5011B	95.0	87.9	113	5,825	76,557
KF5008	500	900	5810B	94.6	77.9	128	9,802	103,473
KF6004	600	1800	5011B	95.2	86.5	137	6,145	82,111
KF6008	600	900	5810B	94.6	77.5	154	10,740	109,414
KF7006	700	1200	5810B	95.4	81.6	168	10,068	106,704
KF80021	800	3600	5810A	95.6	86.5	182	9,190	103,965
KF8004	800	1800	5810B	95.6	83.6	188	9,310	102,761
KF8008	800	900	6808B	95.0	74.2	214	13,081	136,713
KF9004	900	1800	5810B	95.6	83.1	212	9,656	109,086
KF9006	900	1200	6810B	95.5	82.7	213	13,606	141,642
KF9008	900	900	6810B	95.2	73.0	242	13,666	157,318
KF10004	1000	1800	6808B	95.6	80.4	245	11,471	129,512
KF10006	1000	1200	6810B	95.7	83.1	237	14,836	151,389
KF10008	1000	900	6810B	95.4	73.0	270	15,215	159,496
KF12504	1250	1800	6810B	96.0	81.2	300	13,200	153,662
KF12506	1250	1200	6811B	95.9	84.1	290	17,297	177,976
KF12508	1250	900	6812B	95.6	71.4	342	17,500	214,502
KF15004	1500	1800	6810B	96.1	82.1	356	15,362	161,904
KF15006	1500	1200	6812B	96.1	81.6	359	16,100	232,944
KF15008	1500	900	6812B	95.8	71.7	409	17,000	227,401
KF17504	1750	1800	6811B	96.3	82.4	418	16,884	174,416
KF17506	1750	1200	6812B	96.3	81.6	422	17,660	244,430
KF20004	2000	1800	6812B	96.5	82.7	472	17,395	207,283

Notes:
(1) Insulated non-drive end bearing as standard.
(2) Data subject to change without notice.

AFJHTK, IEC, HIGH EFFICIENCY, MEDIUM VOLTAGE (900 HP - 1750 HP)[JF]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
JF09002[1]	900	3600	400C	95.9	89.6	189	8,200	200,000
JF10002[2]	1000	3600	450C	97.0	91.0	213	9,200	240,000
JF12502	1250	3600	500C	96.8	91.5	264	11,500	270,000
JF15002	1500	3600	560C	96.3	92.0	318	12,900	313,600
JF17502	1750	3600	560C	96.5	92.0	369	13,200	333,500

Notes:

(1) 400 frame motor is standard with antifriction ball bearings.
(2) 450 frame motor is standard with sleeve bearings and non-drive end insulated bearings; self lubricated.
(3) 500 frame and above, standard with sleeve bearings and non-drive end insulated bearings; force feed lubricated.
(4) Data subject to change without notice.

VERTICAL HOLLOW SHAFT WPI
HIGH THRUST with "P" BASE - LOW VOLTAGE

AMRCNH, (MAX-VHP™) NEMA PREMIUM [VHP]*
AMRC, (MAX-VH™) HIGH EFFICIENCY [VH]*

Effective 03-24-17
Supercedes 06-14-15

FIRE SAFETY

APPLICATIONS:

- Deep Well Turbine Pumps
- Fluid Handling Systems
- Irrigation
- Water/ Waste Water
- Fire Pumps*

FEATURES:

- Output Range: 7.5 - 500 HP
- Speed: 1800 RPM
- Enclosure: Weather Protected Type I (WPI)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- New Dual Column (60/50 Hz) Design Nameplate as Standard; 50 Hz Data 190/380V at 1.0 S.F.
- Standard Features: Coupling w/ Gib Key, Ball Type NRR(2), Drip/Splash Cover, Space Heaters (120V)
- Optional Capability for 175% High Thrust Requirement for 444 - 449TP Frames
- Motor Design Suitable to Handle 2 Stacked Bearings; Motors will Ship with 1 Bearing and 1 Spacer as Standard*
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance
- Cast Iron Conduit Box for F#449TP and Below; Steel Plate Conduit Box for F#5000
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449TP and Below
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color for AMRC (MAX-VH™): Dark Gray - Munsell 7.5B 3.5/0.5 (Existing Stock ONLY - See F.P. Statement)
- Paint Color for AMRCNH (MAX-VHP™): Blue - Munsell 5PB 3/8
- Guide Bearings: 213 - 286TP frames are Grease Pre-packed Double Shielded Bearings (MULTEMP SRL)
  324TP - 5009P frames are Re-Greasable (Mobil Polyrex™ EM Grease)
- Thrust Bearings: 213 - 286TP frames are Re-Greasable Angular Contact (Mobil Polyrex™ EM Grease);
  324 - 449TP frames are Oil Lubricated Angular Contact; F#5000 and Above with Spherical Roller
- Oil Sight Glass for 324TP Frames and Above
- Oil Requirements: 300 S.S.U. @100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate and Rodent Screens
- 12 Leads (PWS on 230V) on 213 - 405TP;
  6 Leads on 444TP to 449TP; 5000 Frames and Above with Connection Studs(3)
- Inverter Duty - 4:1 Variable Torque with NRR. 10:1 C.T., 20:1 VT without NRR Using Braking in VFD
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor
  by the VFD as stated per NEMA MG1, Part 31.4.4.3 for AMRCNH (Part 30 on AMRC)

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

* Fire Pump available. See product page for more details.
(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Suitable for Wye/Delta start at 230V or 460V.
(4) Suitable for Wye/Delta start at 460V.

MAX-VHP™ VERTICAL HOLLOW SHAFT WPI

AMRCNH, (MAX-VHP™) NEMA PREMIUM [VHP]*

Effective 03-24-17
Supercedes 06-14-15

FIRE SAFETY

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	BD DIM (in.)	CD DIM (in.)	BX DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)	FIRE PUMP CATALOG NO.	FIRE PUMP LIST PRICE ($)
VHP7/54	7.5	1800	213TP	91.0	81.0	9.6	2,600	10	20.25	1.001	227	4,124	VHP7/54FP	4,536
VHP0104	10	1800	215TP	91.7	84.0	12.2	2,600	10	20.25	1.001	241	4,347	VHP0104FP	4,782
VHP0154	15	1800	254TP	93.0	83.0	18.2	3,350	10	23.38	1.001	349	5,213	VHP0154FP	5,734
VHP0204	20	1800	256TP	93.0	83.0	24.3	3,350	10	23.38	1.001	373	5,591	VHP0204FP	6,150
VHP0254	25	1800	284TP	93.6	85.0	29.4	3,350	10	24.75	1.001	480	6,653	VHP0254FP	7,318
VHP0304	30	1800	286TP	94.1	86.0	34.7	3,350	10	24.75	1.001	525	6,952	VHP0304FP	7,647
VHP0404	40	1800	324TP	94.1	86.0	46.3	5,700	16.5	28.22	1.188	716	9,951	VHP0404FP	10,946
VHP0504	50	1800	326TP	94.5	85.0	58.5	5,700	16.5	28.22	1.188	777	10,438	VHP0504FP	11,482
VHP0604	60	1800	364TP	95.0	85.0	69.5	6,000	16.5	31.16	1.188	892	12,574	VHP0604FP	13,831
VHP0754	75	1800	365TP	95.0	86.0	86.0	6,000	16.5	31.16	1.188	989	13,000	VHP0754FP	14,300
VHP1004	100	1800	404TP	95.4	85.5	115	7,900	16.5	36.94	1.501	1,278	18,500	VHP1004FP	20,350
VHP1254	125	1800	405TP	95.4	84.5	145	7,900	16.5	36.94	1.501	1,398	19,900	VHP1254FP	21,890
VHP1504	150	1800	444TP	95.8	86.0	171	10,700	16.5	44.78	1.501	1,815	31,500	VHP1504FP	34,650
VHP2004	200	1800	445TP	95.8	86.5	225	10,700	16.5	44.78	1.501	1,815	33,000	VHP2004FP	36,300
VHP2504	250	1800	445TP20	95.8	86.5	284	13,400	20	44.78	1.501	2,312	40,000	VHP2504FP	44,000
VHP3004	300	1800	447TP	95.8	87.5	337	13,400	20	49.78	1.688	2,841	50,000	VHP3004FP	55,000
VHP3504	350	1800	447TP	95.8	88.0	390	13,300	20	49.78	1.688	3,335	55,000	VHP3504FP	60,500
VHP4004	400	1800	449TP	95.8	88.5	444	13,200	20	53.91	1.938	3,818	60,000	VHP4004FP	66,000
VHP4504	450	1800	5009P	96.2	88.6	494	30,900	24.5	57.06	2.188	3,940	72,268	~	~
VHP5004	500	1800	5009P	96.2	88.8	548	30,900	24.5	57.06	2.188	4,070	79,898	~	~
VHP6004	600	1800	5808P	96.2	82.0	647	30,100	30.5	61.30	2.376	5,700	92,799	~	~
VHP7004	700	1800	5810P	96.2	90.7	751	30,100	30.5	68.78	2.376	6,100	99,924	~	~
VHP8004	800	1800	5810P	96.2	90.7	859	30,100	30.5	68.78	2.376	6,400	105,805	~	~

Notes:

* Fire Pump available as made to order. Fire Pump Certificate complies with ANSI/UL 1004-5. Certificate# 20120717 - EX6569.

(1) Delivery for Fire Pump Duty motor (Catalog Number + FP) is standard 5 - 10 working days after receipt of order if standard motor is in stock; Painting to Fire Safety Red requirement on Fire Pump Duty type motor can be waived in order to expedite delivery upon request.

(2) Fire Pump Duty Motor pricing includes: adding UL nameplate, restamping original nameplate to new "VHP_FP" catalog number, and Fire Safety Red Paint.

(3) See page 109 in order to confirm the TWMC standard coupling size is suitable for customer requirements or to select an alternate coupling size. Required coupling size must be noted on all vertical hollow shaft motors orders. Coupling will be changed out prior to shipping if a non-TWMC standard coupling size is needed.

(4) All data subject to change without notice.

MAX-VH™ VERTICAL HOLLOW SHAFT WPI

AMRC, (MAX-VH™) HIGH EFFICIENCY [VH]*

Effective 03-24-17
Supercedes 06-14-15

FIRE SAFETY

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	BD DIM (in.)	CD DIM (in.)	BX DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)	FIRE PUMP CATALOG NO.	FIRE PUMP LIST PRICE ($)
VH7/54	7.5	1800	213TP	88.5	85.0	9.35	2,600	10	20.25	1.001	227	2,750	VH7/54FP	3,025
VH0104	10	1800	215TP	89.5	86.5	12.1	2,600	10	20.25	1.001	241	3,000	VH0104FP	3,300
VH0154	15	1800	254TP	91.0	88.0	17.5	3,350	10	23.38	1.001	349	3,750	VH0154FP	4,125
VH0204	20	1800	256TP	91.0	88.0	23.4	3,350	10	23.38	1.001	373	3,975	VH0204FP	4,373
VH0254	25	1800	284TP	91.7	86.0	29.7	3,350	10	24.75	1.001	480	4,575	VH0254FP	5,033
VH0304	30	1800	286TP	92.4	86.5	35.1	3,350	10	24.75	1.001	525	4,900	VH0304FP	5,390
VH0404	40	1800	324TP	93.0	88.0	45.7	5,700	16.5	28.22	1.188	716	6,700	VH0404FP	7,370
VH0504	50	1800	326TP	93.0	88.0	57.0	5,700	16.5	28.22	1.188	777	7,169	VH0504FP	7,886
VH0604	60	1800	364TP	93.6	84.5	71.0	6,000	16.5	31.16	1.188	892	9,000	VH0604FP	9,900
VH0754	75	1800	365TP	94.1	84.5	88.5	6,000	16.5	31.16	1.188	989	9,964	VH0754FP	10,960
VH1004	100	1800	404TP	94.1	86.0	116	7,900	16.5	36.94	1.501	1,278	12,732	VH1004FP	14,005
VH1254	125	1800	405TP	94.5	87.5	142	7,900	16.5	36.94	1.501	1,398	15,381	VH1254FP	16,919
VH1504	150	1800	444TP	95.0	86.0	172	10,700	16.5	44.78	1.501	1,815	19,275	VH1504FP	21,203
VH2004	200	1800	445TP	95.0	86.5	228	10,700	16.5	44.78	1.501	1,815	23,062	VH2004FP	25,368
VH2504	250	1800	445TP20	95.4	86.5	284	13,400	20	44.78	1.501	2,312	30,222	VH2504FP	33,244
VH3004	300	1800	447TP	95.4	87.5	337	13,400	20	49.78	1.688	2,841	35,655	VH3004FP	39,221
VH3504	350	1800	447TP	95.4	88.0	390	13,300	20	49.78	1.688	3,335	41,175	VH3504FP	45,293
VH4004	400	1800	449TP	95.4	88.5	444	13,200	20	53.91	1.938	3,818	46,690	VH4004FP	51,359
VH4504	450	1800	5009P	96.2	89.1	496	31,000	24.5	57.06	2.188	3,940	62,268	~	~
VH5004	500	1800	5009P	96.2	89.2	550	30,900	24.5	57.06	2.188	4,070	73,898	~	~

Notes:

* Fire Pump available as made to order. Fire Pump Certificate complies with ANSI/UL 1004-5. Certificate# 20120717 - EX6569.

(1) Delivery for Fire Pump Duty motor (Catalog Number + FP) is standard 5 - 10 working days after receipt of order if standard motor is in stock; Painting to Fire Safety Red requirement on Fire Pump Duty type motor can be waived in order to expedite delivery upon request.

(2) Fire Pump Duty Motor pricing includes: adding UL nameplate, restamping original nameplate to new "VHP_FP" catalog number, and Fire Safety Red Paint.

(3) Per DOE regulations, this High Efficiency motor line inventory will be available through June 2018, or until current inventory has been depleted. Whichever occurs first.

(4) Once product listed on this page has been depleted from current stock, that model will be sold only as Fire Pump.

(5) Please see our new line of Premium Efficient motors on page 99 or contact your Application Specialist for details.

(6) See page 109 in order to confirm the TWMC standard coupling size is suitable for customer requirements or to select an alternate coupling size. Required coupling size must be noted on all vertical hollow shaft motors orders. Coupling will be changed out prior to shipping if a non-TWMC standard coupling size is needed.

(7) All data subject to change without notice.

VERTICAL HOLLOW SHAFT TEFC
HIGH THRUST with "P" BASE - LOW VOLTAGE

AEEHNH, (MAX-VHP™) NEMA PREMIUM [VHTP]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Deep Well Turbine Pumps
- Irrigation
- Water/Wastewater

FEATURES:

- Output Range: 15 - 800 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only
- 230/460V Motors Suitable for Partial Winding Start (at 230V Only)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- New Dual Column (60/50 Hz) Design Nameplate as Standard; 50 Hz Data 190/380V at 1.0 S.F.
- Standard Features: Coupling w/ Gib Key, Non-Sparking Ball Type NRR(2), Drip/Splash Cover, Space Heaters (120V)
- CSA Certified for Class I, Div. 2, Groups B,C, D; Temp Code T3 Maximum
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance
- Cast Iron Conduit Box for F#449TP and Below; Steel Plate Conduit Box for F#5000
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Guide Bearings: 254 - 286TP frames are Grease Pre-packed Double Shielded Bearings (MULTEMP SRL)
  324TP - 5810P frames are Re-Greasable (Mobil Polyrex™ EM Grease)
- Thrust Bearings: 254 - 365TP frames are Re-Greasable Angular Contact (Mobil Polyrex™ EM Grease);
  404 - 449TP frames are Oil Lubricated Angular Contact; F#5000 & Above with Spherical Roller or Angular Contact
- Oil Sight Glass for 324TP Frames and Above
- Oil Requirements: 300 S.S.U. @ 100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- 12 Leads (PWS on 230V) on 254 - 405TP
  6 Leads on 444TP to 449TP; 5000 Frames and Above with Connection Studs
- Inverter Duty - 4:1 Variable Torque with NRR; 20:1 Variable Torque without NRR Using Braking in VFD
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor
  by the VFD as stated per NEMA MG1, Part 31.4.4.3

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.

MAX-VHP™ VERTICAL HOLLOW SHAFT TEFC

AEEHNH, (MAX-VHP™) NEMA PREMIUM [VHTP]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	BD DIM (in.)	CD DIM (in.)	BX DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
VHTP0154	15	1800	254TP	92.4	88.0	17.3	3,350	10	22.36	1.001	350	5,556
VHTP0156	15	1200	284TP	92.4	83.5	16.4	3,850	10	24.01	1.188	460	7,953
VHTP0204	20	1800	256TP	93.0	87.5	23.0	3,350	10	24.10	1.001	450	5,988
VHTP0206	20	1200	286TP	91.7	84.0	22.1	3,850	10	25.51	1.188	550	8,643
VHTP0254	25	1800	284TP	93.6	86.0	29.1	3,350	10	24.01	1.188	520	7,783
VHTP0256	25	1200	324TP	93.0	83.0	26.9	5,200	16.5	27.60	1.188	725	11,786
VHTP0304	30	1800	286TP	93.6	87.5	34.3	3,350	10	25.51	1.188	558	8,549
VHTP0306	30	1200	326TP	93.0	80.5	32.3	5,200	16.5	29.09	1.188	725	12,493
VHTP0404	40	1800	324TP	94.1	86.0	46.3	4,500	16.5	27.60	1.188	720	12,440
VHTP0406	40	1200	364TP	94.1	86.5	42.3	6,600	16.5	30.26	1.188	898	16,168
VHTP0504	50	1800	326TP	94.5	87.0	57.0	4,500	16.5	29.09	1.188	780	13,220
VHTP0506	50	1200	365TP	94.1	86.0	53.0	6,600	16.5	31.24	1.188	1,025	17,780
VHTP0604	60	1800	364TP	95.0	86.5	68.5	6,000	16.5	30.26	1.188	900	16,443
VHTP0606	60	1200	404TP	94.5	87.0	63.0	9,000	16.5	38.87	1.501	1,210	24,639
VHTP0754	75	1800	365TP	95.4	86.5	85.0	6,000	16.5	31.24	1.188	970	18,383
VHTP0756	75	1200	405TP	94.5	86.5	78.5	9,000	16.5	40.39	1.501	1,340	28,950
VHTP1004	100	1800	405TP	95.4	87.5	112	7,900	16.5	40.39	1.501	1,415	27,993
VHTP1006	100	1200	444TP	95.0	79.8	123	10,100	16.5	43.03	1.688	1,990	36,496
VHTP1254	125	1800	444TP	95.4	85.6	143	8,900	16.5	43.03	1.688	2,020	34,648
VHTP1256	125	1200	445TP	95.0	79.0	155	10,100	16.5	45.00	1.688	2,080	41,744
VHTP1504	150	1800	445TP	95.8	88.0	166	8,900	16.5	45.00	1.688	2,120	39,678
VHTP1506	150	1200	447TP	95.8	77.2	189	11,500	20	45.94	1.688	2,540	51,527
VHTP2004	200	1800	447TP	96.2	82.5	235	10,100	20	45.94	1.688	2,470	53,815
VHTP2006	200	1200	449TP	95.8	76.6	254	11,500	20	53.94	2.126	2,780	68,015
VHTP2504	250	1800	449TP	96.2	83.1	292	10,100	20	53.94	2.126	2,820	58,015
VHTP2506	250	1200	449TP	95.8	74.3	328	11,500	20	53.94	2.126	2,970	78,507
VHTP3004	300	1800	449TP	96.2	83.1	351	10,100	20	53.94	2.126	3,540	71,749
VHTP3006	300	1200	5009P	95.8	84.8	345	12,400	24.5	57.20	2.188	3,800	88,296
VHTP3504	350	1800	5009P	96.2	86.3	394	10,800	24.5	57.20	2.188	4,020	77,096
VHTP3506	350	1200	5808P	95.8	80.6	424	20,400	30.5	62.09	2.376	5,700	115,434
VHTP4004	400	1800	5009P	96.2	86.6	449	10,800	24.5	57.20	2.188	4,200	96,590
VHTP4006	400	1200	5808P	95.8	80.9	482	20,400	30.5	62.09	2.376	5,950	127,333
VHTP4504	450	1800	5808P	96.2	84.0	521	10,100	30.5	62.09	2.376	5,990	112,043
VHTP4506	450	1200	5808P	95.8	80.2	547	20,400	30.5	62.09	2.376	6,150	142,630
VHTP5004	500	1800	5808P	96.2	84.0	578	10,100	30.5	62.09	2.376	6,210	113,075
VHTP5006	500	1200	5808P	95.8	81.2	601	20,400	30.5	62.09	2.376	6,600	150,648
VHTP6004	600	1800	5810P	96.2	84.0	694	10,100	30.5	67.20	2.376	6,680	134,939
VHTP6006	600	1200	5810P	95.8	81.7	717	20,400	30.5	67.20	2.376	7,090	174,560
VHTP7004	700	1800	5810P	96.2	85.0	800	10,100	30.5	67.20	2.376	7,070	154,690
VHTP7006	700	1200	5810P	95.8	81.3	840	20,400	30.5	67.2	2.376	8,670	188,660
VHTP8004	800	1800	5810P	96.2	86.0	904	10,100	30.5	67.20	2.376	9,220	175,006

Notes:
(1) Data subject to change without notice.

VERTICAL HOLLOW SHAFT WPI
HIGH THRUST with "P" BASE - MEDIUM VOLTAGE

AMRKNH, PREMIUM EFFICIENCY [VHKP]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Deep Well Turbine Pumps
- Irrigation
- Water/Wastewater

FEATURES:

- Output Range: 200 - 1000 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Weather Protected Type I (WPI)
- Voltage: 2300/4000V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- Standard Features: Coupling w/ Gib Key, Ball Type NRR, Drip/Splash Cover, Space Heaters (120V)
- Class F Insulation with VPI Epoxy Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance
- Cast Iron Conduit Box for F#449TP and Below; Steel Plate Conduit Box for F#5000
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449TP and Below
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Guide Bearings: Re-Greasable with Mobil Polyrex™ EM Grease
- Thrust Bearings: 449TP frames are Re-Greasable Oversized Angular Contact with Mobil Polyrex™ EM Grease
- Thrust Bearings: 5000 Frame and above are Oil Lubricated Spherical Roller with Site Glass
- Oil Requirements: 300 S.S.U. @100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- 6 Leads
- Inverter Duty - 4:1 Variable Torque with NRR; 20:1 Variable Torque without NRR Using Braking in VFD
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1, Part 31.4.4.3

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.

VERTICAL HOLLOW SHAFT WPI
HIGH THRUST with "P" BASE - MEDIUM VOLTAGE

AMRKNH, PREMIUM EFFICIENCY [VHKP]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @4160V	DOWN THRUST (lbs.)	BD DIM (in.)	CD DIM (in.)	BX DIM (IN.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
VHKP2006	200	1200	449TP	94.9	81.0	25.5	11,300	20	53.91	1.938	3,420	64,619
VHKP2504	250	1800	449TP	95.0	82.2	30.0	10,100	20	53.91	1.938	3,510	58,364
VHKP2506	250	1200	449TP	95.0	80.0	31.5	11,300	20	53.91	1.938	3,730	71,835
VHKP3004	300	1800	449TP	95.0	83.8	35.5	10,100	20	53.91	1.938	3,610	62,115
VHKP3006	300	1200	5009P	95.0	77.6	38.0	33,800	24.5	57.06	2.188	4,020	75,705
VHKP3504	350	1800	5009P	95.0	86.7	40.0	30,900	24.5	57.06	2.188	3,630	64,112
VHKP3506	350	1200	5009P	95.0	75.9	45.5	33,800	24.5	57.06	2.188	4,010	80,204
VHKP4004	400	1800	5009P	95.0	86.8	45.5	30,900	24.5	57.06	2.188	3,710	68,410
VHKP4006	400	1200	5009P	95.0	75.6	52.0	33,800	24.5	57.06	2.188	4,880	84,450
VHKP4504	450	1800	5009P	95.0	87.1	51.0	30,900	24.5	57.06	2.188	3,810	75,303
VHKP4506	450	1200	5806P	95.0	80.2	55.5	33,600	30.5	55.39	2.438	4,510	86,875
VHKP5004	500	1800	5009P	95.0	87.6	56.5	30,900	24.5	57.06	2.188	3,980	80,971
VHKP5006	500	1200	5806P	95.0	80.2	61.5	33,600	30.5	55.39	2.438	4,610	92,645
VHKP6004	600	1800	5808P	95.0	86.0	69.0	30,600	30.5	61.30	2.438	5,240	87,820
VHKP6006	600	1200	5808P	95.0	80.3	73.5	33,300	30.5	61.30	2.438	5,660	100,066
VHKP7004	700	1800	5810P	95.0	86.0	80.0	30,100	30.5	68.78	2.438	5,650	97,531
VHKP7006	700	1200	5808P	95.0	81.2	85.0	33,300	30.5	61.30	2.438	5,340	123,007
VHKP8004	800	1800	5810P	95.0	86.3	91.5	30,100	30.5	68.78	2.438	5,900	110,028
VHKP8006	800	1200	5810P	95.0	80.7	97.5	33,000	30.5	68.78	2.438	5,720	130,107
VHKP9004	900	1800	5810P	95.0	86.7	103	30,100	30.5	68.78	2.438	6,160	123,936
VHKP9006	900	1200	5810P	95.0	81.5	109	33,000	30.5	68.78	2.438	5,960	147,059
VHKP10004	1000	1800	5810P	95.0	87.3	113	30,100	30.5	68.78	2.438	6,510	139,261

Notes:
(1) Data subject to change without notice.

VERTICAL HOLLOW SHAFT TEFC
HIGH THRUST with "P" BASE -MEDIUM VOLTAGE

AEHCNH, PREMIUM EFFICIENCY [VHKTP]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Deep Well Turbine Pumps
- Irrigation
- Water/Wastewater

FEATURES:

- Output Range: 200 - 700 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP54)
- Voltage: 2300/4000V
- Motors Suitable for Reduced Starting Voltage
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- Standard Features: Coupling w/ Gib Key, Non-Sparking Ball Type NRR, Drip/Splash Cover, Space Heaters (120V)
- CSA Certified for Class I, Div. 2, Groups B,C, D; Temp Code T3 Maximum
- Class F Insulation with VPI Epoxy Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance
- Steel Plate Conduit Box with Threaded Connection Opening(s)
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Oversized Angular Contact or Spherical Thrust Bearing Installed
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449TP
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000 and Above
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Vacuum De-Gassed Re-Greasable Ball Bearings Frames -5007TP & Up with Mobil Polyrex™ EM Grease
- Guide Bearings: 324TP - 5810TP Frames are Re-Greasable with Mobil Polyrex™ EM Grease
- Thrust Bearings: 5009 - 5810TP Frames are Oil Lubricated Angular Contact or Spherical Thrust Bearing with Site Glass
- Oil Requirements for 444TP - 5810TP Frames: 300 S.S.U. @ 100°F
- Grease Discharge Fittings on Frames with Re-Greasable Motors
- Bronze Labyrinth Type Metal Flinger on Lower End Bracket
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- VFD Rated per NEMA MG1, Part 31
- Speed Ranges: 10:1 Variable Torque
- 6 Leads
- UL Recognized and CSA Approved
- Precautions Should Be Taken to Eliminate or Reduce Shaft Currents that May Be Imposed on the Motor by the VFD as stated per NEMA MG1, Part 30.4.4.3.
- Ball Type NRR Provided

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.

VERTICAL HOLLOW SHAFT TEFC
HIGH THRUST with "P" BASE - MEDIUM VOLTAGE

AEHCNH, PREMIUM EFFICIENCY [VHKTP]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @4160V	DOWN THRUST (lbs.)	BD DIM (in.)	CD DIM (in.)	BX DIM (IN.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
VHKTP2006	200	1200	449TP	95.0	76.2	25.5	11,400	20.0	53.94	2.126	3,700	86,710
VHKTP2504	250	1800	449TP	95.0	83.7	29.0	10,000	20.0	53.94	2.126	3,780	85,310
VHKTP2506	250	1200	5009P	95.0	81.9	30.0	12,100	24.5	57.20	2.188	3,980	94,760
VHKTP3004	300	1800	5009P	95.4	85.5	34.0	10,500	24.5	57.20	2.188	3,990	86,503
VHKTP3006	300	1200	5009P	95.0	82.4	35.5	12,100	24.5	57.20	2.188	5,530	112,664
VHKTP3504	350	1800	5009P	95.4	86.1	39.5	10,500	24.5	57.20	2.188	5,310	110,081
VHKTP3506	350	1200	5808P	95.2	80.4	42.5	22,300	30.5	62.09	2.376	5,960	129,055
VHKTP4004	400	1800	5009P	95.4	85.7	45.5	10,500	24.5	57.20	2.188	5,780	126,257
VHKTP4006	400	1200	5808P	95.4	80.8	48.5	22,300	30.5	62.09	2.376	6,300	137,745
VHKTP4504	450	1800	5808P	95.4	83.8	52.5	9,700	30.5	62.09	2.376	6,260	135,003
VHKTP4506	450	1200	5808P	95.6	80.9	54.0	22,300	30.5	62.09	2.376	6,560	145,494
VHKTP5004	500	1800	5808P	95.5	82.6	59.0	9,700	30.5	62.09	2.376	6,480	143,750
VHKTP5006	500	1200	5810P	95.8	81.6	59.5	22,300	30.5	67.20	2.376	6,880	160,188
VHKTP6004	600	1800	5810P	95.7	84.3	69.5	9,700	30.5	67.20	2.376	6,850	158,444
VHKTP6006	600	1200	5810P	96.0	81.3	71.5	22,300	30.5	67.20	2.376	9,120	183,916
VHKTP7004	700	1800	5810P	95.9	84.6	80.5	9,700	30.5	67.20	2.376	9,000	191,109

Notes:
(1) Data subject to change without notice.

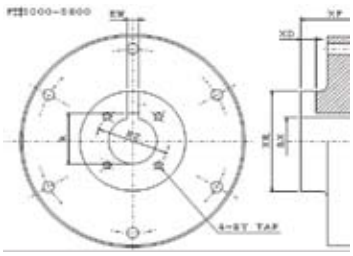
COUPLING KITS WPI

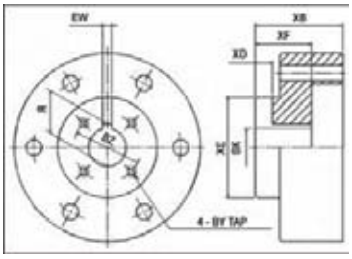
FOR VERTICAL HOLLOW SHAFT MOTORS

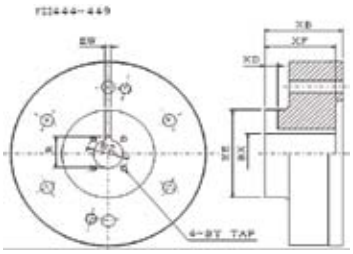
Effective 03-24-17
Supercedes 06-14-15

Notes:

1. Tolerance on BX dimensions up to and including 1.500 inches diameter: +0.001 inches, -0.000 inches; Larger than 1.500 inches diameter: +0.0015 inches, -0.0000 inches.
2. Dimension EW tolerance: +0.002 inches, -0.000 inches.
3. Dimension R tolerance: +0.010 inches, -0.000 inches.
4. **"*" in the table denotes the standard coupling size for each frame.**
5. One coupling is included with motor price. If purchased separately use list pricing.
6. Please consult Application Specialist for listings not shown.
7. Notice coupling part numbers have changed from 2015/2016 Pricebook; New design.







FRAME	BX	BY	BZ	EW	R	XB	XD	XE	XF	PART NO.	LIST PRICE ($)
210TP	0.751	NO. 10-32 UNF	1.375	0.188	0.845	1.750	0.406	2.000	1.125	CONTACT FACTORY	460
	0.876	NO. 10-32 UNF	1.375	0.188	0.970	1.750	0.406	2.000	1.125		
	0.938	NO. 10-32 UNF	1.375	0.250	1.078	1.750	0.406	2.000	1.125		
	***1.001**	NO. 10-32 UNF	1.375	0.250	1.126	1.750	0.406	2.000	1.125		
250TP/ 280TP	0.751	NO. 10-32 UNF	1.375	0.188	0.845	2.170	0.410	2.250	1.230	CONTACT FACTORY	613
	0.876	NO. 10-32 UNF	1.375	0.188	0.970	2.170	0.410	2.250	1.230		
	***1.001**	NO. 10-32 UNF	1.375	0.250	1.126	2.170	0.410	2.250	1.230		
	1.188	1/4"-20 UNC	1.750	0.250	1.313	2.170	0.410	2.250	1.230		
	1.251	1/4"-20 UNC	1.750	0.250	1.376	2.170	0.410	2.250	1.230		
320TP	1.001	NO. 10-32 UNF	1.375	0.250	1.126	2.540	0.410	2.875	1.540	CONTACT FACTORY	920
	***1.188**	1/4"-20 UNC	1.750	0.250	1.313	2.540	0.410	2.875	1.540		
	1.251	1/4"-20 UNC	1.750	0.250	1.376	2.540	0.410	2.875	1.540		
	1.438	1/4"-20 UNC	2.125	0.375	1.625	2.540	0.470	2.875	1.540		
	1.501	1/4"-20 UNC	2.125	0.375	1.688	2.540	0.470	2.875	1.540		
360TP	1.001	NO. 10-32 UNF	1.375	0.250	1.126	2.540	0.410	2.875	1.540	CONTACT FACTORY	920
	***1.188**	1/4"-20 UNC	1.750	0.250	1.313	2.540	0.410	2.875	1.540		
	1.251	1/4"-20 UNC	1.750	0.250	1.376	2.540	0.410	2.875	1.540		
	1.438	1/4"-20 UNC	2.125	0.375	1.625	2.540	0.530	2.875	1.540		
	1.501	1/4"-20 UNC	2.125	0.375	1.688	2.540	0.530	2.875	1.540		
400TP	1.188	1/4"-20 UNC	1.750	0.250	1.313	2.760	0.530	3.150	1.500	CONTACT FACTORY	1,278
	1.251	1/4"-20 UNC	1.750	0.250	1.376	2.760	0.530	3.150	1.500		
	1.438	1/4"-20 UNC	2.125	0.375	1.625	2.760	0.530	3.150	1.500		
	***1.501**	1/4"-20 UNC	2.125	0.375	1.688	2.760	0.530	3.150	1.500		
	1.688	1/4"-20 UNC	2.500	0.375	1.891	2.760	0.530	3.150	1.500		
	1.751	1/4"-20 UNC	2.500	0.375	1.954	2.760	0.530	3.150	1.500		
444TP/ 445TP	1.188	1/4"-20 UNC	1.750	0.250	1.304	3.169	0.409	3.740	2.875	CONTACT FACTORY	2150
	1.251	1/4"-20 UNC	1.750	0.250	1.367	3.169	0.409	3.740	2.875		
	1.438	1/4"-20 UNC	2.125	0.375	1.605	3.169	0.531	3.740	2.875		
	***1.501**	1/4"-20 UNC	2.125	0.375	1.669	3.169	0.531	3.740	2.875		
	1.688	1/4"-20 UNC	2.500	0.375	1.859	3.169	0.531	3.740	2.875		
	1.751	1/4"-20 UNC	2.500	0.375	1.922	3.169	0.531	3.740	2.875		
	1.938	1/4"-20 UNC	2.500	0.500	2.160	3.169	0.689	3.740	2.875		
445TP20[A]/ 447TP[B]/ 449TP[C]	1.438	1/4"-20 UNC	2.125	0.375	1.605	3.559	0.531	4.725	3.071	CONTACT FACTORY	2,350
	***1.501[A]**	1/4"-20 UNC	2.125	0.375	1.669	3.559	0.531	4.725	3.071		
	***1.688[B]**	1/4"-20 UNC	2.500	0.375	1.859	3.559	0.531	4.725	3.071		
	1.751	1/4"-20 UNC	2.500	0.375	1.922	3.559	0.531	4.725	3.071		
	***1.938[C]**	1/4"-20 UNC	2.500	0.500	2.160	3.559	0.689	4.725	3.071		
	2.001	3/8"-16 UNC	3.250	0.500	2.223	3.559	0.689	4.725	3.071		
	2.063	3/8"-16 UNC	3.250	0.500	2.287	3.559	0.689	4.725	3.071		
	2.126	3/8"-16 UNC	3.250	0.500	2.350	3.559	0.689	4.725	3.071		
	2.188	3/8"-16 UNC	3.250	0.500	2.414	3.559	0.689	4.725	3.071		
	2.251	3/8"-16 UNC	3.250	0.500	2.477	3.559	0.689	4.725	3.071		
	2.376	3/8"-16 UNC	3.250	0.625	2.651	3.559	0.815	4.725	3.071		
	2.438	3/8"-16 UNC	3.250	0.625	2.714	3.559	0.815	4.725	3.071		
	2.501	3/8"-16 UNC	3.250	0.625	2.778	3.559	0.815	4.725	3.071		
5000/ 5800	1.688	1/4"-20 UNC	2.500	0.375	1.859	-	0.531	4.725	3.071	3A711C1371209X001	2,650
	1.938	1/4"-20 UNC	2.500	0.500	2.160	-	0.689	4.725	3.071	3A711C1371306X001	
	2.126	3/8"-16 UNC	3.250	0.500	2.350	-	0.689	4.725	3.071	3A711C1371403X001	
	***2.188[A]**	3/8"-16 UNC	3.250	0.500	2.414	-	0.689	4.725	3.071	3A711C1371501X001	
	2.251	3/8"-16 UNC	3.250	0.500	2.477	-	0.689	4.725	3.071	3A711C1370407X001	
	2.376	3/8"-16 UNC	3.250	0.625	2.651	-	0.815	4.725	3.071	3A711C1370300X001	
	*2.438[B]	3/8"-16 UNC	3.250	0.625	2.714	-	0.815	4.725	3.071	3A711C1370202X001	
	2.501	3/8"-16 UNC	3.250	0.625	2.778	-	0.815	4.725	3.071	3A711C1370105X001	
	BLANK1	3/8"-16 UNC	3.250	-	-	-	-	4.725	3.071	3A711C1370504X001	
	BLANK2	-	-	-	-	-	-	4.725	3.071	3A711C1370601X001	

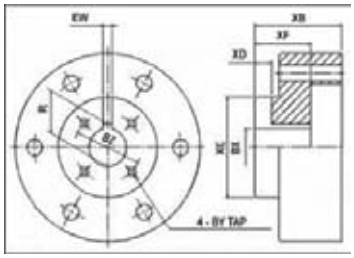
COUPLING KITS TEFC

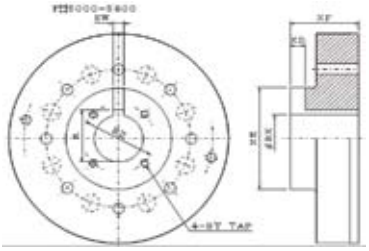
FOR VERTICAL HOLLOW SHAFT MOTORS

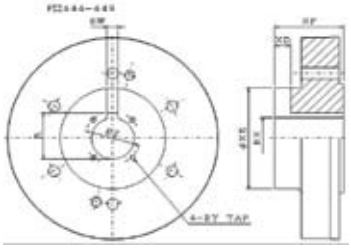
Effective 03-24-17
Supercedes 06-14-15

Notes:

1. Tolerance on BX dimensions up to and including 1.500 inches diameter: +0.001 inches, -0.000 inches; Larger than 1.500 inches diameter: +0.0015 inches, -0.0000 inches.
2. Dimension EW tolerance: +0.002 inches, -0.000 inches.
3. Dimension R tolerance: +0.010 inches, -0.000 inches.
4. **"*" in the table denotes the standard coupling size for each frame.**
5. One coupling is included with motor price. If purchased separately use list pricing.
6. Please consult Application Specialist for listings not shown.







FRAME	BX	BY	BZ	EW	R	XB	XD	XE	XF	PART NO.	LIST PRICE ($)
210TP	0.751	NO. 10-32 UNF	1.375	0.188	0.845	1.750	0.343	2.000	1.125	31010D6870206	460
	0.876	NO. 10-32 UNF	1.375	0.188	0.970	1.750	0.343	2.000	1.125	31010D6870303	
	***1.001**	NO. 10-32 UNF	1.375	0.250	1.126	1.750	0.406	2.000	1.125	31010D6870401	
250TP	0.751	NO. 10-32 UNF	1.375	0.188	0.845	2.560	0.343	2.250	1.625	31010D6870508	613
	0.876	NO. 10-32 UNF	1.375	0.188	0.970	2.560	0.343	2.250	1.652	31010D6870605	
	***1.001**	NO. 10-32 UNF	1.375	0.250	1.126	2.560	0.406	2.250	1.625	31010D6870702	
	1.188	1/4"-20 UNC	1.750	0.250	1.313	2.560	0.406	2.250	1.652	31010D6870800	
280TP	0.876	NO. 10-32 UNF	1.375	0.188	0.970	2.560	0.343	2.250	1.652	31010D6870605	613
	***1.001**	NO. 10-32 UNF	1.375	0.250	1.126	2.560	0.406	2.250	1.625	31010D6870702	
	1.188	1/4"-20 UNC	1.750	0.250	1.313	2.560	0.406	2.250	1.652	31010D6870800	
	1.251	1/4"-20 UNC	1.750	0.250	1.376	2.560	0.406	2.250	1.652	31010D6870907	
320TP	1.001	NO. 10-32 UNF	1.375	0.250	1.126	3.331	0.406	2.875	2.331	31010D6871008	920
	***1.188**	1/4"-20 UNC	1.750	0.250	1.313	3.331	0.406	2.875	2.331	31010D6871105	
	1.251	1/4"-20 UNC	1.750	0.250	1.376	3.331	0.406	2.875	2.331	31010D6871202	
	1.438	1/4"-20 UNC	2.125	0.375	1.625	3.331	0.531	2.875	2.331	31010D6871300	
360TP	***1.188**	1/4"-20 UNC	1.750	0.250	1.313	3.331	0.406	2.875	2.331	31010D6871407	920
	1.251	1/4"-20 UNC	1.750	0.250	1.376	3.331	0.406	2.875	2.331	31010D6871504	
	1.438	1/4"-20 UNC	2.125	0.375	1.625	3.331	0.531	2.875	2.331	31010D6871601	
	1.501	1/4"-20 UNC	2.125	0.375	1.688	3.331	0.531	2.875	2.331	31010D6871709	
400TP	***1.501**	1/4"-20 UNC	2.125	0.375	1.688	3.543	0.531	3.150	2.441	31010D6871806	2,150
444TP/ 445TP	1.188	1/4"-20 UNC	1.750	0.250	1.304	-	0.409	3.740	2.874	3A711C1580100X001	2,150
	1.251	1/4"-20 UNC	1.750	0.250	1.367	-	0.409	3.740	2.874	3A711C1580207X001	
	1.438	1/4"-20 UNC	2.125	0.375	1.605	-	0.531	3.740	2.874	3A711C1580304X001	
	***1.501**	1/4"-20 UNC	2.125	0.375	1.669	-	0.531	3.740	2.874	3A711C1580401X001	
	1.688	1/4"-20 UNC	2.500	0.375	1.859	-	0.531	3.740	2.874	3A711C1580509X001	
	1.751	1/4"-20 UNC	2.500	0.375	1.922	-	0.531	3.740	2.874	3A711C1580606X001	
	1.938	1/4"-20 UNC	2.500	0.500	2.160	-	0.689	3.740	2.874	3A711C1580703X001	
447TP[A]/ 449TP[B]	1.438	1/4"-20 UNC	2.125	0.375	1.605	-	0.531	4.725	3.071	3A711C1590105X001	2,350
	1.501	1/4"-20 UNC	2.125	0.375	1.669	-	0.531	4.725	3.071	3A711C1590202X001	
	***1.688**[A]	1/4"-20 UNC	2.500	0.375	1.859	-	0.531	4.725	3.071	3A711C1590300X001	
	1.751	1/4"-20 UNC	2.500	0.375	1.922	-	0.531	4.725	3.071	3A711C1590407X001	
	***1.938**[B]	1/4"-20 UNC	2.500	0.500	2.160	-	0.689	4.725	3.071	3A711C1590504X001	
	2.001	3/8"-16 UNC	3.250	0.500	2.223	-	0.689	4.725	3.071	3A711C1590601X001	
	2.063	3/8"-16 UNC	3.250	0.500	2.287	-	0.689	4.725	3.071	3A711C1590709X001	
	2.126	3/8"-16 UNC	3.250	0.500	2.350	-	0.689	4.725	3.071	3A711C1590806X001	
	2.188	3/8"-16 UNC	3.250	0.500	2.414	-	0.689	4.725	3.071	3A711C1590903X001	
	2.251	3/8"-16 UNC	3.250	0.500	2.477	-	0.689	4.725	3.071	3A711C1591004X001	
	2.376	3/8"-16 UNC	3.250	0.625	2.651	-	0.815	4.725	3.071	3A711C1591101X001	
	2.438	3/8"-16 UNC	3.250	0.625	2.714	-	0.815	4.725	3.071	3A711C1591209X001	
	2.501	3/8"-16 UNC	3.250	0.625	2.778	-	0.815	4.725	3.071	3A711C1591306X001	
5000/ 5800 4P	1.501	1/4"-20 UNC	2.125	0.375	1.669	-	0.531	4.725	3.071	3A711C1600101X001	2,650
	1.688	1/4"-20 UNC	2.500	0.375	1.859	-	0.531	4.725	3.071	3A711C1600208X001	
	1.938	1/4"-20 UNC	2.500	0.500	2.160	-	0.689	4.725	3.071	3A711C1600305X001	
	2.126	3/8"-16 UNC	3.250	0.500	2.350	-	0.689	4.725	3.071	3A711C1600402X001	
	***2.188**[A]	3/8"-16 UNC	3.250	0.500	2.414	-	0.689	4.725	3.071	3A711C1600500X001	
	2.376	3/8"-16 UNC	3.250	0.625	2.651	-	0.815	4.725	3.071	3A711C1600607X001	
	***2.438**[B]	3/8"-16 UNC	3.250	0.625	2.714	-	0.815	4.725	3.071	3A711C1600704X001	
5800 6P & ABOVE	1.501	1/4"-20 UNC	2.125	0.375	1.669	-	0.531	4.725	3.071	3A711C1630107X001	2,650
	1.688	1/4"-20 UNC	2.500	0.375	1.859	-	0.531	4.725	3.071	3A711C1630204X001	
	1.938	1/4"-20 UNC	2.500	0.500	2.160	-	0.689	4.725	3.071	3A711C1630301X001	
	2.126	3/8"-16 UNC	3.250	0.500	2.350	-	0.689	4.725	3.071	3A711C1630409X001	
	2.188	3/8"-16 UNC	3.250	0.500	2.414	-	0.689	4.725	3.071	3A711C1630506X001	
	2.376	3/8"-16 UNC	3.250	0.625	2.651	-	0.815	4.725	3.071	3A711C1630603X001	
	***2.438**	3/8"-16 UNC	3.250	0.625	2.714	-	0.815	4.725	3.071	3A711C1630701X001	

STEADY BUSHING KITS WPI

FOR VERTICAL HOLLOW SHAFT MOTORS

Effective 03-24-17
Supercedes 06-14-15

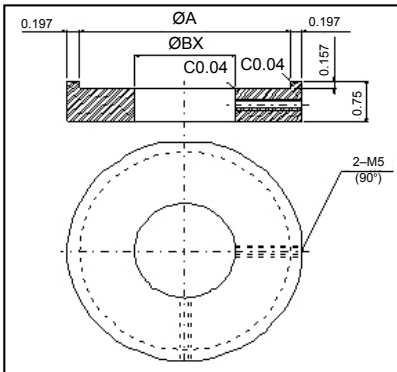


FIG. 1

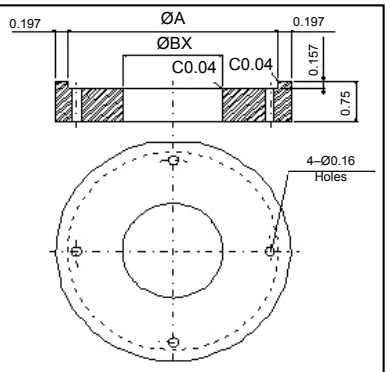


FIG. 2

Notes:

1. See corresponding diagram for part detail.
2. Please consult Application Specialist for listings not shown.
3. Steady Bushing material is Bronze.
4. Kit includes hardware.
5. Notice steady bushing part numbers have changed from 2015/2016 Pricebook; New design.
6. Steady bushing kits are the same for WPI and TEFC for frames 449TP and smaller.
7. **"*" in the table denotes the standard size for each frame.**

FRAME	DIMENSION		PART NO.	LIST PRICE ($)
	A	BX		
210TP	1.77	0.751	31010D4972800	100
		0.876	31010D4972907	
		0.938	31010D4970106	
		***1.001**	31010D4973008	
250TP	1.77	0.751	31010D4971005	100
		0.876	31010D4971102	
		***1.001**	31010D4971200	
		1.188	31010D4971307	
		1.251	31010D4970203	
280TP	2.17	0.751	31010D4970301	100
		0.876	31010D4971404	
		1.001	31010D4971501	
		***1.188**	31010D4971307	
		1.251	31010D4971706	
320TP	2.83	1.001	31010D4971803	130
		***1.188**	31010D4971901	
		1.251	31010D4972001	
		1.438	31010D4972109	
		1.501	31010D4970408	
360TP	3.03	1.001	31010D4972206	130
		***1.188**	31010D4972303	
		1.251	31010D4972401	
		1.438	31010D4972508	
		1.501	31010D4972605	
400TP	3.54	1.188	31010D4970505	150
		1.251	31010D4970602	
		1.438	31010D4970700	
		***1.501**	31010D4972702	
		1.688	31010D4970807	
		1.751	31010D4970904	

FRAME	DIMENSION		CATALOG NO.	LIST PRICE ($)
	A	BX		
444TP/ 445TP	3.15	1.188	3A702D1611403X001	175
		1.251	3A702D1611501X001	
		1.438	3A702D1611608X001	
		***1.501**	3A702D1611705X001	
		1.688	3A702D1611802X001	
		1.751	3A702D1611900X001	
		1.938	3A702D1612001X001	
445TP20/ 447TP/ 449TP	3.54	1.438	3A702D1610105X001	210
		***1.501**[(A)]	3A702D1610202X001	
		***1.688**[(B)]	3A702D1610300X001	
		1.751	3A702D1610407X001	
		***1.938**[(C)]	3A702D1610504X001	
		2.001	3A702D1610601X001	
		2.063	3A702D1610709X001	
		2.126	3A702D1610806X001	
		2.188	3A702D1610903X001	
		2.251	3A702D1611004X001	
		2.376	3A702D1611101X001	
		2.438	3A702D1611209X001	
		2.501	3A702D1611306X001	
5000	3.66	1.688	3A702D1720601X001	210
		1.938	3A702D1720709X001	
		2.126	3A702D1720806X001	
		***2.188**	3A702D1720202X001	
		2.251	3A702D1720903X001	
		2.376	3A702D1720300X001	
		2.438	3A702D1720407X001	
		2.501	3A702D1720504X001	
5800	4.33	2.126	3A702D1740602X001	210
		2.188	3A702D1740505X001	
		2.251	3A702D1740408X001	
		2.376	3A702D1740301X001	
		***2.438**	3A702D1740203X001	
		2.501	3A702D1740106X001	

STEADY BUSHING KITS TEFC

FOR VERTICAL HOLLOW SHAFT MOTORS

Effective 03-24-17
Supercedes 06-14-15

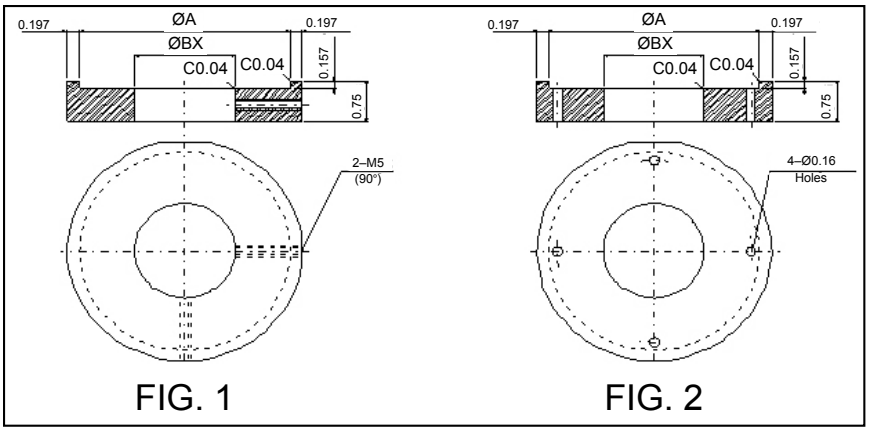


FIG. 1 FIG. 2

Notes:

1. See corresponding diagram for part detail.
2. Please consult Application Specialist for listings not shown.
3. Steady Bushing material is Bronze.
4. Kit includes hardware.
5. Steady bushing kits are the same for WPI and TEFC for frames 449TP and smaller.
6. **"*" in the table denotes the standard size for each frame.**

FRAME	DIMENSION		PART NO.	LIST PRICE ($)
	A	BX		
210TP	1.77	0.751	31010D4972800	100
		0.876	31010D4972907	
		0.938	31010D4970106	
		***1.001**	31010D4973008	
250TP	1.77	0.751	31010D4971005	100
		0.876	31010D4971102	
		***1.001**	31010D4971200	
		1.188	31010D4971307	
		1.251	31010D4970203	
280TP	2.17	0.751	31010D4970301	100
		0.876	31010D4971404	
		1.001	31010D4971501	
		***1.188**	31010D4971307	
		1.251	31010D4971706	
320TP	2.83	1.001	31010D4971803	130
		***1.188**	31010D4971901	
		1.251	31010D4972001	
		1.438	31010D4972109	
		1.501	31010D4970408	
360TP	3.03	1.001	31010D4972206	130
		***1.188**	31010D4972303	
		1.251	31010D4972401	
		1.438	31010D4972508	
		1.501	31010D4972605	
400TP	3.54	1.188	31010D4970505	150
		1.251	31010D4970602	
		1.438	31010D4970700	
		***1.501**	31010D4972702	
		1.688	31010D4970807	
		1.751	31010D4970904	

FRAME	DIMENSION		CATALOG NO.	LIST PRICE ($)
	A	BX		
444TP/ 445TP	3.15	1.188	3A702D1611403X001	175
		1.251	3A702D1611501X001	
		1.438	3A702D1611608X001	
		***1.501**	3A702D1611705X001	
		1.688	3A702D1611802X001	
		1.751	3A702D1611900X001	
		1.938	3A702D1612001X001	
447TP[A]/ 449TP[A]	3.54	1.438	3A702D1610105X001	210
		1.501	3A702D1610202X001	
		***1.688[A]**	3A702D1610300X001	
		1.751	3A702D1610407X001	
		***1.938[B]**	3A702D1610504X001	
		2.001	3A702D1610601X001	
		2.063	3A702D1610709X001	
		2.126	3A702D1610806X001	
		2.188	3A702D1610903X001	
		2.251	3A702D1611004X001	
		2.376	3A702D1611101X001	
		2.438	3A702D1611209X001	
		2.501	3A702D1611306X001	
5000/ 5800	3.66	1.688	3A702D1720601X001	210
		1.938	3A702D1720709X001	
		2.126	3A702D1720806X001	
		***2.188[A]**	3A702D1720202X001	
		2.251	3A702D1720903X001	
		2.376	3A702D1720300X001	
		***2.438[B]**	3A702D1720407X001	
		2.501	3A702D1720504X001	

MAX-E1® VERTICAL ROUND BODY SOLID SHAFT NORMAL THRUST with "P" BASE - LOW VOLTAGE

AEUH8NDP, NEMA PREMIUM, ROUND BODY [EPV_P]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Centrifugal Pumps
- Petro-Chemical
- Water/Wastewater
- Pulp and Paper

FEATURES:

- Output Range: 7.5 - 100 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 230/460V (Usable on 208V)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Maximum
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Cast Iron Frame, End Brackets, Fan Cover, Drip Cover and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 40˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Light Gray - Munsell N5.0
- Guide Bearings: 250HP - 400HP Frames are Single Shielded
- Thrust Bearings: 250HP - 405HP Frames are Re-Greasable Angular Contact with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings on Regreasable Models
- Labyrinth Type Metal Flinger on Both Ends for Frames 320HP & Larger
- Cast Iron Inner and Outer Bearing Caps for Frames 280TS & Larger
- Stainless Steel Nameplate
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 304,5
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- 12 Leads
- Dual Drilled Feet Available on Most Ratings - Longer Frames (i.e. 145T Drilled also for 143T)
- Rubber Dust Flinger on Drive-End for F# 140HP - 280 HP

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

(1) Motors 7.5 HP & up are Suitable for Wye/Delta Starting.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(6) HP Shaft is same as VP shaft dimensions per NEMA MG-1.

MAX-E1™ VERTICAL "P" BASE

AEUH8NDP, NEMA PREMIUM, ROUND BODY [EPV_P]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	BX DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
EPV7/56P	7.5	1200	254HP	91.0	80.5	9.59	975	26.03	358	2,838
EPV0106P	10	1200	256HP	91.0	80.5	12.8	1100	27.76	418	3,338
EPV0152P	15	3600	254HP	92.4	91.5	16.6	740	26.03	310	2,804
EPV0154P	15	1800	254HP	92.4	88.0	17.3	950	26.03	310	2,724
EPV0156P	15	1200	284HP	92.4	83.5	18.2	1200	29.12	506	4,674
EPV0202P	20	3600	256HP	92.4	92.5	21.9	840	27.76	350	3,405
EPV0204P	20	1800	256HP	93.0	87.5	23.0	1050	27.76	350	3,297
EPV0206P	20	1200	286HP	91.7	84.0	24.3	1320	30.36	605	5,550
EPV0252P	25	3600	284HP	92.4	91.0	27.8	900	27.75	490	4,230
EPV0254P	25	1800	284HP	93.6	86.0	29.1	1200	29.12	441	3,985
EPV0256P	25	1200	324HP	93.0	83.0	30.3	1375	32.57	798	6,691
EPV0302P	30	3600	286HP	93.0	91.0	33.2	960	29.25	469	4,876
EPV0304P	30	1800	286HP	93.6	87.5	34.3	1250	30.62	490	4,692
EPV0306P	30	1200	326HP	93.0	80.5	37.5	1430	34.00	853	7,383
EPV0404P	40	1800	324HP	94.1	86.0	46.3	1325	32.57	682	6,153
EPV0406P	40	1200	364HP	94.1	86.5	46.0	1520	31.07	1,078	9,767
EPV0504P	50	1800	326HP	94.5	87.0	56.9	1400	34.07	744	7,691
EPV0506P	50	1200	365HP	94.1	86.0	57.8	1600	36.46	1,215	11,844
EPV0604P	60	1800	364HP	95.0	86.5	68.4	1450	35.48	920	9,624
EPV0606P	60	1200	404HP	94.5	87.0	68.3	1660	39.6	1,436	13,876
EPV0754P	75	1800	365HP	95.4	86.5	85.1	1500	36.5	651	11,937
EPV0756P	75	1200	405HP	94.5	86.5	85.9	1190	37.8	1,584	16,189
EPV1004P	100	1800	405HP	95.4	87.5	112	1550	37.8	1,310	16,710

Notes:

(1) These motors are not readily available from stock; must be created thought our Mod Shop.
(2) Please allow 4-6 weeks for delivery if source motor is available for modification.
(3) All data subject to change without notice.

MAX-E2/841® VERTICAL ROUND BODY SOLID SHAFT NORMAL THRUST with "P" BASE - LOW VOLTAGE

AEUH8BDP, NEMA PREMIUM, ROUND BODY IEEE-841 MOTOR [HBV_P]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Centrifugal Pumps
- Petro-Chemical
- Water/Wastewater
- Pulp and Paper

FEATURES:

- Output Range: 7.5 - 100 HP
- Speed: 3600, 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP56)
- Voltage: 460V Only(1,4)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous); 50 Hz, 1.0 Service Factor (Continuous)
- CSA Certified for Class I, Div. 2, Groups B, C, D - Temp Code T3 Maximum
- Meets or Exceeds IEEE 841 Standards
- Extended Warranty - 60 Months from Date of Manufacture
- Class F Insulation
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum; Various Ratings also Meet Design C
- Cast Iron Frame, End Brackets, Fan Cover, Drip Cover and Main Conduit Box
- Grounding Terminal Inside Main Conduit Box with additional Foot Grounding Provision
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - F1 Mounted
- Designed for 50˚C Ambient Temperature(2)
- Designed for 3300 ft. Elevation(3)
- Bi-Directional Rotation
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: 2 Part Epoxy
- Paint Color: Blue - Munsell 5PB 3/8
- Guide Bearings: 250HP - 400HP Frames are Single Shielded
- Thrust Bearings: 250HP - 405HP Frames are Re-Greasable Angular Contact with Mobil Polyrex™ EM Grease
- Automatic Grease Discharge Fittings
- VBXX INPRO™ Seals Installed on Both Ends
- Stainless Steel Nameplate and Hardware
- Stainless Steel Automatic Breather Drain (Located at both End Brackets for Vertical Mounts)
- New Dual Column Design Nameplate as Standard (60/50 Hz)
- Suitable for Inverter Duty (PWM - Pulse Width Modulation) per NEMA MG-1, Part 30(5,6)
- Inverter Duty Speed Range: 20:1 Variable Torque, 10:1 Constant Torque
- Motors are U.L. Recognized, CSA Approved
- 3 Leads Only
- Dual Drilled Feet Available on Most Ratings - Longer Frames (i.e. 145T Drilled also for 143T)
- Vibration Not to Exceed 0.08 Inches Per Second
- Noise Level Not to Exceed 85 dB(A) at 1 Meter Unloaded

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

(1) 575V motors available.
(2) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(3) Consult a Stock Product Application Specialist for suitability at higher elevations.
(4) Motors 7.5 HP & up are suitable for wye/delta starting.
(5) Motor service factor is 1.0 when operated on a VFD.
(6) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG-1.
(7) HP Shaft is same as VP shaft dimensions per NEMA MG-1.

MAX-E2/841® VERTICAL "P" BASE

AEUH8BDP, NEMA PREMIUM, ROUND BODY IEEE-841 MOTOR [HBV_P]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	BX DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
HBV7/56P	7.5	1200	254HP	91.0	80.5	9.59	975	26.03	323	3,784
HBV0106P	10	1200	256HP	91.0	80.5	12.8	1100	27.76	380	4,334
HBV0152P	15	3600	254HP	92.4	91.5	16.6	740	26.03	323	3,785
HBV0154P	15	1800	254HP	92.4	88.0	17.3	950	26.03	345	3,775
HBV0156P	15	1200	284HP	92.4	83.5	18.2	1200	29.12	540	5,274
HBV0202P	20	3600	256HP	92.4	92.5	21.9	840	27.76	367	4,305
HBV0204P	20	1800	256HP	93.0	87.5	23.0	1050	27.76	425	4,355
HBV0206P	20	1200	286HP	91.7	84.0	24.3	1320	30.36	565	6,323
HBV0252P	25	3600	284HP	92.4	91.0	27.8	900	27.75	490	4,956
HBV0254P	25	1800	284HP	93.6	86.0	29.1	1200	29.12	555	5,052
HBV0256P	25	1200	324HP	93.0	83.0	30.3	1375	32.57	759	6,991
HBV0302P	30	3600	286HP	93.0	91.0	33.2	960	29.25	535	5,425
HBV0304P	30	1800	286HP	93.6	87.5	34.3	1250	30.62	656	6,465
HBV0306P	30	1200	326HP	93.0	80.5	37.5	1430	34.00	795	9,457
HBV0404P	40	1800	324HP	94.1	86.0	46.3	1325	32.57	740	8,849
HBV0406P	40	1200	364HP	94.1	86.5	46.0	1520	31.07	898	12,316
HBV0504P	50	1800	326HP	94.5	87.0	56.9	1400	34.07	845	9,431
HBV0506P	50	1200	365HP	94.1	86.0	57.8	1600	36.46	1,110	13,953
HBV0604P	60	1800	364HP	95.0	86.5	68.4	1450	35.48	955	12,507
HBV0606P	60	1200	404HP	94.5	87.0	68.3	1660	39.6	1,355	15,444
HBV0754P	75	1800	365HP	95.4	86.5	85.1	1500	36.5	1,040	14,006
HBV0756P	75	1200	405HP	94.5	86.5	85.9	1190	37.8	1,363	16,658
HBV1004P	100	1800	405HP	95.4	87.5	112	1550	37.8	1,385	16,773

Notes:

(1) These motors are not readily available from stock; must be created thought our Mod Shop.
(2) Please allow 4-6 weeks for delivery if source motor is available for modification.
(3) All data subject to change without notice.

VERTICAL SOLID SHAFT WPI
HIGH THRUST with "P" BASE - LOW VOLTAGE

AMRCED (MAX-VSP™) NEMA PREMIUM [VSP]*

Effective 03-24-17
Supercedes 06-14-15

FIRE SAFETY

APPLICATIONS:

- Deep Well Turbine Pumps
- Fluid Handling Systems
- Irrigation
- Water/Wastewater
- Fire Pumps*

FEATURES:

- Output Range: 15 - 800 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Weather Protected Type I (WPI)
- Voltage: 230/460V(Usable on 208V); 150HP and Larger is 460V Only
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- New Dual Column (60/50 Hz) Design Nameplate as Standard; 50 Hz Data 190/380V at 1.0 S.F.
- Standard Features: Ball Type NRR, Drip/Splash Cover, Space Heaters (120V)
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance
- Cast Iron Conduit Box for F#449TP and Below; Steel Plate Conduit Box for F#5000
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449TP and Below
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color for AMRCED (MAX-VSP™): Blue - Munsell 5PB 3/8
- Guide Bearings: 213TP - 286TP frames are Double Shielded
- Guide Bearings: 324TP - 449TP frames are Re-Greasable with Mobil Polyrex™ EM Grease
- Thrust Bearings: 213TP - 286TP frames are Re-Greasable Angular Contact with Mobil Polyrex™ EM Grease
- Thrust Bearings: 324TP - 449TP frames are Oil Lubricated Angular Contact with Site Glass
- Oil Requirements for 324TP-405TP - 145 to 175 S.S.U. @100°F
- Oil Requirements for 444TP-449TP - 300 S.S.U. @100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate and Rodent Screens
- 9 Leads (PWS on 230V) on 210TP to 365TP; 12 Leads (PWS on 230V) on 404TP to 405TP; 6 Leads (PWS on 460V) on 444TP to 5810P(3)
- Inverter Duty - 4:1 Variable Torque with NRR. 10:1 C.T., 20:1 VT without NRR Using Braking in VFD
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1, Part 31.4.4.3 for AMRCNH (Part 30 on AMRC)

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

* Fire Pump available. See product page for more details.
(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Motors 440 frame & up are suitable for wye/delta starting.

MAX-VSP™ VERTICAL SOLID SHAFT WPI

AMRCED (MAX-VSP™) NEMA PREMIUM [VSP]*

Effective 03-24-17
Supercedes 06-14-15

FIRE SAFETY

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	AG DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)	FIRE PUMP	
											CAT. NO.	LIST PRICE ($)
VSP0154	15	1800	254VP	93.0	83.0	18.2	3,350	26.91	309	4,256	VSP0154FP	4,682
VSP0204	20	1800	256VP	93.0	83.0	24.3	3,350	26.91	330	5,048	VSP0204FP	5,553
VSP0254	25	1800	284VP	93.6	85.0	29.4	3,350	28.25	425	5,836	VSP0254FP	6,420
VSP0304	30	1800	286VP	94.1	86.0	34.7	3,350	28.25	465	6,325	VSP0304FP	6,958
VSP0404	40	1800	324VP	94.1	86.0	46.3	5,700	32.71	634	8,825	VSP0404FP	9,708
VSP0504	50	1800	326VP	94.5	85.0	58.5	5,700	32.71	689	10,277	VSP0504FP	11,305
VSP0604	60	1800	364VP	95.0	85.0	69.5	6,000	35.89	791	12,412	VSP0604FP	13,653
VSP0606	60	1200	404VP	94.5	85.5	69.5	9,000	42.32	1,094	15,456	VSP0606FP	17,002
VSP0754	75	1800	365VP	95.0	86.0	86.0	6,000	35.89	877	13,742	VSP0754FP	15,116
VSP0756	75	1200	405VP	94.5	86.5	86.0	9,000	42.32	1,239	16,356	VSP0756FP	17,992
VSP1004	100	1800	404VP	95.4	85.5	115	7,900	42.32	1,133	15,878	VSP1004FP	17,466
VSP1006	100	1200	444VP	95.0	82.0	120	12,000	50.40	1,450	21,767	VSP1006FP	23,944
VSP1254	125	1800	405VP	95.4	84.5	145	7,900	42.32	1,158	18,810	VSP1254FP	20,691
VSP1256	125	1200	445VP	95.0	82.0	150	11,900	50.40	1,650	23,827	VSP1256FP	26,210
VSP1504	150	1800	444VP	95.0	86.0	172	10,700	50.40	1,530	23,986	VSP1504FP	26,385
VSP1506	150	1200	445VP	95.4	82.5	178	11,800	50.40	1,890	25,393	VSP1506FP	27,932
VSP2004	200	1800	445VP	95.0	86.5	228	10,700	50.40	1,820	26,757	VSP2004FP	29,433
VSP2006	200	1200	447VP	95.4	83.0	236	14,900	55.80	2,130	27,589	VSP2006FP	30,348
VSP2504	250	1800	445VP20	95.8	86.5	283	13,400	55.80	1,940	34,248	VSP2504FP	37,673
VSP2506	250	1200	449VP	95.8	83.0	295	14,700	55.80	2,660	40,552	VSP2506FP	44,607
VSP3004	300	1800	447VP	95.8	87.5	335	13,400	55.80	2,470	39,647	VSP3004FP	43,612
VSP3006	300	1200	449VP	94.7	79.0	375	11,360	64.93	3,320	50,566	VSP3006FP	55,623
VSP3504	350	1800	447VP	95.8	88.0	388	13,300	55.80	2,900	50,786	VSP3504FP	55,865
VSP3506	350	1200	5009VP	95.8	84.5	405	33,900	60.68	4,050	56,281	~	~
VSP4004	400	1800	449VP	95.8	88.5	442	13,200	59.93	3,320	54,605	VSP4004FP	60,066
VSP4006	400	1200	5009VP	95.8	85.0	460	33,800	60.68	4,270	69,352	~	~
VSP4504	450	1800	5009VP	96.2	89.1	492	31,000	60.68	4,050	67,228	~	~
VSP4506	450	1200	5806VP	95.8	84.7	519	33,600	55.56	5,310	75,871	~	~
VSP5004	500	1800	5009VP	96.2	89.2	546	30,900	60.68	4,170	71,924	~	~
VSP5006	500	1200	5806VP	95.8	85.4	572	33,500	55.56	5,430	81,205	~	~
VSP6004	600	1800	5808VP	96.2	90.6	645	30,400	61.47	5,470	80,733	~	~
VSP6006	600	1200	5808VP	95.8	85.0	690	33,300	61.47	5,600	89,248	~	~
VSP7004	700	1800	5810VP	96.2	91.1	748	30,200	68.95	5,880	87,938	~	~
VSP7006	700	1200	5808VP	95.8	85.7	798	33,100	61.47	5,830	97,176	~	~
VSP8004	800	1800	5810VP	96.2	91.0	856	30,100	68.95	6,180	93,546	~	~
VSP8006	800	1200	5810VP	95.8	86.1	908	32,900	68.95	6,210	107,157	~	~

Notes:

* Fire Pump available as made to order. Fire Pump Certificate complies with ANSI/UL 1004-5. Certificate# 20120717 - EX6569.

(1) Delivery for Fire Pump Duty motor (Catalog Number + FP) is standard 5 - 10 working days after receipt of order if standard motor is in stock; Painting to Fire Safety Red requirement on Fire Pump Duty type motor can be waived in order to expedite delivery upon request.

(2) Fire Pump Duty Motor pricing includes: adding UL nameplate, restamping original nameplate to new "VSP_FP" catalog number, and Fire Safety Red Paint.

(3) All data subject to change without notice.

VERTICAL SOLID SHAFT TEFC
HIGH THRUST with "P" BASE - LOW VOLTAGE

AEEHED (MAX-VSP™) NEMA PREMIUM [VSTP]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Deep Well Turbine Pumps
- Irrigation
- Water/Wastewater

FEATURES:

- Output Range: 15 - 800 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 230/460V (Usable on 208V); 150HP and Larger is 460V Only
- 230/460V Motors Suitable for Partial Winding Start (at 230V Only)
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- New Dual Column (60/50 Hz) Design Nameplate as Standard; 50 Hz Data 190/380V at 1.0 S.F.
- Standard Features: Non-Sparking Ball Type NRR, Drip/Splash Cover, Space Heaters (120V)
- CSA Certified for Class I, Div. 2, Groups B, C, D; Temp Code T3 Maximum
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance
- Cast Iron Conduit Box for F#449TP and Below; Steel Plate Conduit Box for F#5000
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Guide Bearings: 213TP - 286TP frames are Double Shielded
- Guide Bearings: 324TP - 449TP frames are Re-Greasable with Mobil Polyrex™ EM Grease
- Thrust Bearings: 213TP - 286TP frames are Re-Greasable Angular Contact with Mobil Polyrex™ EM Grease
- Thrust Bearings: 324TP - 449TP frames are Oil Lubricated Angular Contact with Site Glass
- Oil Requirements for 324TP-405TP - 145 to 175 S.S.U. @100°F
- Oil Requirements for 444TP-449TP - 300 S.S.U. @100°F
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate and Rodent Screens
- 12 Leads (PWS on 230V) on 213 - 405TP(3)
  6 Leads on 444TP to 449TP; 5000 Frames and Above with Connection Studs(4)
- Inverter Duty - 4:1 Variable Torque with NRR. 10:1 C.T., 20:1 VT without NRR Using Braking in VFD
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1, Part 31.4.4.3 for AMRCNH (Part 30 on AMRC)

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.
(3) Suitable for Wye/Delta start at 230V or 460V.
(4) Suitable for Wye/Delta start at 460V.

MAX-VSP™ VERTICAL SOLID SHAFT TEFC

AEEHED (MAX-VSP™) NEMA PREMIUM [VSTP]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	AG DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
VSTP0154	15	1800	254VP	92.4	88.0	17.3	3,350	24.00	350	4,993
VSTP0204	20	1800	256VP	93.0	87.5	23.0	3,350	25.73	450	5,479
VSTP0254	25	1800	284VP	93.6	86.0	29.1	3,350	25.85	520	5,879
VSTP0304	30	1800	286VP	93.6	87.5	34.3	3,350	27.34	558	7,327
VSTP0404	40	1800	324VP	94.1	86.0	46.3	4,500	29.84	720	10,874
VSTP0504	50	1800	326VP	94.5	87.0	56.9	4,500	31.33	780	11,373
VSTP0604	60	1800	364VP	95.0	86.5	68.4	6,000	32.82	900	14,695
VSTP0754	75	1800	365VP	95.4	86.5	85.1	6,000	33.80	970	16,527
VSTP1004	100	1800	405VP	95.4	87.5	112	7,900	43.19	1,415	23,766
VSTP1006	100	1200	444VP	95.0	79.8	123	10,000	52.56	1,980	34,044
VSTP1254	125	1800	444VP	95.4	85.6	143	8,800	52.56	2,050	33,562
VSTP1256	125	1200	445VP	95.0	79.0	155	10,000	54.53	2,090	35,889
VSTP1504	150	1800	445VP	95.8	88.0	166	8,800	54.53	2,150	38,244
VSTP1506	150	1200	447VP	95.8	77.2	189	11,400	56.06	2,110	52,054
VSTP2004	200	1800	447VP	96.2	82.5	235	10,000	56.06	2,530	44,845
VSTP2006	200	1200	449VP	95.8	76.6	254	11,400	64.06	2,850	61,678
VSTP2504	250	1800	449VP	96.2	83.1	292	10,000	64.06	2,890	56,934
VSTP2506	250	1200	449VP	95.8	74.3	328	11,400	64.06	3,040	78,400
VSTP3004	300	1800	449VP	96.2	83.1	351	10,000	64.06	3,580	71,749
VSTP3006	300	1200	5009VP	95.8	84.8	345	12,300	66.38	3,880	88,388
VSTP3504	350	1800	5009VP	96.2	86.3	394	10,700	65.98	4,080	77,096
VSTP3506	350	1200	5808VP	95.8	80.6	424	20,200	70.67	5,800	115,434
VSTP4004	400	1800	5009VP	96.2	86.6	449	10,700	65.98	4,260	96,570
VSTP4006	400	1200	5808VP	95.8	80.9	482	20,200	70.67	6,040	127,333
VSTP4504	450	1800	5808VP	96.2	84.0	521	9,900	70.87	6,000	112,043
VSTP4506	450	1200	5808VP	95.8	80.2	547	20,200	70.67	6,250	142,630
VSTP5004	500	1800	5808VP	96.2	84.0	578	9,900	70.87	6,220	114,444
VSTP5006	500	1200	5808VP	95.8	81.2	601	20,200	70.67	6,770	150,648
VSTP6004	600	1800	5810VP	96.2	84.0	694	9,900	75.98	6,770	134,939
VSTP6006	600	1200	5810VP	95.8	81.7	717	20,200	75.78	7,260	163,309
VSTP7004	700	1800	5810VP	96.2	85.0	800	9,900	75.98	7,160	154,690
VSTP7006	700	1200	5810VP	95.8	81.3	840	20,200	75.78	8,830	188,660
VSTP8004	800	1800	5810VP	96.2	86.0	904	9,900	75.98	9,340	175,006

Notes:
(1) All data subject to change without notice.

VERTICAL SOLID SHAFT WPI
HIGH THRUST with "P" BASE - LOW VOLTAGE

AMRKED, PREMIUM EFFICIENCY [VSKP]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Deep Well Turbine Pumps
- Irrigation
- Water/Wastewater

FEATURES:

- Output Range: 200 - 1000 HP
- Speed: 1800, 1200 & 900 RPM
- Enclosure: Weather Protected Type I (WPI)
- Voltage: 2300/4000V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- Standard Features: Coupling w/ Gib Key, Ball Type NRR, Drip/Splash Cover, Space Heaters (120V)
- Class F Insulation with VPI Epoxy Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance
- Cast Iron Conduit Box for F#449TP and Below; Steel Plate Conduit Box for F#5000
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449TP and Below
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Vacuum De-Gassed Re-Greasable Ball Bearings Frames -5007VP & Up with Mobil Polyrex™ EM Grease
- Guide Bearings: 324VP - 5810VP Frames are Re-Greasable with Mobil Polyrex™ EM Grease
- Thrust Bearings: 5009 - 5810VP Frames are Oil Lubricated Angular Contact or Spherical Thrust Bearing with Site Glass
- Oil Requirements for 444VP - 5810VP Frames: 300 S.S.U. @ 100°F
- Grease Discharge Fittings on Frames with Re-Greasable Motors
- Labyrinth Type Metal Flinger on Lower End Bracket
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- VFD Rated per NEMA MG1, Part 31
- Speed Ranges: 10:1 VT, 4:1 CT
- 6 Leads
- UL Recognized and CSA Approved
- Precautions Should Be Taken to Eliminate or Reduce Shaft Currents that May Be Imposed on the Motor by the VFD as stated per NEMA MG1, Part 30.4.4.3.
- Ball Type NRR Provided

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.

VERTICAL SOLID SHAFT WPI
HIGH THRUST with "P" BASE - LOW VOLTAGE

AMRKED, PREMIUM EFFICIENCY [VSKP]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	AG DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
VSKP2006	200	1200	449VP	94.9	81.0	25.5	11,200	59.93	3,620	64,619
VSKP2008	200	900	5009VP	93.6	73.0	27.5	39,500	63.40	4,210	76,355
VSKP2504	250	1800	449VP	95.0	82.2	30.0	10,000	59.93	3,710	58,364
VSKP2506	250	1200	449VP	95.0	80.0	31.5	11,200	59.93	3,730	71,835
VSKP2508	250	900	5009VP	94.5	75.3	33.0	39,500	63.40	4,570	79,176
VSKP3004	300	1800	449VP	95.0	83.8	35.5	10,000	59.93	3,810	62,115
VSKP3006	300	1200	5009VP	95.0	77.6	38.0	33,800	63.40	4,230	75,705
VSKP3008	300	900	5808VP	95.0	77.0	38.5	39,200	68.50	5,520	87,457
VSKP3504	350	1800	5009VP	95.0	86.7	40.0	30,900	63.40	3,730	64,112
VSKP3506	350	1200	5009VP	95.0	75.9	45.5	33,800	63.40	4,110	80,204
VSKP4004	400	1800	5009VP	95.0	86.8	45.5	30,900	63.40	3,820	68,410
VSKP4006	400	1200	5009VP	95.0	75.6	52.0	33,800	63.40	4,190	84,450
VSKP4504	450	1800	5009VP	95.0	87.1	51.0	30,900	63.40	3,910	75,303
VSKP4506	450	1200	5806VP	95.0	80.2	55.5	33,600	62.60	4,630	86,875
VSKP5004	500	1800	5009VP	95.0	87.6	56.5	30,900	63.40	4,090	80,971
VSKP5006	500	1200	5806VP	95.0	80.2	61.5	33,600	62.60	4,730	92,645
VSKP6004	600	1800	5808VP	95.0	86.0	69.0	30,600	68.50	5,370	87,820
VSKP6006	600	1200	5808VP	95.0	80.3	73.5	33,300	68.50	5,180	100,066
VSKP7004	700	1800	5810VP	95.0	86.0	80.0	30,100	75.98	5,780	97,531
VSKP7006	700	1200	5808VP	95.0	81.2	85.0	33,300	68.50	5,460	123,007
VSKP8004	800	1800	5810VP	95.0	86.3	91.5	30,100	75.98	6,030	110,028
VSKP8006	800	1200	5810VP	95.0	80.7	97.5	33,000	75.98	5,850	130,107
VSKP9004	900	1800	5810VP	95.0	86.7	103	30,100	75.98	6,300	123,936
VSKP9006	900	1200	5810VP	95.0	81.5	109	33,000	75.98	6,090	147,059
VSKP10004	1000	1800	5810VP	95.0	87.3	113	30,100	75.98	6,650	139,261

Notes:

(1) All data subject to change without notice.

VERTICAL SOLID SHAFT TEFC
HIGH THRUST with "P" BASE - MEDIUM VOLTAGE

AEHCED, PREMIUM EFFICIENCY [VSKTP]

Effective 03-24-17
Supercedes 06-14-15

APPLICATIONS:

- Deep Well Turbine Pumps
- Irrigation
- Water/Wastewater

FEATURES:

- Output Range: 200 - 700 HP
- Speed: 1800 & 1200 RPM
- Enclosure: Totally Enclosed Fan Cooled (IP55)
- Voltage: 2300/4000V
- Three Phase, 60 Hz, 1.15 Service Factor (Continuous on Sine Wave Power)
- Inverter Duty (PWM) per NEMA® MG-1 Part 31 at 1.0 Service Factor
- Standard Features: Non-Sparking Ball Type NRR, Drip/Splash Cover, Space Heaters (120V)
- 5000 Frames and Above also include Mounting Provisions for bearing RTD's and Insulated Bearing Housing
- CSA Certified for Class I, Div. 2, Groups B,C, D; Temp Code T3 Maximum
- Class F Insulation with VPI Epoxy Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance
- Steel Plate Conduit Box with Threaded Connection Opening(s)
- Designed for 40˚C Ambient Temperature(1)
- Designed for 3300 ft. Elevation(2)
- Oversized Angular Contact or Spherical Thrust Bearing Installed
- Counterclockwise (CCW) Rotation; Viewed from Top
- Cast Iron Frame & End Brackets; Steel Plate Fan Cover
- 1045 Hollow Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction for F#449VP and Below
- Squirrel Cage Copper or Copper Alloy Bar Rotor Construction for F#5000
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue - Munsell 5PB 3/8
- Guide Bearings: Re-Greasable with Mobil Polyrex™ EM Grease
- Thrust Bearings: Oil Lubricated Angular Contact or Spherical Thrust bearing with Site Glass
- Oil Requirements: 300 S.S.U. @ 100˚F
- Automatic Grease Discharge Fittings on Frames with Re-Greasable Motors
- Labyrinth Type Metal Flinger on Both Ends for Frames 320VP & Up
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- VFD Rated Per NEMA MG1, Part 30
- Speed Ranges: 10:1 VT, 4:1 CT
- 6 Leads
- UL Recognized and CSA Approved
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1, Part 30.4.4.3.

EXTRAS/ OPTIONS:

Please refer to pages 129 - 134 which show common modifications that can be performed.

Notes:

(1) Consult a Stock Product Application Specialist for suitability in higher ambient environments.
(2) Consult a Stock Product Application Specialist for suitability at higher elevations.

VERTICAL SOLID SHAFT TEFC
HIGH THRUST with "P" BASE - MEDIUM VOLTAGE

AEHCED, PREMIUM EFFICIENCY [VSKTP]

Effective 03-24-17
Supercedes 06-14-15

CAT. NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS @ 460V	DOWN THRUST (lbs.)	AG DIM (in.)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
VSKTP2006	200	1200	449VP	95.0	76.2	25.5	11,400	64.06	3,760	76,574
VSKTP2504	250	1800	449VP	95.0	83.7	29.0	10,000	64.06	3,920	74,487
VSKTP2506	250	1200	5009VP	95.0	81.9	30.0	12,100	66.38	4,040	78,540
VSKTP3004	300	1800	5009VP	95.4	85.8	34.0	10,500	65.98	4,050	76,393
VSKTP3006	300	1200	5009VP	95.0	82.4	35.5	12,100	66.38	5,630	111,380
VSKTP3504	350	1800	5009VP	95.4	86.1	39.5	10,500	65.98	5,420	111,150
VSKTP3506	350	1200	5808VP	95.2	80.4	42.5	22,300	70.67	6,060	114,233
VSKTP4004	400	1800	5009VP	95.4	85.7	45.5	10,500	65.98	5,890	113,998
VSKTP4006	400	1200	5808VP	95.4	80.8	48.5	22,300	70.67	6,390	118,806
VSKTP4504	450	1800	5808VP	95.4	83.8	52.5	9,700	70.87	6,300	125,301
VSKTP4506	450	1200	5808VP	95.6	80.9	54.0	22,300	70.67	6,680	127,623
VSKTP5004	500	1800	5808VP	95.5	82.6	59.0	9,700	70.87	6,530	128,515
VSKTP5006	500	1200	5810VP	95.8	81.6	59.5	22,300	75.78	6,990	130,897
VSKTP6004	600	1800	5810VP	95.7	84.3	69.5	9,700	75.98	6,900	133,657
VSKTP6006	600	1200	5810VP	96.0	81.3	71.5	22,300	75.78	9,110	160,107
VSKTP7004	700	1800	5810VP	95.9	84.6	80.5	9,700	75.98	8,950	157,791

Notes:
(1) All data subject to change without notice.

C-FLANGE KITS FOR FIELD CONVERSION

Effective 03-24-17
Supercedes 06-14-15

FRAME	LIST PRICE ($)	ODP ASHH CATALOG NO. "DHP"	MAX-PE™ AEHH8P CATALOG NO. "NP"	MAX-E1® AEHE, AEHH8N CATALOG NO. "E" or "EP"	MAX-E2® AEHH CATALOG NO. "HH"	MAX-E2/841®(1) AEHH8B LIST PRICE ($)	MAX-E2/841® AEHH8B CATALOG NO. "HB"
140T	125	N/A	CFN140T	CFE140T	CFHH140T	350	CFHB140T
180T	180	N/A	CFN180T	CFE180T	CFHH180T	465	CFHB180T
210T	325	N/A	CFN210T	CFE210T	CFHH210T	721	CFHB210T
250T	454	CFDH250T	CFN250T	CFE250T	CFHH250T	856	CFHB250T
280TS	529	CFDH280TS	CFN280TS	CFE280TS	CFHH280TS	1,075	CFHB280TS
280T	529	CFDH280T	CFN280T	CFE280T	CFHH280T	1,075	CFHB280T
320T or TS	689	CFDH320	CFN320	CFE320	CFHH320	1,175	CFHB320
360TS	825	CFDH360TS	CFN360TS	CFE360TS	CFHH360TS	1,289	CFHB360TS
360T	825	CFDH360T	CFN360T	CFE360T	CFHH360T	1,289	CFHB360T
400TS	1,025	CFDH400TS	CFN400TS	CFE400TS	CFHH400TS	1,575	CFHB400TS
400T	1,025	CFDH400T	CFN400T	CFE400T	CFHH400T	1,789	CFHB400T
444/445TS	2,150	CFDH444/5TS	CFN444/5TS	CFE444/5TS	CFHH444/5TS	3,400	CFHB444/5TS
444/445T	2,150	CFDH444/5T	CFN444/5T	CFE444/5T	CFHH444/5T	3,705	CFHB444/5T
447/449TS	2,550	CFDH447/9TS	CFN447/9TS	CFE447/9TS	CFHH447/9TS	3,810	CFHB447/9TS
447/449T	2,550	CFDH447/9T	CFN447/9T	CFE447/9T	CFHH447/9T	3,950	CFHB447/9T
Hybrid 449TS	2,650	N/A	N/A	CFE449TS-HYBRID	N/A	N/A	N/A
Hybrid 449T	2,650	N/A	N/A	CFE449T-HYBRID	N/A	N/A	N/A

NEMA C-FLANGE KITS FOR ROLLED STEEL MOTORS

FRAME	LIST PRICE ($)	ROLLED STEEL ASGA/ASGH ASGHPE CATALOG NO. "DS", "DSP" or "DTP"	SINGLE PHASE FARM DUTY CATALOG NO. "S"	3 PHASE ROLLED STEEL AEGHPE CATALOG NO. "GH"	3 PHASE ROLLED STEEL AEGH CATALOG NO. "GP"
56	103	CFDS56	CFS56	CFG56S3(3) CFG56L/1404(4)	N/A
140T	103	CFDT140T	CFS140T	N/A	CFG56L/140
180T	152	CFDT180T	CFS180T	N/A	CFGP180
210T	189	CFDT210T	CFS210T	N/A	CFGP210
250T	219	CFDT250T	N/A	N/A	N/A
280TS	424	CFDT280TS	N/A	N/A	N/A
280T	424	CFDT280T	N/A	N/A	N/A

C-FACE KITS FOR LARGE TEFC FRAMES

FRAME	LIST PRICE ($)	MAX-E1® AEHE, AEHH8N, AEHGTK & AEEHGD CATALOG NO. "E", "EP", "KG" & "CD"
5007A	3,600	3A103B8820103
5009A	3,600	3A103B8820201
5009B/C	3,600	3A103B5430207
5011A	3,850	3A103B8820308
5011B/C	3,850	3A103B5430304
5808A	4,300	3A103B9120202
5808B/C	4,300	3A103B6050203
5810A	5,350	3A103B9120300
5810B/C	5,350	3A103B6050301BG01

Notes:

(1) For MAX-E2/841®, type AEHH8B (cat# ""HB"") motors, INPRO™ Bearing isolator Seal is already included in the list price. INPRO™ Bearing Isolator Seal ships separately and will be added to order as an additional no cost line item."

(2) "TS" Flanges are for 2 pole motors only. "TS" c-flanges for 280TS - 405TS are interchangeable between MAX-E1® and MAX®-SE/PE.
444TS - 449TS c-flanges are NOT interchangable.

(3) 56 Frame Only - Fits bearing sizes 6204ZZ

(4) 56 and 140T Frames - Fits bearing sizes 6205ZZ

(5) For frame sizes larger than 449T, please refer to an Application Specialist for availability.

(6) MAX-E1® type AEHH8N "hybrid" ratings are cat# EP3502 & EP3504.

(7) Flanges for F# 505UZ and 586/7UZ Crusher Duty "CD", type AEHHGD motors must be quoted by an Application Specialist.

IEC B14 "C-FLANGE" KITS

FRAME	LIST PRICE ($)	METRIC AESV3W CATALOG NO. "MP"
80	125	CFM80
90	135	CFM90
100	180	CFM100
112	195	CFM112
132	325	CFM132
160	454	CFM160

D-FLANGE KITS FOR FIELD CONVERSION

Effective 03-24-17
Supercedes 06-14-15

NEMA D-FLANGE KITS FOR CAST IRON MOTORS							
FRAME	LIST PRICE ($)	ODP ASHH CATALOG NO. "DHP"	MAX-PE™ AEHH8P CATALOG NO. "NP"	MAX-E1® AEHE, AEHH8N CATALOG NO. "E" or "EP"	MAX-E2® AEHH CATALOG NO. "HH"	MAX-E2/841®(1) AEHH8B LIST PRICE ($)	MAX-E2/841® AEHH8B CATALOG NO. "HB"
140T	299	N/A	DFN140T	DFE140T	DFHH140T	333	DFHB140T
180T	319	N/A	DFN180T	DFE180T	DFHH180T	446	DFHB180T
210T	N/A	N/A	N/A	N/A	N/A	N/A	N/A
250T	385	DFDH250T	DFN250T	DFE250T	DFHH250T	688	DFHB250T
280TS	550	DFDH280TS	DFN280TS	DFE280TS	DFHH280TS	1,053	DFHB280TS
280T	570	DFDH280T	DFN280T	DFE280T	DFHH280T	1,053	DFHB280T
320T or TS	675	DFDH320	DFN320	DFE320	DFHH320	1,153	DFHB320
360TS	750	DFDH360TS	DFN360TS	DFE360TS	DFHH360TS	1,247	DFHB360TS
360T	750	DFDH360T	DFN360T	DFE360T	DFHH360T	1,247	DFHB360T
400TS	955	DFDH400TS	DFN400TS	DFE400TS	DFHH400TS	1,548	DFHB400TS
400T	955	DFDH400T	DFN400T	DFE400T	DFHH400T	1,758	DFHB400T
444/445TS	2,695	DFDH444/5TS	DFN444/5TS	DFE444/5TS	DFHH444/5TS	3,406	DFHB444/5TS
444/445T	2,695	DFDH444/5T	DFN444/5T	DFE444/5T	DFHH444/5T	3,718	DFHB444/5T
447/449TS	3,250	DFDH447/9TS	DFN447/9TS	DFE447/9TS	DFHH447/9TS	3,507	DFHB447/9TS
447/449T	3,250	DFDH447/9T	DFN447/9T	DFE447/9T	DFHH447/9T	3,819	DFHB447/9T

D-FLANGE KITS FOR LARGE TEFC FRAMES		
FRAME	LIST PRICE ($)	MAX-E1® AEHE, AEHH8N, AEHGTK & AEEHGD CATALOG NO. "E", "EP", "KG" & "CD"
5007A	3,500	3A103B31010010N01
5009A	3,500	3A103B3101109
5009B/C	3,500	3A103B3100200
5011A	3,750	3A103B3101206
5011B/C	3,750	3A103B3100307
5808A	5,100	3A103B3110701
5808B/C	5,100	3A103B3110205
5810A	6,741	3A103B3110906
5810B/C	6,741	3A103B3110302

D-FLANGE KITS FOR LARGE T ODP FRAMES		
5000A	3,500	3A103B7680006BG01(9)

IEC B5 "D-FLANGE" KITS			
FRAME	LIST PRICE ($)	METRIC AESV3W CATALOG NO. "MP"	SPECIAL NOTE
80	299	DFM80	~
90	309	DFM90	~
100	319	DFM100	~
112	329	DFM112	~
132	350	DFM132	~
160	385	DFM160	~
180	550	DFM180	~
200	675	DFM200	~
225MA	750	DFM225-2P	2 Pole Only
225SC/225MC	750	DFM225-4/6P	4 & 6 Pole Only
250SA	955	DFM250-2P	2 Pole Only
250SC	955	DFM250-4/6P	4 & 6 Pole Only

Notes:

(1) For MAX-E2/841®, type AEHH8B (cat# "HB") motors, INPRO™ Bearing Isolator Seal is already included in the list price. INPRO™ Bearing Isolator Seal ships separately and will be added to order as an additional no cost line item."
(2) "TS" Flanges are for 2 pole motors only. "TS" c-flanges for 280TS-449TS are interchangeable between MAX-E1® and MAX®-SE/PE.
(3) 56 Frame Only - Fits bearing sizes 6204ZZ
(4) 56 and 140T Frames - Fits bearing sizes 6205ZZ
(5) For frame sizes larger than 449T, please refer to the factory.
(6) MAX-E1® type AEHH8N "hybrid" ratings are cat# EP3502 & EP3504.
(7) Flanges for F# 505UZ and 586/7UZ Crusher Duty "CD", type AEHHGD motors must be quoted by an Application Specialist.
(8) Flanges for Large ODP motors above 5000 2P must be quoted by an Application Specialist.
(9) Part number is for 2-pole only

DRIP COVERS & PAINT

Effective 03-24-17
Supercedes 06-14-15

DRIP COVER/FAN COVER ASSEMBLIES				
FRAME	ROLLED STEEL CATALOG NO.	ROLLED STEEL LIST PRICE ($)	CAST IRON CATALOG NO.	CAST IRON LIST PRICE ($)
140T	RSDC140T	102	CIDC140T	312
180T	RSDC180T	135	CIDC180T	400
210T	RSDC210T	193	CIDC210T	455
250T/TS	RSDC250T	355	CIDC250T	624
280T/TS	RSDC280TS	442	CIDC280T	931
320T/TS	RSDC320T	574	CIDC320T	1,235
360T/TS	RSDC360T	1,413	CIDC360T	1,965
400T/TS	RSDC400T	1,833	CIDC400T	2,045

Notes:
(1) 56 frame drip covers available as stock items. Contact the parts department for part number and quote.
(2) Drip covers available for 440T and above as made to order. Contact part department for quote.

AEROSOL TOUCH-UP SPRAY PAINT				
MOTOR TYPE	PAINT PART NUMBER	COLOR	PAINT #	LIST PRICE ($)
MAX-E1® TEFC JP-JM LOW VOLTAGE ODP	5D98549H04	LIGHT GRAY	MUNSELL N5.0	77
MAX-E2® MAX-E2/841® METRIC IE3 MAX-VHP™ MAX-VSP™ SINGLE PHASE HVAC	5D98549H05	BLUE	MUNSELL 5PB 3/8	77
SINGLE PHASE FARM DUTY	5D98549H07	GREEN	MUNSELL 5G 4/4	77
TEXP TEFC OIL WELL PUMP	5D98549H08	DARK BLUE	MUNSELL 5PB 4.5/2	77
MAX-SE™ MAX-PE™ MAX-HT™ MEDIUM VOLTAGE	5D98549H03	DARK GRAY	MUNSELL 7.5B 3.5/0.5	77

Stock Replacement parts:
Contact TECO-Westinghouse for replacement part inquiries for stock product motors.

Email our stock product parts group at Tframeparts@tecowestinghouse.com or call 1-800-USE-TECO and select or ask to be connected with the stock product parts group.

Most commonly replaced motor parts are stocked in limited quantities. Replacement parts are also available on a made to order basis.

To confirm the proper part is identified and quoted, the motor's catalog number AND serial number must be provided at time of inquiry. Not all currently stocked parts may be interchangeable for earlier models. Replacement parts for older models may no longer be available.

P-BASES

Effective 03-24-17
Supercedes 06-14-15

P-BASES FOR SMALL WPI VERTICAL MOTORS (ALL)								
FRAME	TYPE	BD	AK	BB	AJ	BF	PART NUMBER	NOTE
210	Standard	10"	8.25"	0.22"	9.125"	0.44"	31103F412X1C0	~
250	Standard	10"	8.25"	0.25"	9.125"	0.44"	31103F406X5C6	AMRCED ONLY
	Standard	10"	8.25"	0.25"	9.125"	0.44"	31103F406X6C3	AMRCNH ONLY
	Alternate	12"	8.25"	0.25"	9.125"	0.44"	31010D5150102	AMRCNH ONLY
280	Standard	10"	8.25"	0.25"	9.125"	0.44"	31103F407X3C7	~
	Alternate	12"	8.25"	0.25"	9.125"	0.44"	31010D5150307	~
320	Alternate	12"	8.25"	0.25"	9.125"	0.44"	31010D5150501	~
	Standard	16.5"	13.5"	0.28"	14.750"	0.69"	31103F408X2C5	~
360	Standard	16.5"	13.5"	0.28"	14.750"	0.69"	31103F409X3C8	~
400	Standard	16.5"	13.5"	0.28"	14.750"	0.69"	31103F410X4C1	~

P-BASES FOR SMALL TEFC VERTICAL MOTORS (ALL)							
FRAME	TYPE	BD	AK	BB	AJ	BF	PART NUMBER
180	Standard	9.85"	8.25"	0.20"	9.125"	0.44"	31103F351X6C5
210	Standard	10"	8.25"	0.20"	9.125"	0.44"	31103F331X8C1
250	Standard	10"	8.25"	0.20"	9.125"	0.44"	31103F352X7C8
280	Standard	10"	8.25"	0.20"	9.125"	0.44"	31103F354X3C0
	Alternate	12"	8.25"	0.25"	9.125"	0.44"	31103F354X8C6
320	Standard	16.5"	13.5"	0.25"	14.750"	0.69"	31103B67604C0
360	Standard	16.5"	13.5"	0.25"	14.750"	0.69"	31103B67704C5
400	Standard	16.5"	13.5"	0.25"	14.750"	0.69"	31103B95105C1

P-BASES FOR LARGER WPI VERTICAL MOTORS (ALL)								
FRAME	TYPE	BD	AK	BE	BB	AJ	BF	PART NUMBER
444/445	Standard	16.5"	13.5"	1.00"	0.25"	14.75"	0.69"	3A103F072X5A5
445TP20	Standard	20"	13.5"	1.00"	0.25"	14.75"	0.69"	3A103B270X5A9
447/449	Standard	20"	13.5"	1.00"	0.25"	14.75"	0.69"	3A103F047X4A1
5000	Alternate	16.5"	13.5"	1.18"	0.25"	14.75"	0.69"	3A103C077X5A8
	Standard	24.5"	13.5"	1.18"	0.25"	**14.75" 22"**	0.69" 0.94"	3A103C077X6A5
	Alternate	30.5"	22"	1.18"	0.25"	26"	0.81"	3A103C077X1A9
5800	Alternate	24.5"	13.5"	1.38"	0.25"	22"	0.94"	3A103C345X4A7
	Standard	30.5"	22"	1.38"	0.25"	26"	0.81"	3A103C345X3A0

P-BASES FOR LARGER WPI VERTICAL MOTORS (ALL)								
FRAME	TYPE	BD	AK	BE	BB	AJ	BF	PART NUMBER
444-449	Standard	16.5"	13.5"	1.00"	0.25"	14.75"	0.69"	3A103B329XSA8
	Alternate	20"	13.5"	1.20"	0.25"	14.75"	0.69"	3A103B421XZA6
5000	Standard	24.5"	13.5"	1.18"	0.25"	14.75" 22"	0.69" 0.94"	3A103B155Y4A2
5800	Standard	30.5"	22"	1.38"	0.25"	26"	0.81"	3A103B41010A3

FACTORY MODIFICATION PRICING

Effective 03-24-17
Supercedes 06-14-15

MODIFICATION LEAD TIME

1. TWMC standard lead time for all modifications is 5-10 working days.
   If shorter lead time is required, please contact TWMC. Expediting fees may apply.
2. Modification lead time does not include transit time.
3. Lead time is based upon availability of parts.
4. M2X, M8A, M8B, M10, M11, M14A, M16, M18, M21A is the only modification that can be done to our explosion-proof motors.
5. Explosion Proof motors modified in Round Rock, TX only.

MOD. NUMBER	DESCRIPTION		LIST PRICE ($)									
		NEMA FRAME:	56-180T	210T	250T	280T	320T	360T	400T	440T	5000	5800 & UP
		METRIC FRAME:	90S, 90L, 112S, 112M	132S, 132M	160M, 160L	180M, 180L	200M, 200L	225S, 225M	250S, 250M	N/A	N/A	N/A
M1	Nameplate Change		105	105	105	105	105	105	105	105	105	105
M1A	Additional Nameplate		140	140	140	140	140	140	140	140	140	140
M1B	304 Stainless Steel Hardware		N/A	N/A	468	605	743	935	1,155	1,458	1,705	2,035
M2[1]	Space Heater		407	407	491	535	604	604	673	826	1,678	1,906
M2A[1]	Space Heater w/ Auxiliary Box		881	881	998	1,076	1,152	1,228	1,304	1,458	2,118	2,351
M2X	Space Heater "Explosion Proof Motors Only"		614	614	767	922	1,076	1,076	1,228	1,535	N/A	N/A
M3C[2]	Installation of C-Face		330	422	515	745	905	1,152	1,623	2,852	6,138	6,906
M3C841[2]	Installation of C-Face w/ INPRO™ Seal (MAX-E2/841® only)		674	960	1,382	1,535	1,918	2,148	2,610	3,159	N/A	N/A
M3D[2, 11,12]	Installation of D-Flange		330	N/A	515	745	905	1,152	1,623	2,852	6,138	6,906
M3D841[2, 11]	Installation of D-Flange w/ INPRO™ Seal (MAX-E2/841® only)		674	960	1,382	1,535	1,918	2,148	2,610	3,159	N/A	N/A
M3P[2]	Installation of P-Base		N/A	N/A	592	645	811	1,030	1,449	1,993	N/A	N/A
M4[3]	Stator Winding RTD's, 100 Ohm Platinum (1/ Phase)		890	1,016	1,080	1,080	1,228	1,228	1,398	1,398	1,779	1,779
M4A[3]	Stator Winding RTD's w/ Auxiliary Box (1/ Phase)		N/A	N/A	N/A	N/A	N/A	1,918	1,918	1,918	2,455	2,532
M4B[3]	Stator Winding RTD's, 100 Ohm Platinum w/ Auxiliary Box (2/ Phase)		N/A	N/A	N/A	N/A	N/A	N/A	3,568	3,568	4,105	4,182
M5	Thermistors (1/ Phase)		614	922	922	922	1,228	1,228	1,228	1,228	1,535	1,535
M5A	Thermistors (1/ Phase) w/ Auxiliary Box		1,398	1,525	1,535	1,535	1,843	1,918	1,918	1,918	2,455	2,532
M6	Thermostats (1/ Phase)		307	460	460	460	614	648	737	737	767	767
M6A	Thermostats (1/ Phase) w/ Auxiliary Box		881	1,036	1,076	1,076	1,228	1,304	1,304	1,304	1,689	1,764
M7[4,6]	Bearing RTD's, 100 Ohm Platinum Cable Type with Aux Box (2/ motor)		N/A	N/A	N/A	N/A	N/A	N/A	3,304	3,304	3,304	3,304
M8[4]	Bearing Conversion - Roller to Ball or Ball to Roller		N/A	N/A	N/A	N/A	N/A	2,541	2,888	3,781	5,590	6,098
M8A[4]	Convert to Ceramic or Hybrid Bearings		1,098	1,733	1,848	2,022	2,772	3,754	4,505	7,219	12,128	15,593
M8B[4]	Convert to Outer Race Insulated Bearings		924	924	1,210	1,878	1,878	1,878	2,253	3,610	6,063	7,797
M9	Change Rotation		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,846	2,846
M10	Shorten Shaft to NEMA TS Dimensions ONLY; Does Not Require TWMC Drawing		N/A	N/A	N/A	1,382	1,535	1,689	1,843	2,148	QUOTE	QUOTE
M10A	Special Keyless 4140 Shaft Ext. for 440 Frames and Above; Any Special Shaft		N/A	N/A	N/A	N/A	N/A	N/A	N/A	QUOTE	QUOTE	QUOTE
M10B	Any Non NEMA Special Shaft Required; Non NEMA Dim requires TWMC Drawing		N/A	N/A	N/A	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE
M10C	Drill and Tap Shaft		425	425	580	750	925	925	1,100	1,100	QUOTE	QUOTE

Notes:

(1) Double the List Price for 240V Space Heaters operated at 120V.
(2) Price includes the flange.
(3) Only one per phase is available for 360T frame and smaller.
(4) Price is per bearing.
(5) Not required for MAX-E2® or MAX-E2/841®.
(6) For frames 140T-400T, please use Max-E2/841®.
(7) M8A or M8B Mod required as well from frames 440TS/T and Larger.
(8) Must Start with IEEE841 motor. Required only of motors with VBX Seal. Must perform M17 Mod, and add extra sealant to end brackets.
(9) No Shaft Grounding Ring allowed in Div#2 Area.
(10) Must start with "VPH" NEMA Premium Series.
(11) Not available for Hybrid F# 449T/TS frames: EP3502, EP3504, HB3502, HB3504.
(12) Excludes ASHA "P" and AMHGTK "PG" 2-Pole motors. Contact Application Specialist for quote.
(13) If adding Stainless Steel Breather Drains for shaft up application see M28A.

FACTORY MODIFICATION PRICING

MODIFICATION LEAD TIME

Effective 03-24-17
Supercedes 06-14-15

1. TWMC standard lead time for all modifications is 5-10 working days.
   If shorter lead time is required, please contact TWMC. Expediting fees may apply. Additional 15% of purchase order total is standard.
2. Modification lead time does not include transit time.
3. Lead time is based upon availability of parts.
4. M2X, M8A, M8B, M10, M11, M14A, M16, M18, M21A, M28 is the only modification that can be done to our explosion-proof motors.
5. Explosion Proof motors modified in Round Rock, TX only.

MOD. NUMBER	DESCRIPTION		LIST PRICE ($)									
		NEMA FRAME:	56-180T	210T	250T	280T	320T	360T	400T	440T	5000	5800 & UP
		METRIC FRAME:	90S, 90L, 112S, 112M	132S, 132M	160M, 160L	180M, 180L	200M, 200L	225S, 225M	250S, 250M	N/A	N/A	N/A
M11	F1 to F2 Mounting Conversion		210	264	377	377	377	503	503	589	9,486	9,486
M12	Supply Oversized Main Conduit Box		N/A	N/A	N/A	N/A	N/A	N/A	N/A	4,620	4,620	4,620
M12A	Supply Fully Loaded Main Conduit Box		N/A	N/A	N/A	N/A	N/A	N/A	N/A	25,480	25,480	25,480
M13[13]	Stainless Steel Breather Drains		210	264	377	377	377	503	503	589	589	670
M14	Tropicalization/ Fungus Protection		284	284	284	284	284	284	284	468	857	857
M14A	Tropicalization/ Fungus Protection for Explosion Proof Motors ONLY		341	341	341	341	341	341	341	562	1028	1028
M15	Provisions for Vertical Jack Screws		N/A	N/A	N/A	N/A	N/A	N/A	1,185	1,185	Included	Included
M16	Alternate Grease		314	364	364	427	508	589	670	751	1,185	1,185
M17	Chico Motor Leads		210	264	377	377	377	503	549	549	900	1,142
M18A[5]	Epoxy Paint Finish		838	838	1,152	1,152	1,152	1,152	1,152	1,152	1,535	1,840
M18B	Fire Pump Red		838	838	1,152	1,152	1,152	1,152	1,152	1,152	1,535	1,840
M19[4]	Shaft INPRO™ Seals		N/A	N/A	N/A	N/A	N/A	N/A	N/A	3,003	3,003	3,003
M20[5]	Grounding Provisions on Frame		140	140	140	140	140	140	140	Included	Included	Included
M21	Drip Cover (TEFC) Rolled Steel		347	404	578	962	1,213	1,386	2,195	N/A	N/A	N/A
M21A	Drip Cover (TEFC) Cast Iron		572	771	922	1,116	1,451	1,688	2,617	N/A	N/A	N/A
M22	Extend Leads - Connection Behind Conduit Box; Price Based on 4' Leads		$628 +$1/ft	$628 +$1/ft	$628 +$1/ft	$669 +$3.25/ft	$757 +$6.50/ft	$855 +$12.70/ft	$991 +$19/ft	$1049 +$23/ft	$1028 +$25/ft	$1427 +$41/ft
M23[9]	Supply Shaft Grounding Ring		650	742	742	1,242	1,242	1,334	1,489	1,587	1,587	2,285
M23A[9]	Supply Internal Shaft Grounding Ring		1300	1485	1485	2485	2485	2,650	2,950	3,175	QUOTE	QUOTE
M23B[9,10]	VHS Shaft Grounding Ring & Insulated Bearing for INV Duty		N/A	N/A	N/A	N/A	N/A	N/A	3,037	4,869	4,869	4,869
M24[4]	Provisions for Vibration Sensor Spot Face, Drill & Tap (1/4-20)		N/A	N/A	N/A	N/A	N/A	N/A	384	384	384	384
M24A[4]	Provide and Install Vibration Switch/ Transmitter Spec. (Does Not Include Cabling or Terminations)		N/A	N/A	N/A	N/A	N/A	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE
M24B[4]	Provide our Standard METRIX # ST5484E-121-714-00 Transmitter		N/A	N/A	N/A	N/A	N/A	3,250	3,354	3,587	4,154	5,600
M25	Mill Off Motor Feet		1632	1676	1768	1856	2,038	2,310	2,764	3,216	3,750	QUOTE
M26[7]	Inline Blower for 1000:1 Speed Range		508	681	951	1,109	1,756	1,860	2,044	6,999	12,249	17,499
M27A[7]	Installation of Dynopar Encoder		2,573	2,573	2,678	2,783	3,019	3,019	3,281	3,615	6,825	8,138
M27B[7]	Installation of Other Encoder		QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE
M28	Vertical Shaft Down - Snap Ring (Lock Nut and Washer)		N/A	N/A	N/A	N/A	N/A	1,936	2,145	2,616	3,397	3,397
M28A	Vertical Shaft Up - DE Lip Seal and Breather Drains in NDE Endframe		225	279	392	392	392	518	518	604	604	685
M29[8]	Oil Mist Ready		N/A	N/A	N/A	N/A	N/A	N/A	2,625	3,413	6,563	9,188
M30	Installation of Brake		QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE
M31[8]	Convert to IP56 or IP65		489	682	795	795	935	1,092	1,219	1,219	QUOTE	QUOTE
M32	Precision Balance		N/A	N/A	N/A	N/A	N/A	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE
M33	175% Thrust or more on VHS on 440 Frame 200-400 HP		N/A	N/A	N/A	N/A	N/A	N/A	N/A	QUOTE	QUOTE	QUOTE
M34	Convert TEFC to TEAO		650	750	850	900	1100	1300	1600	1900	QUOTE	QUOTE

Notes:

(1) Double the List Price for 240V Space Heaters operated at 120V.
(2) Price includes the flange.
(3) Only one per phase is available for 360T frame and smaller.
(4) Price is per bearing.
(5) Not required for MAX-E2® or MAX-E2/841®.
(6) For frames 140T-400T, please use Max-E2/841®.
(7) M8A or M8B Mod required as well from frames 440TS/T and Larger.
(8) Must Start with IEEE841 motor. Required only of motors with VBX Seal. Must perform M17 Mod, and add extra sealant to end brackets.
(9) No Shaft Grounding Ring allowed in Div#2 Area.
(10) Must start with "VPH" NEMA Premium Series.
(11) Not available for Hybrid F# 449T/TS frames: EP3502, EP3504, HB3502, HB3504.
(12) Excludes ASHA "P" and AMHGTK "PG" motors. Contact Application Specialist for quote.
(13) If adding Stainless Steel Breather Drains for shaft up application see M28A.

FACTORY MODIFICATION DESCRIPTIONS

Effective 03-24-17
Supercedes 06-14-15

M1. Nameplate Change:

Add new nameplate displaying approved data changes such as new voltage and frequency, revised HP and service factor, higher or lower ambient temperature, etc. Information should be clearly stamped on P.O.

M1A. Additional Nameplate:

Add second data plate with customer part number, order number, or other data.

M1B. 304 Stainless Steel Hardware:

Add for 304 Stainless Steel Hardware - Bolts, Nameplate.

M2. Space Heater:

Add wrap around space heaters with leads brought out to main terminal box. Standard voltage is 120V, however other voltages are available. Please specify voltage when ordering. All heaters are single phase.

M2A. Space Heater w/ Auxiliary Box:

Same as M2, except an auxiliary terminal box is added to the side of the main terminal box and the space heater leads are brought out to the auxiliary terminal box.

M2X. Space Heater "Explosion Proof":

Add wrap around space heaters with leads brought out to main terminal box. Standard voltage is 120V, however other voltages are available. Please specify voltages when ordering. All heaters are single phase. This applies to TWMC's explosion proof line of motors.

M3C. Installation of C-Face:

Remove drive-end bracket and replace with C-Face: Modification Price includes the C-Face.

M3C841. Installation of C-Face w/ INPRO™ Seal (MAX-E2/841® only):

Remove drive-end bracket and replace with C-Face and INPRO™ Seal: Only Available on MAX-E2/841® Line.

M3D. Installation of D-Flange:

Remove drive-end bracket and replace with D-Flange: Modification Price includes the D-Flange.

M3D841. Installation of D-Flange w/ INPRO™ Seal (MAX-E2/841® only):

Remove drive-end bracket and replace with D-Flange and INPRO™ Seal: Only Available on MAX-E2/841® Line

M3P. Installation of P Base on any Horizontal Motor for Vertical Mount.

Remove drive-end bracket

M4. Stator Winding RTD's, 100 Ohm Platinum (1/ phase):

Provide 100 Ohm platinum resistant temperature detectors (RTD's), one per phase, on the winding end turns with leads brought out to main terminal box. Note TWMC's medium voltage line of products come standard with 100 Ohm platinum RTD's, two per phase.

M4A. Stator Winding RTD's w/ Auxiliary Box (1/ Phase):

Provide 100 Ohm platinum resistant temperature detectors (RTD's) two per phase on the winding end turns with leads terminated in an auxiliary terminal box.

Note: On motors 449T frame and smaller, the auxiliary box will be located on the same side as the main lead box. On 5000 frames and larger, the auxiliary box will be located on the F2 side, or on the opposite side of the main lead box.

M4B. Stator Winding RTD's, 100 Ohm Platinum w/ Auxiliary Box (2/ Phase):

Provide 100 Ohm platinum resistant temperature detectors (RTD's) one per phase on the winding end turns with leads terminated in an auxiliary terminal box.

Note: On motors 360T - 449T, the auxiliary box will be located on the same side as the main lead box. On 5000 frames and larger, the auxiliary box will be located on the F2 side, or on the opposite side of the main lead box.

M5. Thermistors (1/ Phase):

Provide (3) PTC thermistors (140˚C) on the winding end turns with leads brought out to main terminal box.
Note: these are standard on Metric motors with frames 160L and larger.

M5A. Thermistors (1/ Phase) w/ Auxiliary Box:

Provide (3) PTC thermistors (140˚C) on the winding end turns with leads brought out to an auxiliary terminal box. The auxiliary box will be located on the side of the main terminal box.

M6. Thermostats (1/ Phase):

Addition of (3) normally closed thermostats (140˚C) to the winding end turns, connected in series with the leads brought out to the main terminal box. This is standard on Explosion Proof Motors.

M6A. Thermostats (1/ Phase) w/ Auxiliary Box:

Addition of (3) normally closed thermostats (140˚C) to the winding end turns, connected in series with the leads brought out to an auxiliary terminal box. The auxiliary box will be located off the side of the main terminal box.

M7. Bearing RTD's, 100 Ohm Platinum (2/ motor) Cable Type with Aux. Box:

Add 100 Ohm platinum bearing resistance temperature detectors, on both the drive and non-drive end bearing. Specify if alternate type is required.

M8. Convert Bearings - Ball to Roller or Roller to Ball:

Convert from Roller Bearings to Ball Bearings or Ball Bearings to Roller Bearings. The Roller to Ball conversion requires some machining on bearing caps to allow for thermal growth.

M8A. Convert to Ceramic or Hybrid Bearings:

Replace existing bearing(s) with either Hybrid Ceramic bearings, where balls are Ceramic, or Solid Ceramic bearings.
This would be to reduce/ eliminate shaft currents. TWMC's standard is on the Non-Drive End Bearing only.

M8B. Convert to Outer Race Insulated Bearings:

Replace existing bearing(s) with bearings that have outer race coated with insulated material like SKF "Insacote."
This would be to reduce / eliminate shaft currents. TWMC's standard is on the Non-Drive End bearing only.

M9. Change Rotation:

This modification only applies to 2-Pole (3600/ 3000 RPM) motors in 5000 frames and larger. Standard direction of rotation is counter clockwise, facing the drive-end of the motor. This modification will change either the internal or external fans for operation in the clockwise direction, facing the drive-end.

M10. Shorten Shaft to NEMA TS Dimensions ONLY; Non-NEMA Dim Requires TWMC Drawing:

Machine shafts to TS Dimensions per NEMA MG1 ONLY. This does not include new bearings. This does NOT require a TWMC drawing.

M10A. Special Keyless 4140 Shaft Extension for 5000 Frames and above; Any Special Shaft:

Extension is for 5000 frames and above, where torsional stress in the application is high, such as reciprocating gas compressors. Requires TWMC approval, quote, and drawing.

M10B. Any NON NEMA Special Shaft Required:

This requires a TWMC quote and Drawing.

M10C. Drill and Tap Shaft:

M11. F1 to F2 Mounting Conversion:

Convert terminal box location from standard F1 to F2, or F2 to F1, depending on the product line. On medium voltage motors, the auxiliary terminal boxes will be on the opposite side of the main terminal box as standard. If the requirement is to have all terminal boxes on either the F1 side or the F2 side, please specify.

M12. Supply Oversized Main Conduit Box:

Replace existing conduit box with an oversized main conduit box. This would be done if the TWMC standard box does not meet customer's requirement. Mount and extend leads if necessary.

M12A. Supply Fully Loaded Main Lead Box:

Replace existing conduit box with a fully loaded box. The box will be TWMC standard size and will contain TWMC standard lightning arrestors, surge capacitors and current transformers (50:5). Box is not self supporting and will require the customer to support.

M13. Stainless Steel Breather Drains:

Drill and tap the existing drain holes to accommodate a Crouse-Hinds stainless steel breather drain. Note, this is standard on MAX-E2®, MAX-E2/841® and Explosion Proof motors.

M14. Tropicalization/ Fungus Protection:

Involves disassembling the motor and spraying the internal windings.

M14A. Tropicalization/ Fungus Protection for Explosion Proof Motors ONLY:

Involves disassembling the motor and spraying the internal windings.

M15. Provisions for Vertical Jack Screws:

Drill and tap (2) holes per motor.

M16. Alternate Grease:

Purge and repack lubricant in end brackets with TWMC standard high temp. or low temp. grease. Please contact TWMC for alternates.

M17. Chico Motor Leads:

Apply a compound between terminal box and frame of motor. This feature is standard for explosion proof motors.

FACTORY MODIFICATION DESCRIPTIONS

Effective 03-24-17
Supercedes 06-14-15

M18A. Epoxy Paint Finish:
Standard paint finish will be changed to Epoxy paint

M18B. Fire Pump Red Finish:
Standard paint finish will be changed to Fire Pump Red (e.g. PPG Pitt-Tech 90-306 Safety Red). Also requires addition of UL nameplate and Renameplate to show "FP" in catalog number.

M19. Shaft INPRO™ Seals:
Add INPRO™ seals to drive-end only of MAX-E2® motors 140T~449T/TS frames. This modification is only available for frames 440T and larger on all other product lines. The price reflects drive-end only.

M20. Grounding Provisions on Frame:
Drill and tap the motor frame. This is standard on MAX-E2®, MAX-E2/841®, Oil Well Pump motors, and motors on 5000 frames and larger. All motors have a grounding lug inside the main lead box as a standard.

M21. Drip Cover (TEFC) Rolled Steel:
Replace the existing fan cover with a rolled steel drip cover. This is only for motors mounted vertically.

M21A. Drip Cover (TEFC) Cast Iron:
Replace the existing fan cover with a cast iron drip cover. This is only for motors mounted vertically.

M22. Extend Leads - Connection Behind Conduit Box; Price Based on 4' leads:
Extend existing leads to the length specified by customer. The splice will be made behind the conduit box so it is not seen.

M23. Supply Shaft Grounding Ring:
Install AEGIS shaft grounding ring as made by ELECTRO STATIC TECHNOLOGY. This would be to reduce or eliminate shaft currents. Any CSA Hazardous Location nameplates must be removed. For other methods of shaft grounding, please contact TWMC.

M23A. Vertical Hollow Shaft Grounding Ring:
Install a Shaft Grounding Ring internally on inboard side of Guide Bearing Cap.

M23B. VHS Shaft Grounding Ring & Insulated Brg. For VFD Duty:
Must start with a VHP NEMA Premium motor. Install a SGR internally on guide bearing inboard cap, and insulated bearing.

M24. Provisions for Vibration Sensor:
Drill, tap and machine end bracket(s) to accommodate vibration sensor. Customer is required to submit specifications of vibration sensor. Price is per bracket.

M24A. Provide and Install Vibration Sensor (Does Not Include Cabling or Terminations):
Drill, tap and machine end bracket(s) to accommodate vibration sensor. TWMC standard switch will be provided as made by METRIX, ROBERTSHAW, PREDICTECH, or STI. For details or pricing to provide another brand, please contact TWMC. Price is per bracket.

M24B. Provide our Standard METRIX # ST5484E-121-714-00 Vibration Switch

M25. Mill Off Motor Feet:
TWMC will cut off the feet of a footed motor to create a round body type motor. Second lifting lug available for an additional price adder.

M26. Inline Blower for 1000:1 Speed Range:
Remove existing fan and fan cover and replace with TWMC standard inline blower/ fan cover configuration. Blower motor will require a separate power source. This modification will also require an "M8A" modification for 440TS/T frames and larger.

M27A. Installation of Dynopar Encoder:
Install TWMC standard Encoder as made by Dynapar.

M27B. Installation of Other Encoder:
Please contact factory for quote.

M28. Snap Ring - Lock Nut and Washer for Mounting the Motor Vertical Shaft Down
Available 320 frame and up.

M28A. Install Drive End Lip Seal and Stainless Steel Breather Drains for Motor Vertical Shaft Down
To prevent moisture from entering the motor in shaft up applications in an outdoor environment.

M29. Oil Mist Ready:
TWMC to prepare motors for immediate Oil Mist Lubrication. Must use MAX-E2/841® if applicable.

M30. Installation of Brake:
Modify TEFC motors such that a Brake can be attached. This must be quoted with specs and a TWMC Drawing required.

M31. Convert to IP56 or IP65:
TWMC to take IEEE 841 motor, perform M17 modification and add extra sealant to end-brackets.

M32. Precision Balancing for Vibration limits below what standard NEMA specification on IEEE/841 motors.

M33. 175% Thrust VHS on 440 Frame 200-400 HP:
Modify the motor adding correct bearings, parts, and oil for higher thrust

M34. Convert TEFC to TEAO

MODIFICATION DRAWING REQUIREMENTS

DRAWING REQUIREMENTS		
X No Drawing	● Basic Drawing	■ Modification Drawing

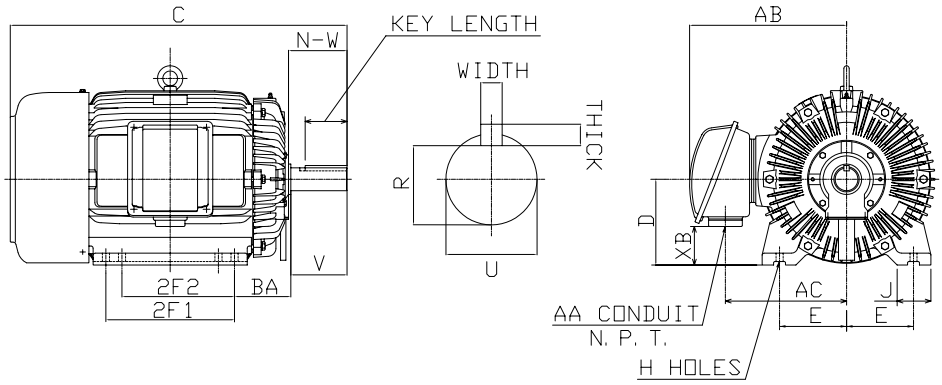
Effective 03-24-17
Supercedes 06-14-15

DRAWING REQ.	MOD CODE	MODIFICATION DESCRIPTION
X	M1	Nameplate Change
X	M1A	Additional Nameplate
X	M1B	304 Stainless Steel Hardware
●	M2	Space Heater
●	M2A	Space Heater with Aux Box
X	M2X	Space Heater "Explosion Proof Motors Only"
●	M3C	Installation of C-Face
X	M3C841	C-Face with Inpro (MAX-E2/841® only)
●	M3D	Installation of D-Flange
X	M3D841	D-Flange with Inpro (MAX-E2/841® only)
X	M3P	Installation of P-Base
X	M4	Winding RTD's 100 Ohm Platinum (1/Phase)
●	M4A	Winding RTD (2/Phase) with Auxilary Terminal Box
●	M4B	Stator Winding RTDs, 100 Ohm Platinum (2/phase)
X	M5	Thermistors (1/Phase)
●	M5A	Thermistors (1/Phase) with Auxilliary Box
X	M6	Thermostats (1/Phase)
●	M6A	Thermostats (1/Phase) with Auxilliary Box
●	M7	Bearing RTD
●	M8	Bearings Coversion: Ball to Roller/ Roller to Ball
●	M8A	Convert to Ceramic or Hybrid Bearings
●	M8B	Convert to Outer Race Insulated Bearings
X	M9	Change Rotation
●	M10	Shorten Shaft (TS Frames) Per NEMA MG-1 Dimensions (Non NEMA Dimensions Require TWMC Drawing and Approval)
■	M10A	Special Keyless 4140 Shaft Extension for 440 frames and Larger
●	M10B	Any Non NEMA Special Shaft Required; Non NEMA Dim Requires TWMC Drawing
●	M11	F1 to F2 Mounting Conversion
■	M12	Oversized Main Conduit Box - Mount and Extend Leads
■	M12A	Fully Loaded Main Conduit Box - Mount and Extend Leads
X	M13	Stainless Steel Breather Drains
X	M14	Tropicalization / Fungus Protection
●	M15	Provisions for Vertical Jack Screws
X	M16	Alternate Grease
X	M17	Chico Motor Leads
X	M18A	Epoxy Paint Finish
X	M18B	Fire Pump Red Finish
●	M19	Install INPRO Seals
X	M20	Grounding Provisions on Frame
●	M21	Drip cover (TEFC)- Rolled Steel
●	M21A	Drip cover (TEFC)- Cast Iron
X	M22	Extend Leads -Connect Behind Box; Price Based on 4' Leads
X	M23	Supply Shaft Grounding Ring
X	M23A	VHS Shaft Grounding Ring
X	M23B	VHS Shaft Grounding Ring & Insulated Brg for INV Duty
X	M24	Provision for Vibration Sensor
■	M24A	Provide and Install Vibration Switch/ Transmitter Spec. (Does not Include Cabling or Terminations)
■	M24B	Provide our Standard METRIX # ST5484E-121-714-00 Vibration Switch
■	M25	Mill Off Motor Feet
■	M26	Inline Blower for 1000:1 speed range
●	M27A	Installation Of Dynopar Encoder
●	M27B	Installation Of Other Encoder
X	M28	Lock Nut and Washer For Vertical Shaft Down
●	M29	Oil Mist Ready
■	M30	Installation of Brake
X	M31	Convert to IP56 or IP65
X	M32	Precision Balance
■	M33	175% Thrust or more on VHS on 440 Frame 200-400 HP
■	M34	Convert TEFC to TEAO

DIMENSIONS - AC MACHINES

Dimensions for Foot-Mounted Machines with a Single Straight-Shaft Extension

Effective 03-24-17
Supercedes 06-14-15

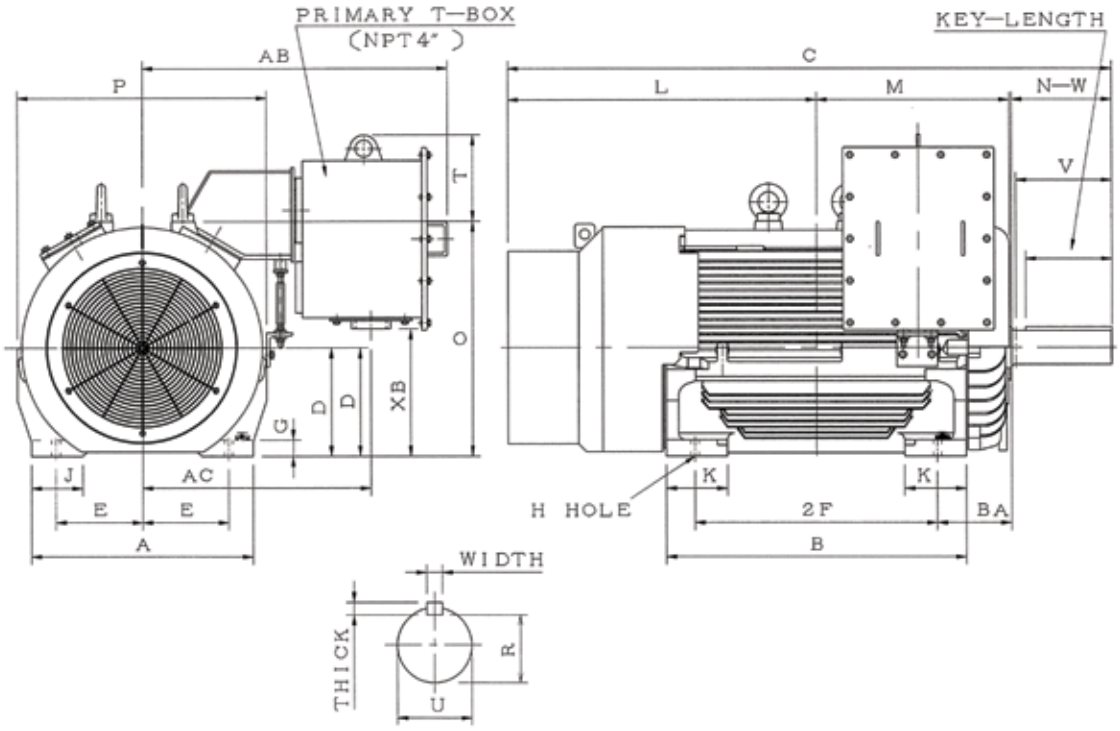


FRAME SIZE	MOUNTING							SHAFT EXTENSION			KEY & KEYSEAT				TERMINAL HOUSING			
	C	D	E	2F1	2F2	H	BA	N-W	U	V	WIDTH	THICK	LENGTH	R	AA	AB	AC	XB
143T	12.47	3.50	2.75	4.00	—	0.34	2.25	2.25	0.875	2.20	0.188	0.188	1.410	0.771	.75	6.18	4.92	2.52
145T	13.46	3.50	2.75	5.00	4.00	0.34	2.25	2.25	0.875	2.20	0.188	0.188	1.410	0.771	.75	6.18	4.92	2.52
182T	14.77	4.50	3.75	4.50	—	0.41	2.75	2.75	1.125	2.70	0.250	0.250	1.780	0.986	.75	7.44	6.06	3.36
184T	15.79	4.50	3.75	5.50	4.50	0.41	2.75	2.75	1.125	2.70	0.250	0.250	1.780	0.986	.75	7.44	6.06	3.36
213T	18.09	5.25	4.25	5.50	—	0.41	3.50	3.38	1.375	3.30	0.312	0.312	2.410	1.201	1.00	8.86	7.07	3.32
215T	19.59	5.25	4.25	7.00	5.50	0.41	3.50	3.38	1.375	3.30	0.312	0.312	2.410	1.201	1.00	8.86	7.07	3.32
254T	23.70	6.25	5.00	8.25	—	0.53	4.25	4.00	1.625	3.90	0.375	0.375	2.910	1.416	1.25	10.24	8.58	4.37
256T	25.44	6.25	5.00	10.00	8.25	0.53	4.25	4.00	1.625	3.90	0.375	0.375	2.910	1.416	1.25	10.24	8.58	4.37
284T	26.80	7.00	5.50	9.50	—	0.53	4.75	4.62	1.875	4.50	0.500	0.500	3.280	1.591	1.25	12.13	9.84	3.97
284TS	25.43	7.00	5.50	9.50	—	0.53	4.75	3.25	1.625	3.20	0.375	0.375	1.930	1.416	1.25	12.13	9.84	3.97
286T	28.30	7.00	5.50	11.00	9.50	0.53	4.75	4.62	1.875	4.50	0.500	0.500	3.280	1.591	1.25	12.13	9.84	3.97
286TS	26.93	7.00	5.50	11.00	9.50	0.53	4.75	3.25	1.625	3.20	0.375	0.375	1.930	1.416	1.25	12.13	9.84	3.97
324T	29.93	8.00	6.25	10.50	—	0.66	5.25	5.25	2.125	5.15	0.500	0.500	3.910	1.845	2.00	13.47	10.98	3.59
324TS	28.43	8.00	6.25	10.50	—	0.66	5.25	3.75	1.875	3.65	0.500	0.500	2.030	1.591	2.00	13.47	10.98	3.59
326T	31.42	8.00	6.25	12.00	10.50	0.66	5.25	5.25	2.125	5.15	0.500	0.500	3.910	1.845	2.00	13.47	10.98	3.59
326TS	29.92	8.00	6.25	12.00	10.50	0.66	5.25	3.75	1.875	3.65	0.500	0.500	2.030	1.591	2.00	13.47	10.98	3.59
364T	32.57	9.00	7.00	11.25	—	0.66	5.88	5.88	2.375	5.75	0.625	0.625	4.280	2.021	3.00	15.10	12.28	2.39
364TS	30.44	9.00	7.00	11.25	—	0.66	5.88	3.75	1.875	3.65	0.500	0.500	2.030	1.591	3.00	15.10	12.28	2.39
365T	33.55	9.00	7.00	12.25	11.25	0.66	5.88	5.88	2.375	5.75	0.625	0.625	4.280	2.021	3.00	15.10	12.28	2.39
365TS	31.42	9.00	7.00	12.25	11.25	0.66	5.88	3.75	1.875	3.65	0.500	0.500	2.030	1.591	3.00	15.10	12.28	2.39
404T	36.50	10.00	8.00	12.25	—	0.81	6.62	7.25	2.875	7.15	0.750	0.750	5.650	2.450	3.00	19.07	14.33	1.81
405T	37.99	10.00	8.00	13.75	12.25	0.81	6.62	7.25	2.875	7.15	0.750	0.750	5.650	2.450	3.00	19.07	14.33	1.81
405TS	34.99	10.00	8.00	13.75	12.25	0.81	6.62	4.25	2.125	4.15	0.500	0.500	2.780	1.845	3.00	19.07	14.33	1.81
444T	44.40	11.00	9.00	14.50	—	0.81	7.50	8.50	3.375	8.00	0.875	0.875	6.890	2.880	3.00	24.00	17.90	2.40
444TS	40.65	11.00	9.00	14.50	—	0.81	7.50	4.75	2.375	4.50	0.625	0.625	3.030	2.021	3.00	24.00	17.90	2.40
445T	46.40	11.00	9.00	16.50	14.50	0.81	7.50	8.50	3.375	8.00	0.875	0.875	6.890	2.880	3.00	24.00	17.90	2.40
445TS	42.65	11.00	9.00	16.50	14.50	0.81	7.50	4.75	2.375	4.50	0.625	0.625	3.030	2.021	3.00	24.00	17.90	2.40
447T	49.90	11.00	9.00	20.00	16.50	0.81	7.50	8.50	3.375	8.00	0.875	0.875	6.910	2.880	3.00	24.00	17.90	2.40
447TZ	51.12	11.00	9.00	20.00	16.50	0.81	7.50	10.12	3.375	9.62	0.875	0.875	8.500	2.880	3.00	24.00	17.90	2.40
447TS	46.15	11.00	9.00	20.00	16.50	0.81	7.50	4.75	2.375	4.50	0.625	0.625	3.030	2.021	3.00	24.00	17.90	2.40
449T	54.90	11.00	9.00	25.00	20.00	0.81	7.50	8.50	3.375	8.00	0.875	0.875	6.910	2.880	3.00	24.00	17.90	2.40
449TZ	56.12	11.00	9.00	25.00	20.00	0.81	7.50	10.12	3.375	9.62	0.875	0.875	8.500	2.880	3.00	24.00	17.90	2.40
449TS	54.51	11.00	9.00	25.00	20.00	0.81	7.50	4.75	2.375	4.50	0.625	0.625	3.030	2.021	3.00	24.00	17.90	2.40

All dimensions are in inches and for reference only.

DIMENSIONS - AC MACHINES

Effective 03-24-17
Supercedes 06-14-15



FRAME SIZE	MOUNTING						SHAFT EXTENSION			KEY & KEYSEAT				TERMINAL HOUSING				
	C	D	E	2F	H	BA	N-W	U	V	WIDTH	THICK	LENGTH	R	AA	AB	AC	XB[E1]	XB[CD]
505UZ	53.04	12.5	10.00	18.00	0.94	8.50	11.62	3.875	11.38	1.000	1.000	10.000	3.309	4	32.5	23.6	~	4.75
5007A	63.25	12.5	10.00	22.00	0.94	8.50	5.75	2.625	5.50	0.625	0.625	4.010	2.275	4	35.50	26.40	14.70	~
5007B,C	63.80	12.5	10.00	22.00	0.94	8.50	11.62	3.875	11.12	1.000	1.000	10.000	3.309	4	35.50	26.40	14.70	2.75
5009A	69.20	12.5	10.00	28.00	0.94	8.50	5.75	2.625	5.50	0.625	0.625	4.010	2.275	4	35.50	26.40	14.70	~
5009B,C	69.75	12.5	10.00	28.00	0.94	8.50	11.62	3.875	11.12	1.000	1.000	10.000	3.309	4	35.50	26.40	14.70	2.75
5011A	77.15	12.5	10.00	36.00	0.94	8.50	5.75	2.625	5.50	0.625	0.625	4.010	2.275	4	35.50	26.40	14.70	~
5011B,C	77.67	12.5	10.00	36.00	0.94	8.50	11.62	3.875	11.12	1.000	1.000	10.000	3.309	4	35.50	26.40	14.70	~
586/7UZ	64.37	14.5	11.50	22.00	1.125	10.00	11.625	4.375	11.125	1.000	1.000	8.661	3.816	2-3	29.33	23.23	~	2.96
5808B,C	74.08	14.5	11.50	28.00	1.13	10.00	11.88	4.875	11.38	1.250	1.250	10.000	4.169	2-3	37.85	28.95	19.00	2.95
5810A	81.40	14.5	11.50	36.00	1.13	10.00	5.75	2.625	5.50	0.625	0.625	4.010	2.275	2-3	37.85	28.95	19.00	2.95
5810B,C	81.81	14.5	11.50	36.00	1.13	10.00	11.88	4.875	11.38	1.250	1.250	10.000	4.169	2-3	37.85	28.95	19.00	2.95
6808A	88.43	17.0	13.50	36.00	1.38	11.50	5.75	2.625	5.50	0.625	0.625	4.010	2.275	2-3	40.30	31.40	23.80	~
6808B,C	87.68	17.0	13.50	36.00	1.38	11.50	11.88	4.875	11.38	1.250	1.250	10.000	4.169	2-3	40.30	31.40	23.80	2.95

All dimensions are in inches and for reference only
(E1) Denotes the MAX-E1® and MAX-E2® frame construction
(CD) Denotes the MAX-HT™ frame construction.

GEAR REDUCERS

Effective 03-24-17
Supercedes 06-14-15

GEAR REDUCERS DRIVING INDUSTRIES

TECO-Westinghouse is excited to extend its product offering from motors and drives to power transmission systems. Our line of gearing solutions provides customers with highly modular, inventory saving, designs that are industry leading in efficiency and cost effectiveness. Additionally, our unique aluminum housing designs are reinforced and robust to give high performance with excellent heat dissipation that performs well in lower horsepower, higher torque applications. The Helical, Parallel Shaft and Helical Bevel products were designed to directly interchange with the critical dimensions that are commonly used in industry. TECO-Westinghouse gear reducers can handle a broad range of power requirements from fractional to several hundred horsepower and are complementary to our motor and controls product lines, offering our customers a powerful and complete solution to drive their applications.

BROAD SELECTION COVERING WORM, HELICAL, PARALLEL SHAFT, AND HELICAL BEVEL STYLES

TECO-Westinghouse offers a broad selection of Gear Reducers covering Worm, Helical, Parallel Shaft, and Helical Bevel styles.

- Modular Worm Gear Reducers in Aluminum Housings with multiple input and output configurations
- Unique Aluminum Housed Helical and Helical Bevel Gear Reducers with a wide range of ratios and sizes to cover fractional up to 5 HP
- Cast Iron Housed Helical, Parallel Shaft, and Helical Bevel Gear Reducers with sizes up to 75 HP; Directly interchanges with the critical dimensions that are commonly used in industry.

For more information on our Gear Reducers, please contact the factory at 1-800-USE-TECO.

WORLD SERIES® MOTORS

Effective 03-24-17
Supercedes 06-14-15

WORLD SERIES® MOTORS: SETTING THE STANDARD OF EXCELLENCE

Building on over 100 years of Westinghouse motor experience, TECO-Westinghouse World Series® motors represent the induction motor at its highest state of evolution. We began with a product known for excellence, and through computer-aided design and the use of advanced materials, made it even better. We have made it leaner, more efficient, and highly refined. Yet the World Series® line of motors retains all the original quality features that established Westinghouse as the world leader among large motor manufacturers – features such as rugged copper bar rotor construction, Thermalastic® insulation, and heavy-duty frame construction.

At TECO-Westinghouse Motor Company, we pride ourselves on service. As our customer, you can tap the strength of our resources for superior front-end services, including engineering support, computer-aided engineering studies, product information and quotation assistance. Once your World Series® Motor is in place, you can rely on our worldwide field service and engineering network to service and protect your investment.

World Series® motors offer a full range of benefits to fill your large induction motor requirements. For more information, contact your local TECO- Westinghouse representative, or call us direct at our Round Rock, Texas headquarters: 1-800-451-8798.

WORLD SERIES® VERTICAL MOTORS FOR HIGH-THRUST CONDITIONS

A long and successful history with vertical motor construction goes into the making of every vertical motor in the World Series® line.

Used primarily for pump applications, World Series® vertical motors are designed to handle virtually any thrust load that might be imposed (loads well in excess of 100,000 lbs., continuous downward thrust). High-thrust load capability is achieved by utilizing Kingsbury-type tilting-pad thrust bearings. Both sleeve and ball bearings are available for guide bearings, depending on the application.

For long wear and reliability, the thrust bearings and guide bearings are air-cooled through constant ventilation and are oil lubricated from a large reservoir. Special water-cooling coils can also be added when needed.

World Series® vertical motors reflect the same high quality construction and insulation processes that distinguish all the various components of our horizontal motors. Our vertical motors are readily adaptable to a variety of specific needs. For example, non-reverse ratchets are available and flywheels can be included in the design when required. Our vertical motors can also be started from zero-speed or reverse-speed and can be designed to accommodate overspeed situations, as in a hydro-generator.

WORLD SERIES® MOTORS

Effective 03-24-17
Supercedes 06-14-15

QUALITY FEATURES AND TIME-TESTED PERFORMANCE

- Copper rotor bars provide high conductivity and outstanding reliability.
- High frequency induction brazing ensures uniform end ring connections.
- Swaging contributes to long motor life by minimizing rotor bar movement.
- Rugged frame construction ensures lateral and torsional stability.
- Innovative PAM motors provide two-speed operation with only one winding.
- Thermalastic® insulation provides excellent protection from environmental contaminants.
- 250 HP to 30,000 HP ranges available for a wide variety of applications.
- High operating efficiency yields low life cycle cost.
- Split-sleeve bearings offer outstanding service and are easy to inspect.
- Adjustable frequency capability is available when specified.
- Each motor is custom designed for the most demanding applications.
- Over 100 years of experience goes into every motor we produce.

AVAILABLE ENCLOSURES

World Series® motors are offered in a complete range of enclosures to meet the toughest demands of any industry. IEC enclosures are also supplied. Available NEMA enclosures include the following configurations:

- Open Drip-Proof (Guarded), IP22/ IC01
- Weather Protected Type I, IP23/ IC01
- Weather Protected Type II, IPW24/ IC01
- Totally Enclosed Water-to-Air Cooled, IP44-54/ ICW81
- Totally Enclosed Air-to-Air Cooled, IP44-54/ IC411
- Totally Enclosed Pipe Ventilated, IP44/ IC31/ 37

TERMINAL BOXES

World Series® motors feature main lead and auxiliary terminal boxes constructed of 12-gauge steel. Each terminal box is gasketed for air-tight, dust-free, and weather-proof protection of terminal leads. Available for F1 or F2 locations, terminal boxes can be modified to include any customer terminations and accessory devices.

The main lead terminal box provides termination of the motor's main power leads. Available terminal box options include lightning arresters, surge capacitors, current transformers, special grounding devices, cable or bus bar terminations, and top or bottom lead entry.

WORLD SERIES® AIR CABINETS DESIGN LIST

Effective 03-24-17
Supercedes 06-14-15

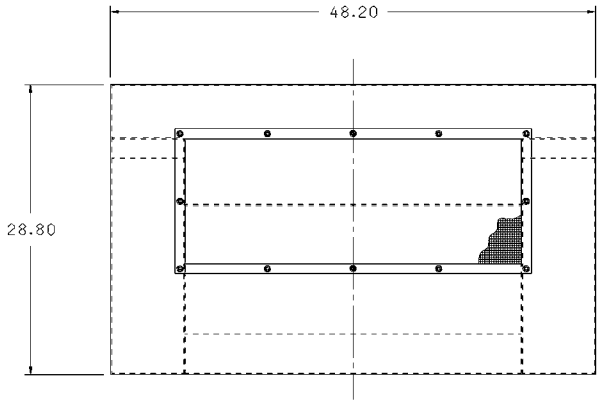
REPLACEMENT WPII AIR CABINETS FOR AGING TECO-WESTINGHOUSE AND WESTINGHOUSE MOTORS

Features and Benefits:

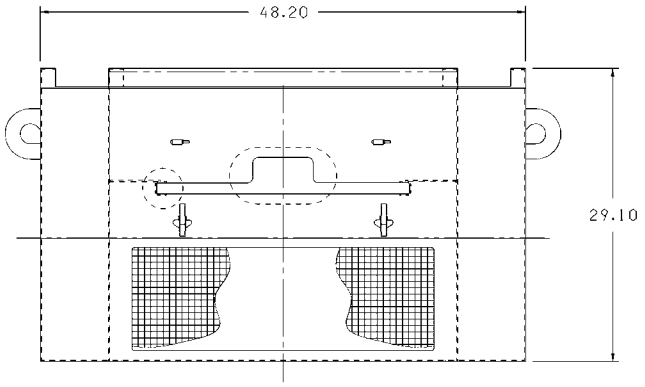
- Replacements for corroded air cabinets on aged motors
- Meets NEMA MG 1 requirements for WPI and WPII enclosures
- Tested to MIL-STD-810E for water-tightness
- Split-hinge design (Fig-2): for inlets, allowing for fast and safe filter replacement without the use of hand tools Filter replacement possible without motor shutdown.
- Air cabinet changeout achievable onsite without motor removal.
- Minimal differences in overall dimensions between old and new design. Example shown below for frame 3509; actual dimensions will vary with frame size.

Standard Construction:

- A36 carbon steel – 11 gauge
- Full acoustic lining
- #4 Mesh stainless steel screens
- Stainless steel filters included.



WORLD SERIES® DESIGN
FIGURE 1



UNIVERSAL DESIGN
FIGURE 2

WORLD SERIES® AIR CABINETS DESIGN LIST

Effective 03-24-17
Supercedes 06-14-15

WORLD SERIES® FRAME SIZE	UNIVERSAL AIR CABINET PART NUMBER
3505	2563F39G04
3506	2563F39G08
3507	2563F39G12
3508	2563F39G16
3509	2563F39G20
3510	2563F39G24
4008	2563F40G04
4009	2563F40G08
4010	2563F40G12
4011	2563F40G16
4509	2563F41G04
4510	2563F41G08
4511	2563F41G12
4512	2563F41G16
5010	2563F42G04
5011	2563F42G08
5012	2563F42G12
5014	2563F42G16
5611	2563F43G04
5612	2563F43G08
5614	2563F43G12
5616	2563F43G16

WORLD SERIES® FRAME SIZE	UNIVERSAL AIR CABINET PART NUMBER
6312	6D47635G04
6314	6D47635G08
6316	6D47635G12
6318	6D47635G16
7112	6D45158G04
7114	6D45158G08
7116	6D45158G12
7118	6D45158G16
8014	2565F19G04
8016	2565F19G08
8018	2565F19G12
8020	2565F19G16
9016	2573F69G04
9018	2573F69G08
9020	2573F69G12
9022	2573F69G16

Available Options:

- All stainless steel construction
- Differential pressure devices
- Manometers
- Air temperature devices
- Mufflers
- Heat shield

NOTE:

Universal air cabinets are also available for Westinghouse Buffalo Life Line® D Series and TECO-Westinghouse Round Rock Life Line® D Series. For information, contact the Renewal Parts team at (888) 754-5006 or visit our website at www.tecowestinghouse.com.

SYNCHRONOUS MOTORS

Effective 03-24-17
Supercedes 06-14-15

SYNCHRONOUS MACHINES: THE OPTIMAL CHOICE OF HEAVY INDUSTRY

TECO-Westinghouse Motor Company synchronous motors and generators provide superior value in terms of proven reliability, low maintenance performance, and long life in arduous applications. Our synchronous machines offer numerous benefits, including:

- Constant-speed operation
- High-efficiency ratings
- Low inrush currents
- Leading power factor (for corrective kVA capability)
- Horsepower range from 1000 HP to 100,000 HP

For more information, contact your local TECO-Westinghouse representative, or call us direct at our Round Rock, Texas headquarters: 1-800-451-8798.

PROVEN FEATURES FOR EFFICIENT SYNCHRONOUS MOTOR PERFORMANCE

TECO-Westinghouse Motor Company synchronous machines feature high efficiency designs in which great care is taken to minimize losses. To ensure maximum operating efficiencies and trouble free operations, the following features are standard on these motors:

- Airgap, slot openings, and slot ratios are selected to reduce pole face losses due to flux pulsations.
- Low loss, core-plated, non-aging, silicon steel stator punchings are used to reduce core losses.
- The stator copper is stranded to minimize eddy current losses.
- The number of stator slots, slot width, slot depth, and stator core depths are dimensioned to reduce magnetic noise.
- Pole punchings are designed for reduced pole leakage flux and field excitation to minimize field copper losses.
- Blowers are carefully selected to reduce windage loss.
- Stator end-plates are designed to ensure a tight and rigid core assembly, to minimize noise due to core distortion, and to transmit torque to the frame bulkhead.

DC MOTORS

Effective 03-24-17
Supercedes 06-14-15

DC MOTOR APPLICATIONS

TECO-Westinghouse Motor Company DC motors are ideally suited to a multitude of industrial and marine applications in which high torque and variable speed are required. These applications include ship propulsion, mine hoists, and steel rolling mills. They also drive many other types of industrial equipment such as fans, Banbury mixers, and extruders.

To meet the needs of a broad range of applications, our rugged DC motors are available in sizes ranging from 22-inch to 12-foot armature diameters, with available power ratings from 250 HP to over 35,000 HP.

For more information, contact your local TECO-Westinghouse representative, or call us direct at our Round Rock, Texas headquarters: 1-800-451-8798.

CUSTOM DESIGNS AS A STANDARD FEATURE

TECO-Westinghouse Motor Company DC motors are designed and built for long life and minimum maintenance. Over 100 years of motor industry experience has yielded design features that add up to precision, performance, and reliability.

Our DC motors and generators are custom engineered to meet your specified needs. We can incorporate existing foundations, space limitations, service conditions, and enhanced sparing capabilities into our motor and generator designs. In addition, you can apply TECO-Westinghouse DC machines to any quality brand of controls with total confidence.

SERVICE

Effective 03-24-17
Supercedes 06-14-15

LARGE MOTOR REPAIR

At TECO-Westinghouse, size or complexity are never an issue. With a 200 ton lifting capacity and 90 feet under hook, TWMC can handle almost any large motor repair. Our service team, backed by a full staff of motor design and manufacturing engineers, can perform for you! Our range of services extends from basic motor maintenance to complete redesigns and rebuilds. Each repair is customized to meet your needs and work is performed via a carefully controlled process dictated by industry standards as well as to your specifications. At TWMC, we don't just put your motor back together the way we found it, we use sound engineering judgment, extensive manufacturing and design experience, and the same ISO 9001 quality system incorporated into new motor manufacturing, to ensure that the machine will perform as originally designed, if not better.

Each motor is carefully disassembled and rigorously inspected for mechanical or electrical issues, with digital photographs taken during the process. A full battery of non-destructive electrical tests are performed, and a detailed inspection report is generated and supplied for your review along with recommendations for repairs and improvements. Recommendations are often made for improvements to the machine from an operational or reliability viewpoint. Upon authorization to proceed, a detailed "project control plan" is developed by one of our service engineers advising of the work to be done and specifying the parts to be used in the repairs or modifications. All work is performed by factory trained technicians with years of experience in both motor repair and in manufacturing the quality machines that the Westinghouse and TECO-Westinghouse names have come to represent.

Our asset reliability based **Quick Turn Rewind (QTR)** initiative is the leading repair service for large MV and HV motors. These engineered rewinds are performed on all manufacturers motors around the clock to our ISO 9001 quality system with deliveries that meet or exceed customer expectations. Utilizing our in-house coil manufacturing and 12-foot VPI tank, TWMC's proven long life Thermalastic® epoxy insulation system, developed by Westinghouse for reliability.

If the motor repair or engineered component opportunity exceed your experience, expertise, or capacity, give TECO-Westinghouse a call. We pay finder's fees for all referrals that result in an order. Payments are made 45 days after completion and invoicing of the repair.

ORDER SIZE ($)	FINDERS FEES (%)	MAXIMUM PAYOUT ($)
≤ 99k	8	7,920
100k - 299k	6	17,940
300k - 499k	5	24,950
≥ 500k	3	50,000

FIELD SERVICE/ FACTORY TECHNICAL SUPPORT

The Service and Repair Group has you covered from the time the motor leaves our state of the art manufacturing facility. Our highly qualified staff of Field Service Engineers is ready to be dispatched throughout the world to support all of your field needs, and our Technical Support Staff is equipped to answer your questions, with the additional backing of our Design Center engineering personnel. Whether it be start-up and commissioning, preventative/ predictive maintenance, testing, installation and removal assistance, troubleshooting, consulting services, alignments, vibration analysis, dynamic balancing, turnkey projects or training, only our engineers are at the ready to tackle your most challenging needs.

Effective 03-24-17
Supercedes 06-14-15

RENEWAL PARTS AND ENGINEERED COMPONENTS

TECO-Westinghouse Motor Company supplies genuine OEM replacement parts for large Westinghouse/ TECO-Westinghouse AC and DC motors manufactured from 1900 to present. If you have any vintage or large Westinghouse motor in your plant, odds are that we have all the design and manufacturing data for your motor and can supply any part you may need, from nuts and bolts, to a complete drop in spare armature, rotor, or stator. Have an ongoing operation or maintenance concern? Let us know about it! Many older components can be, or have been, analyzed and redesigned for improved performance and maintainability. Need a large component for a non-Westinghouse machine? We may be able to design a drop in replacement.

ENGINEERING STUDIES

Would you like to get more horsepower out of your existing motor? Curious if it can be driven by a VFD? Have a nagging maintenance problem that just won't go away? Through an engineering study, we can research these and other questions, and provide you with viable solutions and answers. With our full complement of skilled design and manufacturing engineers, we can perform a broad spectrum of analyses and offer a complete solution that you won't find elsewhere!

3D MODELING & FINITE ELEMENT ANALYSIS

Using the most up to date tools, we can perform complete electrical, magnetic, thermal, and mechanical analyses. Our fully staffed Design and R&D Centers have the expertise to analyze and review the most complex motor designs.

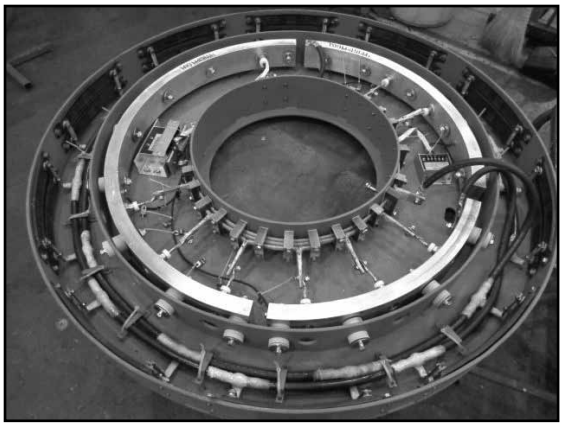
FAILURE ANALYSIS

Want to avoid recurring failures and improve reliability? Complete motor failure analysis can be performed and root cause often determined for many types of electrical and mechanical motor problems. TWMC is fully equipped to gather the facts, perform diagnostic or material testing, review results for design, manufacturing or operational issues, and provide a detailed written report of findings.

Effective 03-24-17
Supercedes 06-14-15

Refurbishing/ Retrofitting Control Wheels

Before

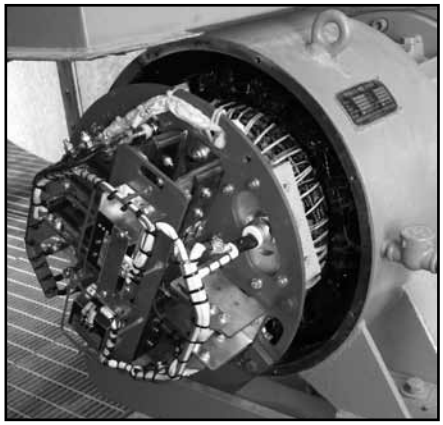


All new components, heat sinks, conductors, insulators, fasteners, lugs, etc. built on a mock-up wheel

After

Everything on the mock-up transferred to the existing control wheel chassis

A TECO-Westinghouse control wheel customized to fit onto an other OEM motor



A TECO-Westinghouse control wheel customized to fit onto an other OEM motor

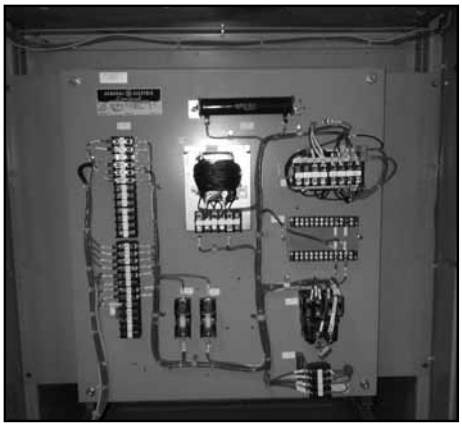
Brushless Control Wheel Replacements and Retrofits

- Convert other OEM unsupported control wheels to a TWMC design
- On-site troubleshooting, repairs, and rebuilds
- In stock renewal parts

Effective 03-24-17
Supercedes 06-14-15

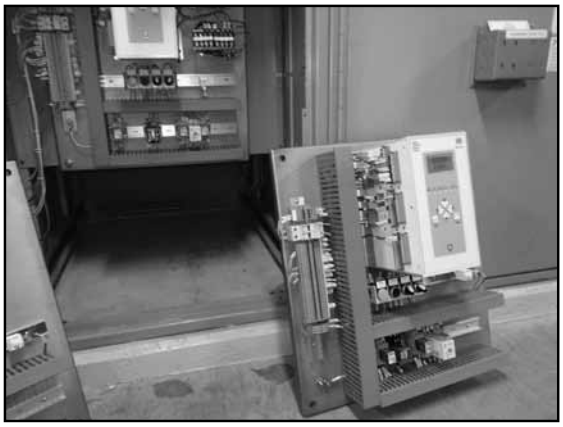
Exciter Control Panel Upgrades

Before



An analog, manual only, exciter control panel

After



The same panel space fitted with a new digital exciter and power factor controller

Before

A typical '80s analog exciter control panel crowded with obsolete components

After

The same line-up with only a few components remaining

Exciter Control Panel Upgrades

- Replace outdated Analog Controls with a modern Digital System using the same panel space
- Superior control and accuracy of Voltage, VAR, and Power Factor Regulation
- Enhanced system response
- Advanced motor protection
- Reliable system operation

USEFUL FORMULAS

Effective 03-24-17
Supercedes 06-14-15

kW	=	HP * .746
Torque in lb-ft	=	$\frac{\text{HP} * 5250}{\text{RPM}}$
Motor synchronous speed in RPM	=	$\frac{120 * \text{Hz}}{\text{Number of Poles}}$
Three-Phase Full-Load Amp	=	$\frac{\text{HP} * .746}{1.73 * \text{kV} * \left(\frac{\text{Efficiency}}{100}\right) * \left(\frac{\text{Power Factor}}{100}\right)}$
Rated Motor kVA	=	$\frac{\text{HP} * .746}{\text{Efficiency} * \text{Power Factor}}$
kW Loss	=	$\frac{(\text{HP} * .746) * (1.0 - \text{Efficiency})}{\text{Efficiency}}$
Wk^2 Referred to Motor Shaft Speed	=	[Driven Machine Wk^2 (Driven Machine RPM/ Motor RPM)^2]+ Gear Wk^2 at Motor Speed
Accelerating Time	=	$\frac{0.462\ (Wk^2 \text{ of Motor and Load})\ \text{RPM}^2}{\text{Motor Rated kW} * 104 * \text{Per-Unit Effective Accelerating Torque}}$
kVA inrush	=	Percent Inrush * Rated kVA
Approximate Voltage Drop (%)	=	$\frac{\text{Motor kVA Inrush}}{\text{Transformer kVA}}$ * Transformer Impedance (Normally 5% to 7%)
Stored Kinetic Energy in kW-sec	=	2.31 * (Total Wk^2) * RPM^2 x 10^{-7}
Inertia Constant (H) in Seconds	=	$\frac{\text{Stored Kinetic Energy in kW Seconds}}{\text{HP} * .746}$
Conversion Factors:		
CV	=	(Metric HP) = 735.5 Watts = 75 KW-m/sec
Wk^2 (lb-ft)	=	5.93 x GD^2 ($kg\text{-}m^2$)

Derating motor for change in elevation: For each 330 foot increase in elevation above 3300 feet above sea level, derate motor horsepower by 1 percent.
Cooling-water requirements: 2 gpm of water for each kW of loss
Ventilating-air requirements: 100-125 cfm of 40˚C air at 1/2 water pressure for each W of loss

Effective 03-24-17
Supercedes 06-14-15

AC DRIVES PACKAGING CAPABILITIES

Effective 03-24-17
Supercedes 06-14-15

PACKAGED DRIVES

- NEMA 1, 12, 3R, 4, 4X (4, 4X will be custom engineered packages)
- Bypass: Two and three contactor
  - Fused disconnects or circuit breakers
  - Soft start on bypass transfer
  - Automatic or manual bypass transfer
  - Fireman's override
  - Damper actuation circuit
  - Electrical and mechanical interlocks

OPTION CABINETS

- Fused disconnects or circuit breakers
- Wall mount or free standing

SPECIAL APPLICATIONS

- Power conditioning via harmonic filters or 12, 18 pulse systems
- Multiple motors on drive (bypass and options)
- Manual duplex, triplex
- RS-485 Protocols
  - Modbus
  - BACNet
  - Johnson Metasys (N2)
  - Ethernet
  - Profibus
  - SCADA
- High elevations
- Surge suppression
- Phase monitoring
- RFI/ EMI Filtering

MOTOR AND DRIVE COMBINATION PACKAGES

Effective 03-24-17
Supercedes 06-14-15

Premium Efficient Motor and Drive Combination Packages developed for both constant and variable torque applications

APPLICABLE MOTORS

- Rolled Steel and Cast Iron ODP
  - 143T through 5009B Frame
  - 1 to 500 HP
  - 1200, 1800, and 3600 RPM
- MAX-E1® type AEHE, AEHH8N
  - 143T through 6808B Frame
  - 1 to 800 HP
  - 900, 1200, 1800, and 3600 RPM

APPLICABLE VARIABLE FREQUENCY DRIVES PRODUCTS

- EQ7 or A510 Drives for Constant Torque Applications
- EQ7 or F 510 Drives for Variable Torque Applications
- 230VAC to 125 HP, 460VAC to 800 HP

- **Single Source Reliability**
- **Additional 5% Discount when purchasing matching motor and drive sets**
- **5 Year Warranty valid on all combination packages.**
- **Select any combination of ODP or MAX-E1® premium Efficient Motors with any power-matched A510, F510, or EQ7 VFD**

**** Use Promo Code "MIPKG2017" when placing motor and Drive Order ****

L510 MICRO DRIVE

MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

A compact, low cost, and versatile AC Drive that is easy to program and ideal for OEM's.

APPLICATIONS:

- Mixing
- Fans
- Small Conveyors
- Treadmills
- AC Contactor Replacement
- Pumps
- Lathes
- Milling

FEATURES:

- Chassis Style Enclosure (IP20)
- Sensorless Vector or V/ Hz with Auto Torque Boost Feature
- 0.25 to 1 HP, 115V, 50/ 60 Hz, 1-Phase
- 0.25 to 3 HP, 230V, 50/ 60 Hz, 1-Phase
- 0.50 to 3 HP, 230V, 50/ 60 Hz, 3-Phase
- 1 to 3 HP, 460V, 50/ 60Hz, 3-Phase
- Extensive Diagnostic and Monitoring Capabilities
- Din Rail Option
- PID Control
- 8 Preset Speeds
- Two Multi-Function Analog Inputs/ Qty 1 Analog Output
- Built-in Modbus or BACnet Protocol via RJ 45 Interface
- UL, cUL, and CE Approved

L510 MICRO DRIVE

MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

All Digital Inputs are Sinked to Control Power Common

115V 1-Phase Input/ 3-Phase 230V Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (in.)			APPROX. WT. (lbs.)	LIST PRICE ($)
			HEIGHT	WIDTH	DEPTH		
L510-1P2-H1-U	.25	1.8	5.55	2.83	5.48	2	262
L510-1P5-H1-U	.50	2.6	5.55	2.83	5.48	2	268
L510-101-H1-U	1	4.3	5.67	4.65	5.80	3.5	290

230V 1-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (in.)			APPROX. WT. (lbs.)	LIST PRICE ($)
			HEIGHT	WIDTH	DEPTH		
L510-2P2-H1-U	.25	1.8	5.55	2.83	5.48	2	246
L510-2P5-H1-U	.50	2.6	5.55	2.83	5.48	2	258
L510-201-H1-U	1	4.3	5.55	2.83	5.48	2	266
L510-202-H1-U	2	7.5	5.67	4.65	5.80	3.5	366
L510-203-H1-U	3	10.5	5.67	4.65	5.80	3.5	438

230V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (in.)			APPROX. WT. (lbs.)	LIST PRICE ($)
			HEIGHT	WIDTH	DEPTH		
L510-2P5-H3-U	.50	2.6	5.55	2.83	5.48	2	258
L510-201-H3-U	1	4.3	5.55	2.83	5.48	2	266
L510-202-H3-U	2	7.5	5.67	4.65	5.80	3.5	360
L510-203-H3-U	3	10.5	5.67	4.65	5.80	3.5	400

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (in.)			APPROX. WT. (lbs.)	LIST PRICE ($)
			HEIGHT	WIDTH	DEPTH		
L510-401-H3-U	1	2.3	5.67	4.65	5.80	3.5	370
L510-402-H3-U	2	3.8	5.67	4.65	5.80	3.5	406
L510-403-H3-U	3	5.2	5.67	4.65	5.80	3.5	492

Notes:
H1 = 1-Phase
H3 = 3-Phase

L510 BRAKE RESISTORS & OPTIONS

Effective 03-24-17
Supercedes 06-14-15

460V 3-Phase *

AC DRIVE HP RATING	BRAKING TRANSISTOR				BRAKING RESISTOR							
	MODEL NO.		QTY USED	NET PRICE	MODEL NO.	QTY	RESISTANCE OHMS - WATTS		ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($)
1	-	-	-	-	JNBR-150W750	1	750	150	12"L x 5"W x 5"D	126	10	30
2	-	-	-	-	JNBR-150W400	1	400	150	12"L x 5"W x 5"D	119	10	35
3	-	-	-	-	JNBR-260W250	1	250	260	12"L x 5"W x 5"D	126	10	50

Notes:

Transistor built-in for all L510 460V ratings (braking resistors externally mounted)

* Option only available for 460V ratings

Options

PART NUMBER	DESCRIPTION	LIST PRICE ($)
JN5-CB-01M	Extension wire (1M)	25
JN5-CB-02M	Extension wire (2M)	27
JN5-CB-03M	Extension wire (3M)	30
JN5-CB-05M	Extension wire (5M)	35
JN5-CM-USB	USB cable to connect PC	80
JN5-CU	Copy module (Also usable as a remote LED operator)	95
JN5-DIN-L01	DIN RAIL, L510, FRAME 1	25
DINE2-201	DIN RAIL, L510, FRAME 2 (Plastic only)	15

N3 COMPACT DRIVE

MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

A compact, low cost, and versatile AC Drive that can operate in constant torque, variable torque, or sensorless vector modes for maximum application flexibility.

APPLICATIONS:

- Fan and Pump Systems
- Larger Conveyors
- Mixers
- Centrifugal Applications
- OEM Products

FEATURES:

- IP20 Enclosure: 1 to 10 HP, 230V, 1 to 15 HP,460V (NEMA 1 Option Kits Shipped with Units Unless Not Requested)
- NEMA 1 Enclosure: 15HP and Above (230V), 20 HP and Above (460V)
- Sensorless Vector or V/Hz
- 0.5 to 3 hp, 230V, 50/ 60Hz,1-Phase
- 0.5 to 40 hp, 230V, 50/ 60Hz, 3-Phase
- 1 to 75 hp, 460V, 50/ 60Hz, 3-Phase
- PID Control
- 0 to 400Hz Speed Range
- Standard Unit with LED Display & Speed Potentiometer
- Optional LCD Digital Operator (Required for NEMA 4 Keypad Kit)
- Dynamic Braking Transistor Standard Through 20 HP Models
- PC Programming Software/ Pocket PC/ Copy Unit (Teco Link Software Available)
- RS485 Interface Option
- RS232 Interface Option
- Multi-function Digital and Analog Inputs/ Outputs
- Built-in Modbus or BACnet Protocols (Requires SIF-485 InterfaceModule)
- UL, cUL, and CE Approved

N3 COMPACT DRIVE

MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

230V 1-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (in.)			APPROX. WT. (lbs.)	LIST PRICE ($)
			HEIGHT	WIDTH	DEPTH		
*N3-2P5-CS-U	0.5	3.1	6.42	3.54	5.79	3	325
*N3-201-CS-U	1	4.5	6.42	3.54	5.79	3	360
*N3-202-CS-U	2	7.5	7.36	5.04	5.83	4	470
*N3-203-CS-U	3	10.5	7.36	5.04	5.83	5	640

230V 3-Phase Input/ 3-Phase Output ***

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (in.)			APPROX. WT. (lbs.)	LIST PRICE ($)
			HEIGHT	WIDTH	DEPTH		
*N3-2P5-C-U	0.5	3.1	6.42	3.54	5.79	3	325
*N3-201-C-U	1	4.5	6.42	3.54	5.79	3	350
*N3-202-C-U	2	7.5	6.42	3.54	5.79	3	430
*N3-203-C-U	3	10.5	7.36	5.04	5.83	4	575
*N3-205-C-U	5	17.5	7.36	5.04	5.83	5	680
*N3-207-C-U	7.5	26	10.24	7.32	7.68	13	980
*N3-210-C-U	10	35	10.24	7.32	7.68	13	1,100
*N3-215-N1-U	15	48	14.17	10.43	9.7	27	1,651
*N3-220-N1-U	20	64	14.17	10.43	9.7	27	1,908
N3-225-N1-U	25	80	14.17	10.43	9.7	29	2,528
**N3-230-N1-U	30	96	25.45	10.6	12	67	3,524
**N3-240-N1-U	40	130	25.45	10.6	12	67	4,751

460 V 3-Phase Input/ 3-Phase Output ***

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (in.)			APPROX. WT. (lbs.)	LIST PRICE ($)
			HEIGHT	WIDTH	DEPTH		
*N3-401-C-U	1	2.3	6.42	3.54	5.79	3	440
*N3-402-C-U	2	3.8	6.42	3.54	5.79	3	500
*N3-403-C-U	3	5.2	7.36	5.04	5.83	4	625
*N3-405-C-U	5	8.8	7.36	5.04	5.83	4	750
*N3-407-C-U	7.5	13	10.24	7.32	7.68	13	1,075
*N3-410-C-U	10	17.5	10.24	7.32	7.68	13	1,135
*N3-415-C-U	15	25	10.24	7.32	7.68	13	1,350
*N3-420-N1-U	20	32	14.17	10.43	9.7	27	1,977
N3-425-N1-U	25	40	14.17	10.43	9.7	29	2,488
**N3-430-N1-U	30	48	14.17	10.43	9.7	29	2,737
**N3-440-N1-U	40	64	25.45	10.6	12	67	3,538
**N3-450-N1-U	50	80	25.45	10.6	12	67	4,415
**N3-460-N1-U	60	96	29.39	12.13	15.2	102	5,017
**N3-475-N1-U	75	128	29.39	12.13	15.2	102	5,763

Notes:
Suffix CS = Chassis (IP20) Unit 1-Phase
C = Chassis (IP20) Unit 3-Phase
N1 = NEMA 1
All Chassis Units will Ship with NEMA 1 Boxes for Field Installation

* Includes Dynamic Braking Transistor
** Includes DC Bus Link Reactor
*** Do Not Apply Single Phase Input Power to these Models

N3 OPTIONS

MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

Options

PART NUMBER	DESCRIPTION	LIST PRICE ($)
SIF-485	Communications Interface (RS485) for Modbus or BACnet	30
SIF-232	RS232 Interface Card with Wire to PC	25
SIF-MP	Copy Module	15
N3-LED-W-U	LED Keypad	45
N3-LCD-W-U	LCD Keypad	65
N3-LCD-N4KIT	NEMA 4 KIT,Only a Cover for LCD Keypad (Keypad Not Included)	69
SW30P5	Remote Wire for Keypad (0.5m)	50
SW3001	Remote Wire for Keypad (1.0m)	52
SW3002	Remote Wire for Keypad (2.0m)	54
SW3003	Remote Wire for Keypad (3.0m)	57
JNEP-16-F	JNEP-16F Remote Analog Operator	120
*SNA301	NEMA 1 Box for Frame 1	15
*SNA302	NEMA 1 Box for Frame 2	16
*SNA303	NEMA 1 Box for Frame 3	21
TL-ENC-01	TECO Link Kit -Includes Box Label, Wiring Diagram, SIF-232, CD With Software and Drive User Manaul, USB-RS485 Converter	425

Notes:

* Frame 1 2P5-CS-U, 201-CS-U, 2P5-C-U, 201-C-U, 202-C-U, 401-C-U, 402-C-U
Frame 2 202-CS-U, 203-CS-U,203-C-U,205-C-U, 403-C-U, 405-C-U
Frame 3 207-C-U, 210-C-U, 407-C-U, 410-C-U, 415-C-U

N3 BRAKE MODULES AND RESISTORS

MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

230V 3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NO.	QTY USED	LIST PRICE ($) ‡	MODEL NO.	QTY USED	RESISTANCE OHMS	WATTS	ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($) ‡
1	X	-	-	JNBR-150W200	1	200	150	9.88"L x 1.10"W x 2.36"D	119	10	30
2	X	-	-	JNBR-150W100	1	100	150	9.88"L x 1.10"W x 2.36"D	119	10	35
3	X	-	-	JNBR-260W70	1	70	260	10.79"L x 1.34"W x 3.07"D	115	10	50
5	X	-	-	JNBR-390W40	1	40	390	10.79"L x 1.34"W x 3.07"D	119	10	70
7.5	X	-	-	JNBR-520W30	1	30	520	15.7"L x 1.57"W x 3.94"D	108	10	125
10	X	-	-	JNBR-780W20	1	20	780	15.7"L x 1.57"W x 3.94"D	119	10	150
15	X	-	-	JNBR-2R4KW13R6	1	13.6	2400	21.1"L x 1.96"W x 4.33"D	117	10	450
20	X	-	-	JNBR-3KW10	1	10	3000	24.21"L x 1.96"W x 4.33"D	119	10	575
25	JNTBU-230	1	475	JNBR-4R8KW8	1	8	4800	21.1"L x 1.96"W x 4.33"D	119	10	940
30	JNTBU-230	1	475	JNBR-4R8KW6R8	1	6.8	4800	21.1"L x 1.96"W x 4.33"D	117	10	955
40	JNTBU-230	2	475	JNBR-3KW10	2	10	3000	24.21"L x 1.96"W x 4.33"D	119	10	575

460V 3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NO.	QTY USED	LIST PRICE ($) ‡	MODEL NO.	QTY USED	RESISTANCE OHMS	WATTS	ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($) ‡
1	X	-	-	JNBR-150W750	1	750	150	9.88"L x 1.10"W x 2.36"D	126	10	30
2	X	-	-	JNBR-150W400	1	400	150	9.88"L x 1.10"W x 2.36"D	119	10	35
3	X	-	-	JNBR-260W250	1	250	260	10.79"L x 1.34"W x 3.07"D	126	10	50
5	X	-	-	JNBR-400W150	1	150	400	10.79"L x 1.34"W x 3.07"D	126	10	75
7.5	X	-	-	JNBR-600W130	1	130	600	15.7"L x 1.57"W x 3.94"D	102	10	125
10	X	-	-	JNBR-800W100	1	100	800	24.21"L x 1.96"W x 4.33"D	99	10	150
15	X	-	-	JNBR-1R6KW50	1	50	1600	24.21"L x 1.96"W x 4.33"D	126	10	300
20	X	-	-	JNBR-1R5KW40	1	40	1500	24.21"L x 1.96"W x 4.33"D	119	10	300
25	JNTBU-430	1	605	JNBR-4R8KW32	1	32	4800	21.1"L x 1.96"W x 4.33"D	119	10	900
30	JNTBU-430	1	605	JNBR-4R8KW27R2	1	27.2	4800	21.1"L x 1.96"W x 4.33"D	117	10	900
40	JNTBU-430	1	605	JNBR-6KW20	1	20	6000	24.21"L x 1.96"W x 4.33"D	119	10	1,100
50	JNTBU-430	2	605	JNBR-4R8KW32	2	32	4800	21.1"L x 1.96"W x 4.33"D	119	10	900
60	JNTBU-430	2	605	JNBR-4R8KW27R2	2	27.2	4800	21.1"L x 1.96"W x 4.33"D	117	10	900
75	JNTBU-430	2	605	JNBR-6KW20	2	20	6000	24.21"L x 1.96"W x 4.33"D	126	10	1,100

Notes:

X = Transistor Built-in for all N3 Drives at these ratings

‡ Price is for the quantity of one (1) unit

A510

HEAVY DUTY

Effective 03-24-17
Supercedes 06-14-15

A versatile AC Drive that can control todays demanding motor driven applications, this highly flexible drive has multiple control modes.

APPLICATIONS:

- Mixing
- Conveyors
- Packaging Machines
- Machine Tools
- Fans
- Compressors
- Pumps (Centrifugal, Positive Displacement, Metering, etc.)
- Extrusion and Injection Molding
- Winders/ Unwinders
- Crushers/ Grinders
- Crain/ Hoist

FEATURES:

- Control Modes for V/F, V/F with PG feedback, Sensorless Vector, and Closed Loop Vector
- Simple PLC Function Built-in
- Advanced Regenerative Load Handling Capability
- 1 to 100 HP (CT), 230V, 50/ 60Hz, 3-Phase
- 1 to 125 HP(VT), 230V, 50/ 60Hz,3-Phase
- 1 to 200 HP (CT), 460V, 50/ 60Hz,3-Phase
- 1 to 250 HP (VT), 460V, 50/ 60Hz,3-Phase
- 1 to 10 HP (CT/VT), 575V, 50/ 60Hz,3-Phase
- 15 to 250 HP (CT), 690V, 50/ 60Hz,3-Phase
- 15 to 270 HP (VT), 690V, 50/ 60Hz,3-Phase
- Conformal Coating on PC Boards
- LCD Keypad that is Remotely Mountable
- Flexible Input/ Output Configurations that Accept Normally Open or Normally Closed Signals
- 0 to 599 Hz Speed Range
- PID Control
- Diagnostics Registers for Troubleshooting
- Built-in RS485 Modbus Protocol
- Enhanced Design for Quiet Motor Operation
- Pulse Output and Pulse Follower
- Select Between Closed-Loop Speed and Torque Control in Vector Mode
- UL, cUL, and CE approved

A510

HEAVY DUTY

Effective 03-24-17
Supercedes 06-14-15

230V 3-Phase

MODEL NO.	HP		DRIVE AMPS		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH		
‡*A510-2001-C-U	1	1	5.0	6.0	9.61	5.12	5.91	6	620
‡*A510-2002-C-U	2	2-3	8.0	9.6	9.61	5.12	5.91	6	650
‡*A510-2003-C-U	3	3	11.0	12.0	12.40	5.51	6.97	9	800
*A510-2005-C3-U	5	5-7.5	17.5	22.0	12.40	5.51	6.97	9	840
*A510-2008-C3-U	7.5	10	25.0	30.0	12.40	5.51	6.97	10	1,220
*A510-2010-C3-U	10	15	33.0	42.0	11.80	8.27	8.46	10	1,320
*A510-2015-C3-U	15	20	47.0	56.0	14.20	10.43	8.86	20	1,750
*A510-2020-C3-U	20	25	60.0	69.0	14.20	10.43	8.86	20	2,120
*A510-2025-C3-U	25	30	73.0	79.0	14.20	10.43	8.86	20	2,730
A510-2030-C3-U	30	40	85.0	110.0	20.70	11.20	9.92	70	4,310
A510-2040-C3-U	40	50	115.0	138.0	20.70	11.20	9.92	70	5,330
**A510-2050-C3-U	50	60	145.0	169.0	22.80	13.54	11.81	90	6,200
**A510-2060-C3-U	60	75	180.0	200.0	22.80	13.54	11.81	90	7,250
**A510-2075-C3-U	75	100	215.0	250.0	31.10	18.10	12.80	200	8,800
**A510-2100-C3-U	100	125	283.0	312.0	31.10	18.10	12.80	200	11,000

460V 3-Phase

MODEL NO.	HP		DRIVE AMPS		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH		
*A510-4001-C3-U	1	1	3.4	4.1	9.61	5.12	5.91	6	640
*A510-4002-C3-U	2	2-3	4.2	5.4	9.61	5.12	5.91	6	670
*A510-4003-C3-U	3	3	5.5	6.9	9.61	5.12	5.91	6	810
*A510-4005-C3-U	5	5-7.5	9.2	12.1	12.40	5.51	6.97	9	900
*A510-4008-C3-U	7.5	10	14.8	17.5	12.40	5.51	6.97	9	1,310
*A510-4010-C3-U	10	15	18.0	23.0	11.80	8.27	8.46	10	1,500
*A510-4015-C3-U	15	20	24.0	31.0	11.80	8.27	8.46	10	1,800
*A510-4020-C3-U	20	25	31.0	38.0	11.80	8.27	8.46	10	2,150
*A510-4025-C3-U	25	30	39.0	44.0	14.20	10.43	8.86	20	2,680
*A510-4030-C3-U	30	40	45.0	58.0	14.20	10.43	8.86	20	2,850
A510-4040-C3-U	40	50	60.0	73.0	20.70	11.20	9.92	70	3,780
A510-4050-C3-U	50	60	75.0	88.0	20.70	11.20	9.92	70	4,560
A510-4060-C3-U	60	75	91.0	103.0	20.70	11.20	9.92	70	5,200
**A510-4075-C3-U	75	100	118.0	145.0	20.70	11.20	9.92	77	6,500
**A510-4100-C3-U	100	125	150.0	168.0	22.80	13.54	11.81	90	9,980
**A510-4125-C3-U	125	150	180.0	208.0	22.80	13.54	11.81	90	12,800
**A510-4150-C3-U	150	175	216.0	250.0	31.10	18.10	12.80	200	14,800
**A510-4215-C3-U	215	250	295.0	328.0	31.10	18.10	12.80	200	17,200

Notes:

* Includes Dynamic Braking Transistor

** Includes DC Bus Link Reactor

‡ Operates on single or three phase inputs at specified rating
1 - 40 HP NEMA 1, 230V, 50 HP and above protected chassis, 1 - 75 HP NEMA 1, 460V, 100 HP and above protected chassis

HEAVY DUTY

Effective 03-24-17
Supercedes 06-14-15

Contact TECO-Westinghouse for delivery 1-800-279-4007

‡ 575V 3-Phase

MODEL NO.	HP		DRIVE AMPS		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH		
*A510-5001-C-U	1	2	1.7	3.0	10.98	5.51	6.96	8	1,150
*A510-5002-C-U	2	3	3.0	4.2	10.98	5.51	6.96	8	1,200
*A510-5003-C-U	3	4	4.2	5.8	10.98	5.51	6.96	8	1,290
*A510-5005-C3-U	5	5	6.6	8.8	11.81	8.26	8.46	10	1,320
*A510-5008-C3-U	7.5	7.5-10	9.9	12.2	11.81	8.26	8.46	10	1,450
*A510-5010-C3-U	10	10	11.4	14.5	11.81	8.26	8.46	10	1,500

***690V 3-Phase

MODEL NO.	HP		DRIVE AMPS		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH		
*A510-6015-C3-U	15	20	15.0	19.0	14.17	10.43	8.85	20	2,125
*A510-6020-C3-U	20	25	22.0	22.0	14.17	10.43	8.85	20	2,500
*A510-6025-C3-U	25	30	22.0	27.0	14.17	10.43	8.85	20	3,125
*A510-6030-C3-U	30	40	27.0	34.0	14.17	10.43	8.85	20	3,200
A510-6040-C3-U	40	50	34.0	42.0	20.66	11.18	9.92	70	4,100
A510-6050-C3-U	50	60	42.0	52.0	20.66	11.18	9.92	70	4,900
A510-6060-C3-U	60	75	54.0	62.0	20.66	11.18	9.92	70	6,100
**A510-6075-C3-U	75	100	62.0	80.0	22.83	13.54	11.81	90	7,100
**A510-6100-C3-U	100	125	86.0	99.0	22.83	13.54	11.81	90	8,630
**A510-6125-C3-U	125	150	95.0	125.0	22.83	13.54	11.81	103	11,950
**A510-6150-C3-U	150	175	131.0	147.0	22.83	13.54	11.81	103	13,950
**A510-6215-C3-U	200	250	163.0	212.0	31.10	18.07	12.77	194	20,500
**A510-6250-C3-U	250	270	193.0	216.0	31.10	18.07	12.77	194	22,733

Notes:

* Includes Dynamic Braking Transistor
** Includes DC Bus Link Reactor
*** Consult factory when applying 575V to 690V models
‡ Do not apply 690V to these models
1-10 HP NEMA 1 575V, 15-60 HP NEMA 1 690V, 75 HP and above protected chassis

A510 OPTIONS

HEAVY DUTY

Effective 03-24-17
Supercedes 06-14-15

Options

PART NUMBER	DESCRIPTION	LIST PRICE ($)
JN5-CB-01M	Remote Wire for Keypad (1M)	25
JN5-CB-02M	Remote Wire for Keypad (2M)	27
JN5-CB-03M	Remote Wire for Keypad (3M)	30
JN5-CB-05M	Remote Wire for Keypad (5M)	35
JN5-CM-PDP	PROFIBUS Communication Interface Module	350
JN5-CM-USB	USB Cable to Connect PC	80
JN5-CU	Copy Module	95
JN5-NK-A06	A510 Frame 6 NEMA1 KIT 50, 60HP 230V; 100, 125 HP 460V, 100, 125, 150 HP 690V	475
JN5-NK-A07	A510 Frame 7 NEMA1 KIT 75,100HP 230V; 150, 200 HP 460V; 200, 250 HP 690V	690
JN5-OP-A01	LED Operator	75
JN5-OP-A02	LCD Operator Replacement*	135
JN5-OP-A03	Blank Operator	25
JN5-PG-L	Line Driver Speed Feedback Card	130
JN5-PG-O	Open Collector Speed Feedback Card	160
JN5-PG-PM	Synchronous Motor Line Driver Speed Feedback Card Card	140
JNEP-16-F	Remote Analog Operator	120

* LCD Operator is standard on all A510 models

A510 BRAKE MODULES AND RESISTORS

HEAVY DUTY

Effective 03-24-17
Supercedes 06-14-15

All brake modules and resistors are chassis (not in an enclosure)

230V 3-Phase *

AC DRIVE HP RATING CONSTANT TORQUE	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NO.	QTY USED	LIST PRICE ($) ‡	MODEL NO.	QTY USED	RESISTANCE OHMS	WATTS	ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($) ‡
1	X	-	-	JNBR-150W200	1	200	150	9.88"L x 1.10"W x 2.36"D	119	10	30
2	X	-	-	JNBR-150W100	1	100	150	9.88"L x 1.10"W x 2.36"D	119	10	35
3	X	-	-	JNBR-260W70	1	70	260	10.79"L x 1.34"W x 3.07"D	115	10	50
5	X	-	-	JNBR-390W40	1	40	390	10.79"L x 1.34"W x 3.07"D	119	10	70
7.5	X	-	-	JNBR-520W30	1	30	520	15.7"L x 1.57"W x 3.94"D	108	10	125
10	X	-	-	JNBR-780W20	1	20	780	15.7"L x 1.57"W x 3.94"D	119	10	150
15	X	-	-	JNBR-2R4KW13R6	1	13.6	2400	21.1"L x 1.96"W x 4.33"D	117	10	450
20	X	-	-	JNBR-3KW10	1	10	3000	24.21"L x 1.96"W x 4.33"D	119	10	575
25	X	-	-	JNBR-4R8KW8	1	8	4800	21.1"L x 1.96"W x 4.33"D	119	10	940
30	JNTBU-230	1	475	JNBR-4R8KW6R8	1	6.8	4800	21.1"L x 1.96"W x 4.33"D	117	10	955
40	JNTBU-230	2	475	JNBR-3KW10	2	10	3000	24.21"L x 1.96"W x 4.33"D	119	10	575
50	JNTBU-230	2	475	JNBR-3KW10	2	10	3000	24.21"L x 1.96"W x 4.33"D	99	10	575
60	JNTBU-230	2	475	JNBR-4R8KW6R8	2	6.8	4800	21.1"L x 1.96"W x 4.33"D	117	10	955
75	JNTBU-230	2	475	JNBR-4R8KW6R8	2	6.8	4800	21.1"L x 1.96"W x 4.33"D	98	10	955
100	JNTBU-230	3	475	JNBR-4R8KW6R8	3	6.8	4800	21.1"L x 1.96"W x 4.33"D	108	10	955

460V 3-Phase *

AC DRIVE HP RATING CONSTANT TORQUE	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NO.	QTY USED	LIST PRICE ($) ‡	MODEL NO.	QTY USED	RESISTANCE OHMS	WATTS	ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($) ‡
1	X	-	-	JNBR-150W750	1	750	150	9.88"L x 1.10"W x 2.36"D	126	10	30
2	X	-	-	JNBR-150W400	1	400	150	9.88"L x 1.10"W x 2.36"D	119	10	35
3	X	-	-	JNBR-260W250	1	250	260	10.79"L x 1.34"W x 3.07"D	126	10	50
5	X	-	-	JNBR-400W150	1	150	400	10.79"L x 1.34"W x 3.07"D	126	10	75
7.5	X	-	-	JNBR-600W130	1	130	600	15.7"L x 1.57"W x 3.94"D	102	10	125
10	X	-	-	JNBR-800W100	1	100	800	24.21"L x 1.96"W x 4.33"D	99	10	150
15	X	-	-	JNBR-1R6KW50	1	50	1600	24.21"L x 1.96"W x 4.33"D	126	10	300
20	X	-	-	JNBR-1R5KW40	1	40	1500	24.21"L x 1.96"W x 4.33"D	119	10	300
25	X	-	-	JNBR-4R8KW32	1	32	4800	21.1"L x 1.96"W x 4.33"D	119	10	900
30	X	-	-	JNBR-4R8KW27R2	1	27.2	4800	21.1"L x 1.96"W x 4.33"D	117	10	900
40**	X	-	-	JNBR-6KW20	1	20	6000	24.21"L x 1.96"W x 4.33"D	119	10	1,100
50	JNTBU-430	2	605	JNBR-4R8KW32	2	32	4800	21.1"L x 1.96"W x 4.33"D	119	10	900
60	JNTBU-430	2	605	JNBR-4R8KW27R2	2	27.2	4800	21.1"L x 1.96"W x 4.33"D	117	10	900
75	JNTBU-430	2	605	JNBR-6KW20	2	20	6000	24.21"L x 1.96"W x 4.33"D	126	10	1,100
100	JNTBU-430	3	605	JNBR-6KW20	3	20	6000	24.21"L x 1.96"W x 4.33"D	139	10	1,100
125	JNTBU-430	3	605	JNBR-6KW20	3	20	6000	24.21"L x 1.96"W x 4.33"D	115	10	1,100
150	JNTBU-430	4	605	JNBR-6KW20	4	20	6000	24.21"L x 1.96"W x 4.33"D	125	10	1,100
200	JNTBU-430	5	605	JNBR-6KW20	5	20	6000	24.21"L x 1.96"W x 4.33"D	99	10	1,100

Notes:

X Transistor Built-in for all A510 drives at these ratings

** Please consult factory when applying braking capabilities.
Please contact factory for external brakes, external braking transistors, and braking capabilities on 575V/ 690V products

‡ Price is for the quantity of one (1) unit

E510 NEMA 4, 4X/12

INDOOR/ MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

A versatile AC Drive that can control today's demanding motor driven applications, this highly flexible drive has multiple control modes and built-in PLC functionality.

APPLICATIONS:

- Mixers
- Conveyors
- Packaging Machines
- Machine Tools
- Fans
- Pumps (Centrifugal, Positive Displacement, Metering, etc.)
- Extrusion and Injection Molding
- Crushers/ Grinders
- Compressors

FEATURES:

- Control Modes for V/F, and Sensorless Vector
- Simple PLC Function Built-in
- Advanced Regenerative Load Handling Capability
- .5 to 20 HP (CT), 230V, 50/ 60Hz, 3-Phase
- 1 to 25 HP (CT), 460V, 50/ 60Hz, 3-Phase
- Conformal Coating on PC Boards
- LED Keypad with 5 Digits
- Flexible Input/ Output Configurations that Accept Normally Open or Normally Closed Signals
- 0 to 599 Hz Speed Range
- PID Control
- Diagnostics Registers for Troubleshooting
- Built-in Modbus Protocol via (RJ45 Interface)
- Dedicated Pulse Follower Signal
- UL, cUL, and CE Approved

E510 NEMA 4, 4X/12 WITH DISCONNECT SWITCH

INDOOR/ MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

230V 1-Phase Input/ 3-Phase Output

MODEL NO.	CONSTANT TORQUE		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	HP	DRIVE AMPS	HEIGHT	WIDTH	DEPTH		
E510-2P5-H1FN4S-U	0.5	2.6	9.79	5.94	7.87	6	665
E510-201-H1FN4S-U	1	4.5	9.79	5.94	7.87	6	700
E510-202-H1FN4S-U	2	7.5	13.19	7.80	9.26	13	899
E510-203-H1FN4S-U	3	10.5	13.19	7.80	9.26	13	1,050

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	CONSTANT TORQUE		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	HP	DRIVE AMPS	HEIGHT	WIDTH	DEPTH		
E510-401-H3FN4S-U	1.0	2.3	9.79	5.94	7.87	6	840
E510-402-H3FN4S-U	2	3.8	9.79	5.94	7.87	6	905
E510-403-H3FN4S-U	3	5.2	13.19	7.80	9.26	13	1,080
E510-405-H3FN4S-U	5	8.8	13.19	7.80	9.26	13	1,350
E510-408-H3FN4S-U	7.5	13	18.11	8.77	10.37	28	1,820
E510-410-H3FN4S-U	10	17.5	18.11	8.77	10.37	28	1,965
E510-415-H3FN4S-U	15	25	18.11	8.77	10.37	28	2,320

E510 NEMA 4, 4X/12 WITHOUT DISCONNECT SWITCH

INDOOR, MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

230V 3-Phase Input/ 3-Phase Output

MODEL NO.	CONSTANT TORQUE		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	HP	DRIVE AMPS	HEIGHT	WIDTH	DEPTH		
*E510-2P5-HN4R-U	0.5	2.6	9.79	5.94	7.87	6	650
*E510-201-HN4R-U	1	4	9.79	5.94	7.87	6	690
*E510-202-HN4R-U	2	8	13.19	7.80	9.26	13	860
*E510-203-HN4R-U	3	11	13.19	7.80	9.26	13	1,025
E510-205-H3N4-U	5	18	13.19	7.80	8.60	13	1,387
E510-208-H3N4-U	8	26	18.11	8.77	9.71	28	1,555
E510-210-H3N4-U	10	35	18.11	8.77	9.71	28	1,860
E510-215-H3N4-U	15	48.0	18.11	8.77	9.71	28	2,310
E510-220-H3N4-U	20	64.0	18.11	8.77	9.71	28	2,420

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	CONSTANT TORQUE		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	HP	DRIVE AMPS	HEIGHT	WIDTH	DEPTH		
E510-401-H3N4-U	1	2.3	9.79	5.94	7.20	6	830
E510-402-H3N4-U	2	3.8	9.79	5.94	7.20	6	885
E510-403-H3N4-U	3	5.2	13.19	7.80	8.60	13	1,050
E510-405-H3N4-U	5	8.8	13.19	7.80	8.60	13	1,275
E510-408-H3N4-U	7.5	13	18.11	8.77	9.71	28	1,700
E510-410-H3N4-U	10	17.5	18.11	8.77	9.71	28	1,890
E510-415-H3N4-U	15	25	18.11	8.77	9.71	28	2,075
E510-420-H3N4-U	20	32	18.11	8.77	9.71	28	2,563
E510-425-H3N4-U	25	40	18.11	8.77	9.71	28	2,665

***Can Supply Either Single or Three Phase 230V Input. Also includes speed pot mounted on front cover.**

E510 OPTIONS

MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

Options

PART NUMBER	DESCRIPTION	LIST PRICE ($)
JN5-CM-PDP	PROFIBUS Communication Interface Module	350
JN5-CM-USB	USB Cable to Connect PC	80
JN5-CU	Copy Module	95

E510 NEMA 4, 4X/12 BRAKE MODULES AND RESISTORS

MEDIUM DUTY

Effective 03-24-17
Supercedes 06-14-15

All brake modules and resistors are chassis (not in an enclosure)

230V 3-Phase

AC DRIVE HP RATING CONSTANT TORQUE	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NO.	QTY USED	LIST PRICE ($)	MODEL NO.	QTY USED	RESISTANCE OHMS	WATTS	ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($)
.5-1	X	-	-	JNBR-150W200	1	200	150	9.88"L x 1.10"W x 2.36"D	119	10	30
2	X	-	-	JNBR-150W100	1	100	150	9.88"L x 1.10"W x 2.36"D	119	10	35
3	X	-	-	JNBR-260W70	1	70	260	10.79"L x 1.34"W x 3.07"D	115	10	50
5	X	-	-	JNBR-390W40	1	40	390	10.79"L x 1.34"W x 3.07"D	119	10	70
7.5	X	-	-	JNBR-520W30	1	30	520	15.7"L x 1.57"W x 3.94"D	108	10	125
10	X	-	-	JNBR-780W20	1	20	780	15.7"L x 1.57"W x 3.94"D	119	10	150
15	X	-	-	JNBR-2R4KW13R6	1	13.6	2400	21.1"L x 1.96"W x 4.33"D	117	10	450
20	X	-	-	JNBR-3KW10	1	10	3000	24.21"L x 1.96"W x 4.33"D	119	10	575

460V 3-Phase

AC DRIVE HP RATING CONSTANT TORQUE	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NO.	QTY USED	LIST PRICE ($)	MODEL NO.	QTY USED	RESISTANCE OHMS	WATTS	ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($)
1	X	-	-	JNBR-150W750	1	750	150	9.88"L x 1.10"W x 2.36"D	126	10	30
2	X	-	-	JNBR-150W400	1	400	150	9.88"L x 1.10"W x 2.36"D	119	10	35
3	X	-	-	JNBR-260W250	1	250	260	10.79"L x 1.34"W x 3.07"D	126	10	50
5	X	-	-	JNBR-400W150	1	150	400	10.79"L x 1.34"W x 3.07"D	126	10	75
7.5	X	-	-	JNBR-600W130	1	130	600	15.7"L x 1.57"W x 3.94"D	102	10	125
10	X	-	-	JNBR-800W100	1	100	800	24.21"L x 1.96"W x 4.33"D	99	10	150
15	X	-	-	JNBR-1R6KW50	1	50	1600	24.21"L x 1.96"W x 4.33"D	126	10	300
20	X	-	-	JNBR-1R5KW40	1	40	1500	24.21"L x 1.96"W x 4.33"D	119	10	300
25	JNTBU-430	1	605	JNBR-4R8KW32	1	32	4800	21.1"L x 1.96"W x 4.33"D	119	10	900

Notes:
X = Transistor Built-in for all E510 drives at these ratings

F510

FAN & PUMP DUTY

Effective 03-24-17
Supercedes 06-14-15

A versatile AC Drive that is easily configured and handles almost any fan, blower, or centrifugal pump application.

APPLICATIONS:

- Fans
- Blowers
- Water and Wastewater Industries
- Centrifugal Pumps
- HVAC Industries
- Irrigation

FEATURES:

- Control Modes for V/F, Sensorless Vector, Sensorless Vector with Permanent Magnet Motor
- Built-in PLC as Standard
- Operation and Engineering Units Standard
- LCD Keypad with Remote Mounting Capabilities
- PID Control with Advanced Diagnostics and Sleep Mode
- 1 to 150 HP (Variable Torque), 230V, 50/ 60Hz, 3-Phase
- 1 to 250 HP (Variable Torque), 460V, 50/ 60Hz, 3-Phase
- Plenum Rated
- Diagnostics Registers for Troubleshooting
- Flexible Input/ Output Configurations that Incorporate Normally Open or Normally Closed Signals
- 0 to 400 Hz Speed Range
- Built-in Modbus, BACNet, and Metasys (N2) Protocols via (RS485 or RJ45 Interface)
- Enhanced Design for Smoother and Quieter Motor Operation
- Real Time Clock (Standard on Models with LCD Keypad)
- PTC Input Available for Direct Thermal Protection of the Motor
- Thermal Management on the Heat Sink for Overtemperature Fault Avoidance
- Master-Follower Control Mode Built-in
- EMI Protection that Complies with EM61800-3 with Optional Filter
- EMS Protection that Follows EN61800-3
- UL, cUL, and CE Approved

F510

FAN & PUMP

Effective 03-24-17
Supercedes 06-14-15

230V 3-Phase

MODEL NO.	HP DRIVE AMPS		DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	VARIABLE TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH		
‡*F510-2001C-U	1	5.0	9.61	5.12	5.91	6	580
‡*F510-2002-C-U	2	7.5	9.61	5.12	5.91	6	615
‡*F510-2003-C-U	3	10.6	9.61	5.12	5.91	6	650
*F510-2005-C3-U	5	14.5	12.4	5.51	6.97	8.4	795
*F510-2008-C3-U	7.5	21.0	12.4	5.51	6.97	8.4	810
*F510-2010-C3-U	10	30.0	11.81	8.27	8.46	13.6	1,150
*F510-2015-C3-U	15	40.0	11.81	8.27	8.46	13.6	1,275
*F510-2020-C3-U	20	56.0	14.17	10.43	8.86	22	1,600
*F510-2025-C3-U	25	69.0	14.17	10.43	8.86	22	2,000
*F510-2030-C3-U	30	79.0	14.17	10.43	8.86	22	2,570
F510-2040-C3-U	40	110.0	20.67	11.18	9.92	66.1	3,500
F510-2050-C3-U	50	138.0	20.67	11.18	9.92	66.1	4,100
**F510-2060-C3-U	60	169.0	22.83	13.54	11.81	89.3	5,838
**F510-2075-C3-U	75	200.0	22.83	13.54	11.81	89.3	6,412
**F510-2100-C3-U	100	250.0	31.10	18.08	12.78	162.8	8,400
**F510-2125-C3-U	125	312.0	31.10	18.08	12.78	162.8	10,500
**F510-2150-C3-U	150	400.0	39.37	27.16	16.14	405	21,000

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP	DRIVE AMPS	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	VARIABLE TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH		
*F510-4001-C3-U	1	3.4	9.61	5.12	5.91	6	600
*F510-4002-C3-U	2	4.1	9.61	5.12	5.91	6	635
*F510-4003-C3-U	3	5.4	9.61	5.12	5.91	6	640
*F510-4005-C3-U	5	9.2	12.4	5.51	6.97	8.8	775
*F510-4008-C3-U	7.5	11.1	12.4	5.51	6.97	8.8	854
*F510-4010-C3-U	10	17.5	12.4	5.51	6.97	8.8	1,250
*F510-4015-C3-U	15	23.0	11.81	8.27	8.46	13.6	1,400
*F510-4020-C3-U	20	31.0	11.81	8.27	8.46	13.6	1,715
*F510-4025-C3-U	25	38.0	14.17	10.43	8.86	22	2,018
*F510-4030-C3-U	30	44.0	14.17	10.43	8.86	22	2,510
*F510-4040-C3-U	40	54.0	14.17	10.43	8.86	22	2,700
F510-4050-C3-U	50	72.0	20.67	11.18	9.92	66.1	3,445
F510-4060-C3-U	60	88.0	20.67	11.18	9.92	66.1	4,300
F510-4075-C3-U	75	103.0	20.67	11.18	9.92	66.1	4,725
**F510-4100-C3-U	100	145.0	22.83	13.7	11.81	89.3	5,990
**F510-4125-C3-U	125	165.0	22.83	13.7	11.81	89.3	8,500
**F510-4150-C3-U	150	208.0	31.10	18.08	12.78	163.1	11,778
**F510-4215-C3-U	200	250.0	31.10	18.08	12.78	163.1	15,449
**F510-4250-C3-U	250	328.0	31.10	18.08	12.78	163.1	16,590

Notes:

* Includes Dynamic Braking Transistor
** Includes DC Bus Link Reactor
‡ Operates on single or three phase inputs at specified rating
(1) 1-50 HP NEMA 1 230V, 60 HP & above protectected chasis, 1-75 HP NEMA 1 460V,100 HP and above protected chassis

F510 PERIPHERALS

FAN & PUMP

Effective 03-24-17
Supercedes 06-14-15

Options:

PART NUMBER	DESCRIPTION	LIST PRICE ($)
JN5-CB-01M	Remote Wire for Keypad (1M)	25
JN5-CB-02M	Remote Wire for Keypad (2M)	27
JN5-CB-03M	Remote Wire for Keypad (3M)	30
JN5-CB-05M	Remote Wire for Keypad (5M)	35
JN5-CM-PDP	PROFIBUS Communication Interface Module	350
JN5-CM-USB	USB Cable to Connect PC	80
JN5-CU	Copy Module	95
JN5-NK-A06	F510 Frame 6 NEMA1 KIT 60, 75HP 230V; 100,125HP 460V	475
JN5-NK-A07	F510 Frame 7 NEMA1 KIT 100,125HP 230V; 150,200,250HP 460V	690
JN5-NK-A08	F510 Frame 8 NEMA1 KIT 150HP 230V	710
JN5-OP-F01	LED Operator	75
4KA41S1139T01	LCD Operator Replacement*	135
JN5-OP-F03	IP 20 LCD HOA Operator	25
JN5-OP-A03	Blank Operator	25
JN5-IO-8DO	1 TO 8 Pump Card	150
JNEP-16-F	Remote Analog Operator	120

Notes:

*LCD Operator is standard on all F510 models

F510 BRAKE MODULES AND RESISTORS

Effective 03-24-17
Supercedes 06-14-15

All brake modules and resistors are chassis (not in an enclosure)

230V 3-Phase *

AC DRIVE HP RATING	BRAKING TRANSISTOR			BRAKING RESISTOR						
	MODEL NO.	QTY USED	LIST PRICE ($) ‡	MODEL NO.	QTY USED	RESISTANCE OHMS	WATTS	ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($) ‡
1	X	-	-	JNBR-150W200	1	200	150	9.88"L x 1.10"W x 2.36"D	119	10	30
2	X	-	-	JNBR-150W100	1	100	150	9.88"L x 1.10"W x 2.36"D	119	10	35
3	X	-	-	JNBR-260W70	1	70	260	10.79"L x 1.34"W x 3.07"D	115	10	50
5	X	-	-	JNBR-390W40	1	40	390	10.79"L x 1.34"W x 3.07"D	126	10	70
7.5	X	-	-	JNBR-520W30	1	30	520	15.7"L x 1.57"W x 3.94"D	114	10	125
10	X	-	-	JNBR-780W20	1	20	780	15.7"L x 1.57"W x 3.94"D	126	10	150
15	X	-	-	JNBR-2R4KW13R6	1	13.6	2400	21.1"L x 1.96"W x 4.33"D	124	10	450
20	X	-	-	JNBR-3KW10	1	10	3000	24.21"L x 1.96"W x 4.33"D	126	10	575
25	X	-	-	JNBR-4R8KW8	1	8	4800	21.1"L x 1.96"W x 4.33"D	126	10	940
30	X	-	-	JNBR-4R8KW6R8	1	6.8	4800	21.1"L x 1.96"W x 4.33"D	124	10	955
40	JNTBU-230	2	475	JNBR-3KW10	2	10	3000	24.21"L x 1.96"W x 4.33"D	126	10	575
50	JNTBU-230	2	475	JNBR-3KW10	2	10	3000	24.21"L x 1.96"W x 4.33"D	105	10	575
60	JNTBU-230	2	475	JNBR-4R8KW6R8	2	6.8	4800	21.1"L x 1.96"W x 4.33"D	124	10	955
75	JNTBU-230	3	475	JNBR-4R8KW6R8	3	6.8	4800	21.1"L x 1.96"W x 4.33"D	124	10	955
100	JNTBU-230	3	475	JNBR-4R8KW6R8	3	8	4800	21.1"L x 1.96"W x 4.33"D	116	10	955
125	JNTBU-230	4	475	JNBR-4R8KW6R8	4	6.8	4800	21.1"L x 1.96"W x 4.33"D	119	10	955
150	JNTBU-230	5	475	JNBR-4R8KW6R8	5	6.8	4800	21.1"L x 1.96"W x 4.33"D	108	10	955

460V 3-Phase *

AC DRIVE HP RATING	BRAKING TRANSISTOR			BRAKING RESISTOR						
	MODEL NO.	QTY USED	LIST PRICE ($) ‡	MODEL NO.	QTY USED	RESISTANCE OHMS	WATTS	ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	LIST PRICE ($) ‡
1	X	-	-	JNBR-150W750	1	750	150	9.88"L x 1.10"W x 2.36"D	126	10	30
2	X	-	-	JNBR-150W400	1	400	150	9.88"L x 1.10"W x 2.36"D	119	10	35
3	X	-	-	JNBR-260W250	1	250	260	10.79"L x 1.34"W x 3.07"D	126	10	50
5	X	-	-	JNBR-400W150	1	150	400	10.79"L x 1.34"W x 3.07"D	133	10	75
7.5	X	-	-	JNBR-600W130	1	130	600	15.7"L x 1.57"W x 3.94"D	107	10	125
10	X	-	-	JNBR-800W100	1	100	800	24.21"L x 1.96"W x 4.33"D	105	10	150
15	X	-	-	JNBR-1R6KW50	1	50	1600	24.21"L x 1.96"W x 4.33"D	133	10	300
20	X	-	-	JNBR-1R5KW40	1	40	1500	24.21"L x 1.96"W x 4.33"D	126	10	300
25	X	-	-	JNBR-4R8KW32	1	32	4800	21.1"L x 1.96"W x 4.33"D	126	10	900
30	X	-	-	JNBR-4R8KW27R2	1	27.2	4800	21.1"L x 1.96"W x 4.33"D	124	10	900
40	X	-	-	JNBR-6KW20	1	20	6000	24.21"L x 1.96"W x 4.33"D	124	10	1,100
50	JNTBU-430	2	783	JNBR-4R8KW32	2	32	4800	21.1"L x 1.96"W x 4.33"D	126	10	900
60	JNTBU-430	2	783	JNBR-4R8KW27R2	2	27.2	4800	21.1"L x 1.96"W x 4.33"D	124	10	900
75	JNTBU-430	2	605	JNBR-6KW20	2	20	6000	24.21"L x 1.96"W x 4.33"D	133	10	1,100
100	JNTBU-430	3	783	JNBR-4R8KW27R2	3	27.2	4800	21.1"L x 1.96"W x 4.33"D	113	10	900
125	JNTBU-430	3	605	JNBR-6KW20	3	20	6000	24.21"L x 1.96"W x 4.33"D	121	10	1,100
150	JNTBU-430	3	605	JNBR-6KW20	3	20	6000	24.21"L x 1.96"W x 4.33"D	104	10	1,100
200	JNTBU-430	6	783	JNBR-4R8KW27R2	6	27.2	4800	21.1"L x 1.96"W x 4.33"D	107	10	900
250	JNTBU-430	5	783	JNBR-6KW20	5	20	6000	24.21"L x 1.96"W x 4.33"D	105	10	1,100

Notes:

X Transistor Built-in for all F510 drives at these ratings

‡ Price is for the quantity of one (1) unit

EQ7

MULTIPLE DUTY

Effective 03-24-17
Supercedes 06-14-15

A rugged and versatile drive with a wide range of ratings ideal for both simpler and more demanding applications.

APPLICATIONS:

- Crushers, Grinders
- Compressors
- Reciprocating Machinery
- Dynamometers
- Water and Wastewater Industries
- Injection Molding
- Centrifugal Pumps
- Positive Displacement Pumps
- High Torque Mixing
- Material Handling
- Extruders
- Chillers and Refrigeration
- Fans

FEATURES:

- Designed for Constant / Variable Torque Applications
- V/F, Dynamic Torque, Sensorless and Sensor (Encoder Feedback) Vector mode
- Backlit LCD / English Language with LED Monitor Display / Selections for 6 Languages
- Keypad May be Used as Copy Unit / Remote Mounting Options
- Extensive Diagnostic Information on LCD Display
- State-of-the-Art Torque Limit and Control Features
- PID Control with Sleep Mode Function
- Provided with low-noise control power supply
- 1 to 125 HP @ 230V (Constant Torque)
- 1 to 150 HP @ 230V (Variable Torque)
- 1 to 900 HP @ 460V (Constant Torque)
- 1 to 1000 HP @ 460V (Variable Torque)
- Extensive I/O Capabilities
- Encoder Feedback Option for Applications Requiring Precise Speed Control
- Conformal Coating on PC Boards, Tin Plating on DC Bus
- External Mounting of Heatsink When Installed in Control Panels (>40HP)
- All Units are IP20 at 40hp and below and IP00 at ratings >40HP (NEMA 1 Option Kits Available)
- Built-in RS485 Protocol (Modbus)/ Options Profbus-DP,DeviceNet, EtherNet, BACNet, ProfiNET
- DC Link Chokes Included in 100 HP and Above Units are Shipped Loose as Chassis Item Inside Crate
- uL and CE Approved

EQ7

MULTIPLE DUTY

Effective 03-24-17
Supercedes 06-14-15

230V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP		DRIVE AMPS		APPROXIMATE DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	HEIGHT	WIDTH	DEPTH		
EQ7-2001-C ‡	1	1	5	5	10.24	4.33	5.71	4.4	850
EQ7-2002-C ‡	2	2	8	8	10.24	5.91	5.71	6.2	950
EQ7-2003-C ‡	3	3	11	11	10.24	5.91	5.71	6.6	1,050
EQ7-2005-C ‡	5	5	18	18	10.24	5.91	5.71	6.6	1,190
EQ7-2007-C ‡	7.5	7.5	27	27	10.24	8.66	7.68	14.3	1,510
EQ7-2010-C ‡	10	7.5	29	27	10.24	8.66	7.68	14.3	1,680
EQ7-2015-C ‡	15	10	42	37	10.24	8.66	7.68	14.3	1,780
EQ7-2020-C ‡	20	15	55	49	10.24	8.66	7.68	12.8	2,130
EQ7-2025-C ‡	25	20	68	63	15.75	9.84	7.68	20.9	2,470
EQ7-2030-C ‡	30	25	80	76	15.75	9.84	7.68	20.9	3,100
EQ7-2040-C ‡	40	30	107	90	15.75	12.6	7.68	22.0	4,700
EQ7-2050-C	50	40	146	119	21.65	13.98	10.04	55.1	5,530
EQ7-2060-C	60	50	180	146	24.21	13.98	10.63	70.6	6,500
EQ7-2075-C	75	60	215	180	29.13	13.98	10.63	92.6	7,740
EQ7-2100-C	100	75	283	215	29.13	13.98	10.63	94.8	9,100
EQ7-2125-C	125	100	346	283	29.53	20.87	11.22	137.0	12,500
EQ7-2150-C	150	125	415	346	34.65	24.80	14.17	231.0	16,700

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP		DRIVE AMPS		APPROXIMATE DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE ($)
	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	HEIGHT	WIDTH	DEPTH		
EQ7-4001-C ‡	1	1	2.5	2.5	10.24	4.33	5.71	4.4	825
EQ7-4002-C ‡	2	2	4.0	4.0	10.24	5.91	5.71	5.7	890
EQ7-4003-C ‡	3	3	5.5	5.5	10.24	5.91	5.71	6.0	1,100
EQ7-4005-C ‡	5	5	9.0	9.0	10.24	5.91	5.71	6.6	1,240
EQ7-4007-C ‡	7.5	7.5	13.5	13.5	10.24	8.66	7.68	14.3	1,650
EQ7-4010-C ‡	10	7.5	16.5	13.5	10.24	8.66	7.68	14.3	1,730
EQ7-4015-C ‡	15	10	23	18.5	10.24	8.66	7.68	14.3	1,930
EQ7-4020-C ‡	20	15	30.5	24.5	10.24	8.66	7.68	12.8	2,220
EQ7-4025-C ‡	25	20	37	32	15.75	9.84	7.68	20.9	2,490
EQ7-4030-C ‡	30	25	45	39	15.75	9.84	7.68	20.9	2,910
EQ7-4040-C ‡	40	30	60	45	15.75	9.84	7.68	22.0	3,790
EQ7-4050-C	50	40	75	60	21.65	12.6	10.04	55.1	4,930
EQ7-4060-C	60	50	91	75	21.65	12.6	10.04	57.3	6,100
EQ7-4075-C	75	60	112	91	24.21	13.98	10.63	68.3	6,450
EQ7-4100-C	100	75	150	112	26.57	13.98	10.63	72.8	8,200
EQ7-4125-C	125	100	176	150	29.13	13.98	10.63	93.0	10,800
EQ7-4150-C*	150	125/150	210	210**	29.13	20.87	12.4	137.0	14,540
EQ7-4200-C*	200	200	253	253**	29.13	20.87	12.4	141.0	15,500
EQ7-4250-C*	250	250	304	304**	39.37	20.87	14.17	207.0	18,900
EQ7-4300-C*	300	300	377	377**	39.37	20.87	14.17	216.0	20,200
EQ7-4350-C*	350	350	415	415**	39.37	26.77	14.17	284.0	24,300
EQ7-4450-C*	400/450	350	520	468**	39.37	26.77	14.17	309.0	25,500
EQ7-4500-C*	500	400/450	650	585**	55.12	26.77	17.32	540.0	48,500
EQ7-4600-C*	600	500	740	650**	55.12	26.77	17.32	540.0	50,500
EQ7-4700-C*	700	600	840	740**	55.12	34.68	17.32	805.0	61,500
EQ7-4800-C*	800	700	960	840**	55.12	34.68	17.32	805.0	63,950
EQ7-4900-C	900	800	1170	960	61.02	39.37	19.69	1170.0	108,000
EQ7-41000-C	1000	900	1370	1170	61.02	39.37	19.69	1170.0	117,000

Notes:

* Marked items are suitable for constant torque V/F control.

** Please consult factory for vector control full load amps for these models.

‡ Dynamic braking transistor built-in

MULTIPLE DUTY

Effective 03-24-17
Supercedes 06-14-15

OPTION TYPE	MODEL	DESCRIPTION	LIST PRICE ($)
NEMA1 Kit	NEMA1-0.75G1-24	1 HP 230V,460V	50
	NEMA1-3.75G1-24	2,3,5 HP 230V,460V	65
	NEMA1-11G1-24	7.5,10,15,20 HP 230V,460V	110
	NEMA1-22G1-24	25,30 HP 230V, 25,30,40 HP 460V	130
	NEMA1-22G1-2	40 HP 230V	150
	NEMA1-37G1-24	50 HP, 230V,50,60 HP 460V	800
	NEMA1-75G1-24	60,75,100 HP 230V, 75,100,125 HP 460V	1,050
	NEMA1-75G1-2	125 HP 230V	1,615
	NEMA1-110G1-4	150,200 HP 460V	1,400
	NEMA1-160G1-4	250,300 HP 460V	1,725
	NEMA1-220G1-24	150 HP 230V, 350,450 HP 460V	1,800
	NEMA1-315G1-4	500,600 HP 460V	1,100
	NEMA1-400G1-4	700,800 HP 460V	1,275
	NEMA1-630G1-4	900,1000 HP 460V	2,100
DC Bus Choke UL Type 1 Enclosure	E012	100,125,150 HP 230V,100 HP 460V	625
	E013	125 - 350 HP 460V	1,150
	E014	450 - 700 HP 460V	2,400
	E015	800 - 1000 HP 460V	3,800
Braking Unit	BU37-2C	230V 50 HP - 60 HP	1,675
	BU55-2C	230V 75 HP - 100 HP	2,200
	BU90-2C	230V 125 - 150 HP	3,040
	BU37-4C	460V 50 HP - 60 HP	1,726
	BU55-4C	460V 75 HP - 100 HP	2,325
	BU90-4C	460V 125 HP - 150 HP	3,040
	BU132-4C	460V 200 HP - 250 HP	4,175
	BU220-4C	460V 300 HP - 450 HP CONSULT FACTORY for applications above 450 HP	6,075
Braking Resistor	DB0.75-2C	230V 1 HP and below	100
	DB2.2-2C	230V 2 HP - 3 HP	125
	DB3.7-2C	230V 5 HP	175
	DB5.5-2C	230V 7.5 HP - 10 HP	265
	DB7.5-2C	230V 15 HP	307
	DB11-2C	230V 20 HP	388
	DB15-2C	230V 25 HP	555
	DB22-2C	230V 30 HP - 40 HP	915
	DB30-2C	230V 50 HP	1,432
	DB37-2C	230V 60 HP	1,850

Notes:

(1) HP indication of Braking Unit & Braking Resistor are for VT HP of dual rating drives. Conditions are the same as drive.

EQ7 PERIPHERALS

MULTIPLE DUTY

Effective 03-24-17
Supercedes 06-14-15

OPTION TYPE	MODEL	DESCRIPTION	LIST PRICE ($)
Braking Resistor	DB45-2C	230V 75HP	2,265
	DB55-2C	230V 100HP	2,450
	DB75-2C	230V 125HP	3,800
	DB90-2C	230V 150HP	4,200
	DB0.75-4C	460V 1HP	129
	DB2.2-4C	460V 2HP - 3HP	134
	DB3.7-4C	460V 7.5HP	199
	DB5.5-4C	460V 10HP	263
	DB7.5-4C	460V 15HP	308
	DB11-4C	460V 20HP	429
	DB15-4C	460V 25HP	590
	DB22-4C	460V 30HP - 40HP	978
	DB30-4C	460V 50HP	1,163
	DB37-4C	460V 60HP	1,873
	DB45-4C	460V 75HP	2,156
	DB55-4C	460V 100HP	1,854
	DB75-4C	460V 125HP	3,290
	DB110-4C	460V 150HP - 200HP	3,755
	DB132-4C	460V 250HP	4,500
	DB160-4C	460V 300HP	5,425
	DB200-4C	460V 350HP	5,900
	DB220-4C	460V 400HP - 450HP	7,540
Options and Accessories	OPC-ETH	EtherNet card	500
	OPC-G1-DEV	DeviceNet card	1,350
	OPC-G1-CCL	CC-link card	1,200
	OPC-G1-PDP2	PROFIBUS-DP card	1,500
	OPC-PRT2	PROFINET card	1,000
	OPC-G1-COP	CANopen	1,800
	OPC-G1-TL	T-link interface card	1,105
	OPC-G 1-PG	PG interface card (12V)	190
	OPC-G1-PG2	PG interface card (5V)	225
	OPC-G1-PG22	PG Synchronization card	470
	OPC-G1-DI	Digital input interface card	495
	OPC-G1-DO	Digital output interface card	495
	OPC-G1-AIO	Analog input/output interface card	500
	OPC-G1 -RY	Relay communication card	140
	TP-G1W-J1	Standard Keypad (LCD)	450
	TP-E1 U	Keypad (with USB Port) LED Only	130
Keypad Extension Cable	EQ7-3S	3 ft, Cable	60
	EQ7-7S	7 ft. Cable	65

Notes:

(1) The HP indication of Braking Units and Braking Resistors are for VT HP of dual rating drives. Conditions are the same as drive.

LINE REACTORS

230V

Effective 03-24-17
Supercedes 06-14-15

Low priced and easy to install, Line Reactors provide input transient protection from harmonic distortion. When applying a reactor between the drive output and the motor, please contact the Factory.

3% IMPEDANCE, 230V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (lbs.)	LIST PRICE	MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (lbs.)	LIST PRICE ($)
1	5.5	KDRULA25L	4.00 x 4.18 x 3.75	4	161	KDRULA25LE01	12.25 x 12.50 x 6.75	14.5	432
1.5	8	KDRULA26L	4.00 x 4.18 x 3.75	4	170	KDRULA26LE01	12.25 x 12.50 x 6.75	14.5	440
2	10	KDRULA27L	4.00 x 4.18 x 3.75	4	172	KDRULA27LE01	12.25 x 12.50 x 6.75	14.5	445
3	12	KDRULA28L	4.00 x 4.18 x 3.75	4	195	KDRULA28LE01	12.25 x 12.50 x 6.75	14.5	463
5	19	KDRULB22L	5.00 x 6.00 x 4.00	8	275	KDRULB22LE01	12.25 x 12.50 x 6.75	18.5	550
7.5	25	KDRULB23L	5.00 x 6.00 x 4.00	8	296	KDRULB23LE01	12.25 x 12.50 x 6.75	18.5	571
10	34	KDRULD25L	5.75 x 7.20 x 4.25	12	309	KDRULD25LE01	12.25 x 12.50 x 6.75	22.5	588
15	48	KDRULD24L	5.75 x 7.20 x 4.25	12	328	KDRULD24LE01	12.25 x 12.50 x 6.75	22.5	595
20	62	KDRULD26L	5.75 x 7.20 x 4.25	12	350	KDRULD26LE01	12.25 x 12.50 x 6.75	22.5	617
25	80	KDRULC22L	5.75 x 7.20 x 5.00	15	530	KDRULC22LE01	12.25 x 12.50 x 6.75	25.5	780
30	100	KDRULF24L	7.00 x 9.00 x 6.00	33	565	KDRULF24LE01	19.13 x 15.43 x 15.43	67	1,050
40	118	KDRULF25L	7.00 x 9.00 x 6.00	33	790	KDRULF25LE01	19.13 x 15.43 x 15.43	67	1,275
50	152	KDRULF26L	7.00 x 9.00 x 6.00	36	920	KDRULF26LE01	19.13 x 15.43 x 15.43	67	1,400
60	180	KDRULH22L	9.00 x 11.00 x 7.00	51	1,060	KDRULH22LE01	22.12 x 20.43 x 24.37	113	1,950
75	211	KDRULI23L	9.00 x 11.00 x 7.00	56	1,092	KDRULI23LE01	22.12 x 20.43 x 24.37	117	2,000
100	280	KDRULI24L	9.00 x 11.00 x 7.00	56	1,200	KDRULI24LE01	22.12 x 20.43 x 24.37	117	2,100
125	377	KDRULG22L	9.00 x 11.00 x 9.00	74	1,675	KDRULG22LE01	22.12 x 20.43 x 24.37	132	2,600
150	420	KDRULJ23L	9.00 x 11.00 x 11.50	80	1,850	KDRULJ23LE01	22.12 x 20.43 x 24.37	137	2,780

5% IMPEDANCE, 230V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (lbs.)	LIST PRICE	MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (lbs.)	LIST PRICE ($)
1	5.5	KDRULA25H	4.00 x 4.18 x 3.75	4	170	KDRULA25HE01	12.25 x 12.50 x 6.75	14.5	460
1.5	8	KDRULA27H	4.00 x 4.18 x 3.75	4	186	KDRULA27HE01	12.25 x 12.50 x 6.75	14.5	480
2	10	KDRULA26H	4.00 x 4.18 x 3.75	4	191	KDRULA26HE01	12.25 x 12.50 x 6.75	14.5	485
3	12	KDRULA28H	4.00 x 4.18 x 3.75	4	207	KDRULA28HE01	12.25 x 12.50 x 6.75	14.5	493
5	19	KDRULB25H	5.00 x 6.00 x 4.00	8	280	KDRULB25HE01	12.25 x 12.50 x 6.75	18.5	554
7.5	25	KDRULB26H	5.00 x 6.00 x 4.00	8	310	KDRULB26HE01	12.25 x 12.50 x 6.75	18.5	599
10	34	KDRULD21H	5.75 x 7.20 x 4.25	12	317	KDRULD21HE01	12.25 x 12.50 x 6.75	22.5	602
15	48	KDRULD22H	5.75 x 7.20 x 4.25	12	416	KDRULD22HE01	12.25 x 12.50 x 6.75	22.5	695
20	62	KDRULC22H	5.75 x 7.20 x 5.00	15	471	KDRULC22HE01	12.25 x 12.50 x 6.75	25.5	770
25	80	KDRULF28H	7.00 x 9.00 x 6.00	30	567	KDRULF28HE01	19.13 x 15.43 x 15.43	67	1,120
30	100	KDRULF25H	7.00 x 9.00 x 6.00	33	645	KDRULF25HE01	19.13 x 15.43 x 15.43	67	1,225
40	118	KDRULF26H	7.00 x 9.00 x 6.00	33	840	KDRULF26HE01	19.13 x 15.43 x 15.43	67	1,390
50	152	KDRULH24H	9.00 x 11.00 x 7.00	40	1,020	KDRULH24HE01	19.13 x 15.43 x 15.43	70	1,550
60	180	KDRULH23H	9.00 x 11.00 x 7.00	51	1,175	KDRULH23HE01	19.13 x 15.43 x 15.43	81	1,975
75	211	KDRULI22H	9.00 x 11.00 x 7.00	56	1,470	KDRULI22HE01	22.12 x 20.43 x 24.37	117	2,450
100	280	KDRULI21H	9.00 x 11.00 x 7.00	56	1,780	KDRULI21HE01	22.12 x 20.43 x 24.37	117	2,750
125	377	KDRULG25H	9.00 x 11.00 x 9.00	74	1,825	KDRULG25HE01	22.12 x 20.43 x 24.37	132	2,825
150	420	KDRULJ22H	9.00 x 11.00 x 9.75	79	1,975	KDRULJ22HE01	22.12 x 20.43 x 24.37	136	2,935

LINE REACTORS

460V

Effective 03-24-17
Supercedes 06-14-15

3% IMPEDANCE, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (lbs.)	LIST PRICE ($)	MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (lbs.)	LIST PRICE ($)
1	2.1	KDRULA8L	4.00 x 4.18 x 3.75	4	146	KDRULA8LE01	12.25 X 12.50 X 6.75	14.5	430
2	6.4	KDRULA1L	4.00 x 4.18 x 3.75	4	154	KDRULA1LE01	12.25 X 12.50 X 6.75	14.5	441
3	6	KDRULA2L	4.00 x 4.18 x 3.75	4	170	KDRULA2LE01	12.25 X 12.50 X 6.75	14.5	460
5	9.6	KDRULA3L	4.00 x 4.18 x 3.75	4	175	KDRULA3LE01	12.25 X 12.50 X 6.75	14.5	468
7.5	14	KDRULA4L	4.00 x 4.18 x 3.75	4	197	KDRULA4LE01	12.25 X 12.50 X 6.75	14.5	481
10	14	KDRULA5L	4.00 x 4.18 x 3.75	5	253	KDRULA5LE01	12.25 X 12.50 X 6.75	14.5	536
15	30	KDRULB2L	5.00 x 6.00 x 4.00	8	290	KDRULB2LE01	12.25 X 12.50 X 6.75	18.5	575
20	30	KDRULB1L	5.00 x 6.00 x 4.00	8	315	KDRULB1LE01	12.25 X 12.50 X 6.75	18.5	600
25	50	KDRULD1L	5.75 x 7.20 x 4.25	10	340	KDRULD1LE01	12.25 X 12.50 X 6.75	20.5	620
30	45	KDRULD2L	5.75 x 7.20 x 4.25	10	420	KDRULD2LE01	12.25 X 12.50 X 6.75	20.5	703
40	55	KDRULC1L	5.75 x 7.20 x 5.00	15	465	KDRULC1LE01	12.25 X 12.50 X 6.75	25.5	746
50	65	KDRULF2L	7.00 x 9.00 x 6.00	25	550	KDRULF2LE01	19.13 X 15.43 X 15.43	67.0	1,124
60	77	KDRULF4L	7.00 x 9.00 x 6.00	25	575	KDRULF4LE01	19.13 X 15.43 X 15.43	67.0	1,140
75	110	KDRULF3L	7.00 x 9.00 x 6.00	33	847	KDRULF3LE01	19.13 X 15.43 X 15.43	67.0	1,415
100	150	KDRULH3L	7.00 x 9.00 x 7.00	46	977	KDRULH3LE01	19.13 X 15.43 X 15.43	78.0	1,540
125	165	KDRULH2L	9.00 x 11.00 x 7.00	46	1,170	KDRULH2LE01	19.13 X 15.43 X 15.43	78.0	1,743
150	185	KDRULH1L	9.00 x 11.00 x 7.00	46	1,355	KDRULH1LE01	22.12 X 20.43 X 24.37	108.0	2,450
200	240	KDRULG3L	9.00 x 11.00 x 8.00	74	1,790	KDRULG3LE01	22.12 X 20.43 X 24.37	131.0	2,783
250	340	KDRULG1L	9.00 x 11.00 x 8.00	74	1,930	KDRULG1LE01	22.12 X 20.43 X 24.37	132.0	2,970
300	370	KDRULG2L	9.00 x 11.00 x 8.00	74	2,010	KDRULG2LE01	22.12 X 20.43 X 24.37	132.0	3,000
350	500	KDRULJ2L	9.00 x 11.00 x 9.00	80	2,330	KDRULJ2LE01	22.12 X 20.43 X 24.37	150.0	3,425
400	520	KDRULJ1L	9.00 x 11.00 x 9.00	80	2,590	KDRULJ1LE01	22.12 X 20.43 X 24.37	150.0	3,600
450	610	KDRULL1L	11.38 x 14.50 x 9.50	120	2,985	KDRULL1LE01	22.12 X 20.43 X 24.37	190.0	3,980
500	610	KDRULL2L	11.38 x 14.50 x 9.50	120	4,350	KDRULL2LE01	22.12 X 20.43 X 24.37	190.0	5,400
600	720	KDRULL3L	11.38 x 14.50 x 9.50	164	5,900	KDRULL3LE01	48.00 X 36.27 X 36.27	748	9,300
700	840	KDRULS1L	11.38 x 15.00 x 13.25	180	6,450	KDRULS1LE01	48.00 X 36.27 X 36.27	872	10,000
800	965	KDRULX2L	18.50 x 21.00 x 18.00	290	9,000	KDRULX2LE01	48.00 X 36.27 X 36.27	997	12,500

Notes:
(1) Contact factory for 900 HP and 1000 HP applications

5% IMPEDANCE, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (lbs.)	LIST PRICE ($)	MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (lbs.)	LIST PRICE ($)
1	2.1	KDRULA8H	4.00 x 4.18 x 3.75	4	170	KDRULA8HE01	12.25 x 12.50 x 6.75	14.5	440
2	6.4	KDRULA1H	4.00 x 4.18 x 3.75	4	175	KDRULA1HE01	12.25 x 12.50 x 6.75	14.5	450
3	6	KDRULA2H	4.00 x 4.18 x 3.75	4	225	KDRULA2HE01	12.25 x 12.50 x 6.75	14.5	500
5	9.6	KDRULA3H	4.00 x 4.18 x 3.75	4	260	KDRULA3HE01	12.25 x 12.50 x 6.75	14.5	535
7.5	14	KDRULA4H	4.00 x 4.18 x 3.75	5	290	KDRULA4HE01	12.25 x 12.50 x 6.75	15.5	573
10	14	KDRULA5H	4.00 x 4.18 x 3.75	5	360	KDRULA5HE01	12.25 x 12.50 x 6.75	15.5	630
15	30	KDRULB2H	5.00 x 6.00 x 4.00	7	370	KDRULB2HE01	12.25 x 12.50 x 6.75	17.5	640
20	30	KDRULC3H	5.75 x 7.20 x 5.00	15	415	KDRULC3HE01	12.25 x 12.50 x 6.75	25.5	680
25	50	KDRULC1H	5.75 x 7.20 x 5.00	15	500	KDRULC1HE01	12.25 x 12.50 x 6.75	25.5	760
30	45	KDRULE2H	5.75 x 7.20 x 5.00	16	570	KDRULE2HE01	12.25 x 12.50 x 6.75	26.5	830
40	55	KDRULF4H	7.00 x 9.00 x 6.00	25	590	KDRULF4HE01	19.13 x 15.43 x 15.43	67.0	1,150
50	65	KDRULF1H	7.00 x 9.00 x 6.00	25	800	KDRULF1HE01	19.13 x 15.43 x 15.43	67.0	1,375
60	77	KDRULF2H	7.00 x 9.00 x 6.00	25	850	KDRULF2HE01	19.13 x 15.43 x 15.43	67.0	1,400
75	110	KDRULH2H	9.00 x 11.00 x 7.00	52	1,020	KDRULH2HE01	19.13 x 15.43 x 15.43	82.0	1,580
100	150	KDRULI2H	9.00 x 11.00 x 7.00	52	1,230	KDRULI2HE01	19.13 x 15.43 x 15.43	82.0	1,730
125	165	KDRULG3H	9.00 x 11.00 x 8.00	57	1,405	KDRULG3HE01	22.12 x 20.43 x 24.37	122.0	2,375
150	185	KDRULG1H	9.00 x 11.00 x 8.00	60	1,650	KDRULG1HE01	22.12 x 20.43 x 24.37	127.0	2,660
200	240	KDRULJ1H	9.00 x 11.00 x 9.00	75	2,230	KDRULJ1HE01	22.12 x 20.43 x 24.37	136.0	3,250
250	340	KDRULL1H	11.38 x 14.50 x 9.50	105	2,450	KDRULL1HE01	22.12 x 20.43 x 24.37	162.0	3,400
300	370	KDRULL2H	11.38 x 14.50 x 9.31	105	2,500	KDRULL2HE01	22.12 x 20.43 x 24.37	162.0	3,475
350	500	KDRULL3H	11.38 x 14.50 x 9.31	109	2,885	KDRULL3HE01	22.12 x 20.43 x 24.37	166.0	3,775
400	520	KDRULL4H	11.38 x 14.50 x 9.50	135	3,700	KDRULL4HE01	22.12 x 20.43 x 24.37	176.0	4,600
450	610	KDRULL5H	11.38 x 14.50 x 11.00	135	3,890	KDRULL5HE01	36.00 x 28.39 x 30.19	295.0	5,900
500	610	KDRULL6H	11.38 x 14.50 x 11.00	135	4,775	KDRULL6HE01	36.00 x 28.39 x 30.19	295.0	6,800
600	720	KDRULS1H	11.38 x 15.00 x 13.25	272	6,000	KDRULS1HE01	48.00 X 36.27 X 36.27	685	9,400
700	840	KDRULS2H	11.38 x 15.00 x 13.25	280	6,885	KDRULS2HE01	48.00 X 36.27 X 36.27	685	10,600
800	965	KDRULX2H	18.50 X 21.00 X 18.00	305	9,500	KDRULX2HE01	48.00 X 36.27 X 36.27	715	12,900

Notes:
(1) Contact factory for 900 HP and 1000 HP applications

OUTPUT REACTORS/ LOW PASS FILTER COMBINATIONS

460V

Effective 03-24-17
Supercedes 06-14-15

Output Reactors/ Low Pass Filter Combinations (DV/DT) installed between an AC Drive and a motor limit the magnitude of voltage spikes at the motor. The filter also protects cables and the motor's insulation from damage caused by PWM reflected waves.

OUTPUT REACTOR/ LOW PASS FILTER COMBINATION, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (IBS.)	LIST PRICE ($)	MODEL NO.	DIMENSIONS H x W x D (in.)	WEIGHT (IBS.)	LIST PRICE ($)
1	3	V1K3A00	9.00 x 5.50 x 7.25	8	530	V1K3A01	9.00 x 5.50 x 10.00	11	830
2	4	V1K4A00	9.00 x 5.50 x 7.25	8	540	V1K4A01	9.00 x 5.50 x 10.00	11	840
3	6	V1K6A00	9.00 x 5.50 x 7.25	8	550	V1K6A01	9.00 x 5.50 x 10.00	11	860
5	8	V1K8A00	9.00 x 5.50 x 8.25	8	560	V1K8A01	9.00 x 5.50 x 10.00	11	875
7.5	12	V1K12A00	9.00 x 5.50 x 8.25	8	590	V1K12A01	9.00 x 5.50 x 10.00	11	900
10	18	V1K18A00	9.00 x 5.50 x 8.25	12	648	V1K18A01	9.00 x 5.50 x 10.00	15	975
15	25	V1K25A00	9.00 x 5.50 x 8.25	12	783	V1K25A01	9.00 x 5.50 x 10.00	15	1,050
20	27	V1K27A00	9.00 x 5.50 x 8.25	14	825	V1K27A01	9.00 x 5.50 x 10.00	15	1,075
25	35	V1K35A00	12.00 x 8.00 x 9.00	17	850	V1K35A01	12.00 x 8.00 x 11.50	23	1,100
30	45	V1K45A00	12.00 x 8.00 x 9.00	17	890	V1K45A01	12.00 x 8.00 x 11.50	23	1,175
40	55	V1K55A00	12.00 x 8.00 x 9.00	23	910	V1K55A01	12.00 x 8.00 x 11.50	23	1,282
50	80	V1K80A00	12.00 x 8.00 x 9.00	23	1,296	V1K80A01	12.00 x 8.00 x 11.50	29	1,648
60	80	V1K80A00	12.00 x 8.00 x 9.00	23	1,296	V1K80A01	12.00 x 8.00 x 11.50	29	1,648
75	110	V1K110A00	12.00 x 8.00 x 10.25	40	1,525	V1K110A01	16.50 x 18.00 x 15.00	68	2,268
100	130	V1K130A00	8.50 x 11.75 x 9.50	55	1,800	V1K130A01	16.50 x 18.00 x 15.00	83	2,484
125	160	V1K160A00	8.50 x 11.75 x 10.50	60	1,944	V1K160A01	16.50 x 18.00 x 15.00	83	2,592
150	200	V1K200A00	8.50 x 11.75 x 9.25	60	2,200	V1K200A01	16.50 x 18.00 x 15.00	93	2,800
200	250	V1K250A00	8.50 x 11.75 x 9.25	65	2,300	V1K250A01	16.50 x 18.00 x 15.00	93	2,900
250	305	V1K305A00	8.75 x 11.75 x 12.25	80	2,376	V1K305A01	16.50 x 18.00 x 30.00	117	3,000
300	362	V1K362A00	8.75 x 11.75 x 12.00	80	2,775	V1K362A01	16.50 x 18.00 x 30.00	117	3,200
350	420	V1K420A00	10.00 x 11.75 x 13.75	95	3,200	V1K420A01	16.50 x 18.00 x 30.00	132	3,700
400	480	V1K480A00	10.00 x 11.75 x 13.75	100	3,456	V1K480A01	16.50 x 18.00 x 30.00	138	4,000
500	600	V1K600A00	12.75 x 15.00 x 13.75	130	3,564	V1K600A01	16.50 x 18.00 x 30.00	168	4,400
600	750	V1K750A00	12.75 x 15.00 x 14.50	135	5,724	V1K750A01	16.50 x 18.00 x 30.00	180	7,600

Notes:
(1) Contact factory for applications above 600 HP


TEAMMaster
4160 VOLTS
DANGER
BENSHAW


TECO Westinghouse

TEAMMASTER™

LOW VOLTAGE PACKAGES

Effective 03-24-17
Supercedes 06-14-15

Engineered to provide solutions for a variety of heavy duty applications, TEAMMASTER™ Low Voltage Soft Starters are feature loaded. They are an excellent solution to Crushers, Grinders, Ball & Hammer Mills, Compressors, Centrifuges, plus many other options.

COMBINATION PANELS INCLUDE:

- NEMA 3R enclosure
- Circuit breaker with flanged disconnect (service entrance rated)
- EMX3 heavy duty solid state starter
- Panel mounted switch: Soft Start/OFF/Line Start
- 110V control power transfomer
- Space heater with thermostat
- Door Mounted: Keypad
  - Start / Stop Pushbutton
  - Local / Remote Switch
  - Reset Pushbutton
  - Power On Light
  - Run Light
  - Fault Light

STANDARD STARTER FEATURES (CHASSIS):

- Voltage Ratings: 208, 230, 460, 575 or 690VAC
- 15-1200 HP (Standard duty)
- Constant Current, Current Ramp, XLR-8 Adaptive Acceleration, Kickstart
- LCD Keypad with real time monitoring and event log:
  - Graphical Display
  - User Friendly
  - Copy program setting between starters
  - Removable for remote mounted
- Emergency Run Mode
- RS 485 Communications via optional Modules
  - Modbus, Profibus, ProfiNET, DeviceNET, Modbus TCP, Ethernet IP
- PC Configuration Software Available

ENGINEERED PACKAGES:

- Fused disconnect or circuit breaker disconnect
- Internal shunt bypass or continuous duty
- Light, standard and heavy duty ratings
- Operator devices and pilot lights
- Fans, filters and enclosure modifiers
- Door-Mounted LCD Keypad

COMBINATION STARTERS W/ CIRCUIT BREAKERS - LOW VOLTAGE HEAVY DUTY

Effective 03-24-17
Supercedes 06-14-15

Heavy Duty with Across -the-Line Bypass

MODEL NO.	HP	FLA AMPS	DIMENSIONS (in.)			WEIGHT (lbs.)	LIST PRICE ($)
			HEIGHT	WIDTH	DEPTH		NEMA 3R
*TWE-0014B-4-HD	10	14	36	32	12	220	8,500
*TWE-0027B-4-HD	20	27	36	32	12	220	8,750
*TWE-0034B-4-HD	25	34	36	32	12	220	8,931
*TWE-0040B-4-HD	30	40	36	32	12	220	9,025
*TWE-0052B-4-HD	40	52	36	32	12	220	9,060
*TWE-0065B-4-HD	50	65	36	32	12	240	9,777
TWE-0077C-4-HD	60	77	36	32	12	240	11,300
TWE-0096C-4-HD	75	96	48	38	16	295	11,655
TWE-0125C-4-HD	100	125	48	38	16	295	13,433
TWE-0156C-4-HD	125	156	48	38	16	320	14,225
TWE-0180C-4-HD	150	180	48	38	16	340	15,780
TWE-0240C-4-HD	200	240	48	38	16	355	18,500
TWE-0302C-4-HD	250	302	48	38	16	360	21,000
TWE-0360C-4-HD	300	360	48	38	16	370	21,465
TWE-0414C-4-HD	350	414	72	38	16	550	27,640
TWE-0477C-4-HD	400	477	90	40	16	800	29,400
TWE-0515C-4-HD	450	515	90	40	18	800	31,005
TWE-0590C-4-HD	500	590	90	40	18	850	35,300
TWE-0720C-4-HD	600	720	90	40	18	850	39,010
TWE-0840C-4-HD	700	840	90	40	18	850	57,000
TWE-0960C-4-HD	800	960	90	72	20	1100	67,500
TWE-1080C-4-HD	900	1080	90	72	20	1100	73,000
TWE-1200C-4-HD	1000	1200	90	72	20	1100	81,500

Notes:

* Includes integral bypass for 'B' models.

(1) Built-to-order: Please allow 1-2 weeks for shipment of complete TEAMMaster™ unit when ordering these options to a stock starter.

(2) Standard Chassis and Engineered Packages are not standard stock; Contact Factory for Lead Times

TEAMMASTER™

MCB PACKAGES with DISCONNECT

Effective 03-24-17
Supercedes 06-14-15

Engineered to provide solutions for a variety of heavy duty applications, TEAMMASTER™ Medium Voltage Soft Starters are feature loaded. They are an excellent solution to Crushers, Grinders, Ball & Hammer Mills, Compressors, Centrifuges, plus many other options.

COMBINATION PANELS INCLUDE:

- Choice of NEMA 3R enclosure package or NEMA 12, solid state starter, UL374 listed, Class E-2
- 45KV BIL
- 200MVA (2300VAC)/350MVA (4160VAC) short circuit fault rated
- 500% - 30 seconds rated solid state starter - UL347 certified and listed
- 8,000 PIV -UL347 certified and listed at 2.4KV
- 12,000 PIV - UL 347 certified and listed at 4.2KV
- Fiber optic firing
- Selectable solid state or emergency full voltage operation via selector switch mounted inside of LV compartment
- Load matched Class R fusing with blown fuse indication
- 400A load break, 600A continous, 5KV rated switch, with viewing window grounding assembly and lockable handle mechanism. Mechanically interlocked for safety.
- Fixed mounted, start duty rated vacuum contactors for isolation and SCR bypass, wired for normal bypass operation and full voltage start operation, with (2) N/O and (2) N/C auxiliary contacts.
- Separately mounted "SPE" series electronic overload device has the following standard features:
  - Class 10-30 adjustable
  - Phase imbalance protection
  - 1 NO/1 NC trip contact
  - Phase reversal protection
  - "Trip free" design
  - Phase loss protection
- Built-in self test (BIST) features for "quick commissioning"
- 120VAC,1000VA CPT with primary and secondary fusing, with 500VA available for customer use
- Door-mounted start and stop push buttons
- Door-mounted LCD keypad Modular Options
- Communications bridges
- Space heater
- E-stop pushbutton
- Top hat enclosure module
- 8 channel RTD modules
- 16 channel RTD modules
- 45KV BIL

TEAMMASTER™ - STANDARD PACKAGE

MEDIUM VOLTAGE CRUSHER DUTY

Effective 03-24-17
Supercedes 06-14-15

Severe Duty with Across -the-Line Bypass

TMVRXE12-2300 VOLT							
MODEL NO.	HP	FLA AMPS	DIMENSIONS (in.)			WEIGHT (lbs.)	NEMA 12
			HEIGHT	WIDTH	DEPTH		LIST PRICE ($)
TMVRXE12650230012	650	160	92	36	32	1800	73,350
TMVRXE12750230012	750	180	92	36	32	1800	75,150
TMVRXE121500230012	1500	360	92	36	32	1800	85,250

TMVRXE12-2300 VOLT							
MODEL NO.	HP	FLA AMPS	DIMENSIONS (in.)			WEIGHT (lbs.)	NEMA 3R
			HEIGHT	WIDTH	DEPTH		LIST PRICE ($)
TMVRXE1265023003R	650	160	92	36	32	1800	76,439
TMVRXE1275023003R	750	180	92	36	32	1800	77,552
TMVRXE12150023003R	1500	360	92	36	32	1800	87,860

TMVRXE18-4160 VOLT							
MODEL NO.	HP	FLA AMPS	DIMENSIONS (in.)			WEIGHT (lbs.)	NEMA 12
			HEIGHT	WIDTH	DEPTH		LIST PRICE ($)
TMVRXE181000416012	1000	133	92	36	32	2000	76,300
TMVRXE181500416012	1500	200	92	36	32	2000	77,100
TMVRXE183000416012	3000	360	92	36	32	2000	91,050

TMVRXE18-4160 VOLT							
MODEL NO.	HP	FLA AMPS	DIMENSIONS (in.)			WEIGHT (lbs.)	NEMA 3R
			HEIGHT	WIDTH	DEPTH		LIST PRICE ($)
TMVRXE18100041603R	1000	133	92	36	32	2000	79,150
TMVRXE18150041603R	1500	200	92	36	32	2000	81,503
TMVRXE18300041603R	3000	360	92	36	32	2000	96,580

Modular Options

MODEL	STANDARD OPTIONS	LIST PRICE ($)
A171	Space Heaters with Thermostat (included in a NEMA 3r Option)	750
A008	E-Stop Push -Button , Mushroom Head , Red	195
A406	8 Channel RTDModule ,100 OHM Platinum (Also Available for remote Mounting, Call Factory for Details)	4,600
A407	16 Channel RTD Module ,100 OHM Platinum (Also Available for emote Mounting, Call Factory for Details)	8,350
A408*	Top Hat Enclosure Module for Top Entry (18"H x 30"W x 20"D) Top Left or Top Right Mounting Accommodates Stress Cones	3,700
A409	Service Entrance Labeled	1,400
A106	Additional 1000VA Control Power Transformer	1,350

Protective Relay Options

MODEL	STANDARD OPTIONS	LIST PRICE ($)
A875	Ground Fault CT, 2000:1 4.0:Dia. (For MX3 Use)	435
A876	Ground Fault CT, 2000:1 8.13:Dia. (For MX3 Use)	1,700

Notes:

(1) Starters are top entry. Bottom exit available upon request. Dimensions and weights are approximate.
(2) Insert appropriate option code as shown below:
**NEMA 12 = 12 **NEMA 3R = 3R
(3) Power fuses ship loose. Please provide motor full load amps at time of order for proper fuse sizing.
(4) The TEAMMaster™ series was designed as an integrated package.
Listed above are the available modular options. For systems requiring more extensive requirements, please call the factory.
(5) Top hat will ship loose for customer installation.
(6) **Lead Time:**
Built-to-order: Please allow 1-2 weeks for shipment of complete TEAMMaster™ unit when ordering these options to a stock starter.

DRIVE RMA RETURN PROCEDURE

Effective 03-24-17
Supercedes 06-14-15

DRIVE RMA RETURN PROCEDURE

- Contact a Drives Engineer for technical troubleshooting/ RMA Qualification at (800) 279-4007.
- TECO-Westinghouse will email or fax an RMA Request Form to complete. Completed RMA Request Form should be returned via e-mail or faxed to 512-218-7378 for processing.
- An RMA number will be issued and sent via e-mail or fax. Detailed instructions on where to ship the drive for warranty evaluation/ repair will be included with the RMA number.

******** IF PRODUCT IS NOT RETURNED WITHIN 30 DAYS, THE RMA WILL BE CLOSED. ********

- The Drive is then evaluated and a Service Report is generated detailing the failure. (The evaluation process should take no longer than 5 working days).
- A copy of the Service Report will be sent to the requesting party via e-mail or fax.
- If the Drive is determined to have failed under Warranty, either of the following will take place, whichever is deemed more appropriate:
  1. The drive will be repaired and returned to the customer.
  2. The drive will be determined to be un-repairable and will be replaced.
  3. If the drive is determined to be functioning properly, the drive will be returned to the customer and considered non-warranty.

****** If credit is being issued, the Controls Group will fax a copy to the customer. ******

If the failure/ problem is determined to be a non-warranty situation, one of the following three actions will take place.

1. The drive will be returned to the customer via freight collect. There might be a $90.00 inspection fee.
2. If the drive is repairable, an estimate will be sent. TECO-Westinghouse will have to receive a PO before any repairs are completed. There is a $90.00 inspection fee for this evaluation. If TECO-Westinghouse repairs the drive, this $90.00 will be credited to the repair charges.
3. If the drive is un-repairable or TECO-Westinghouse is directed to not repair the unit, TWMC will return the drive via freight collect at the customer's option.

Please Note: All repairable and "properly functioning" drives will be returned even if an offsetting order has been made for a replacement unit.

Effective 03-24-17
Supercedes 06-14-15

VERSABRIDGE® FEATURES

Effective 03-24-17
Supercedes 06-14-15

With over 100 years of experience in motor design and application, TECO-Westinghouse Motor Company is a premier supplier of AC and DC motors and generators. Ranging from fractional HP ratings to 100,000 HP, these high-quality machines are used in a variety of rugged applications across several industries throughout the world.

TECO-Westinghouse comprises the experience of Westinghouse, a leader in the motor industry since 1888, and TECO Electric & Machinery Co, Ltd., a multinational conglomerate with over 50 years of manufacturing experience. Together, TECO-Westinghouse embodies the capabilities and proud traditions of excellence from both companies and carries them forward.

In keeping with this idea, TECO-Westinghouse is pleased to now offer a complete package of Variable Speed Drive (VSD) systems that includes an Input/ Output Switchgear, Medium Voltage Drive (MVD), and motors.

VersaBridge® MVDs provide reliable motor control for a variety of industry specific and general purpose applications including Oil & Gas, Utility/ Power Generation, Metals and Mines. These patented MVDs are designed utilizing a multilevel H-Bridge topology that reduces the harmonic levels to extremely low levels. The modular design facilitates ease of installation, commissioning and maintenance. The VersaBridge® is an innovative product that combines reliable, simple, and compact solutions with the latest power electronics and cooling technologies.

FEATURES

Modularity: Modular design with common building blocks (Mains, Slices, Cubes) make VersaBridge® MVD scalable for different power and voltage ratings with fewer spare parts required. Power switching modules (Cubes) can be easily removed in the event of a failure.

Quick and Easy Installation: VersaBridge® MVD provides both top and bottom cable entry as standard on all models. All shipping sections are delivered to the customer pre-terminated, making field assembly fast and efficient.

Serviceability: VersaBridge® power cubes are interchangeable and can be easily replaced within 30 minutes. Additionally, the modular design of VersaBridge® MVD requires few spare parts since the parts are universal and can be used in any configuration regardless of the voltage or power class.

Multi-level, Cascaded H-Bridge Topology produces near sinusoidal voltage output which reduces motor harmonics and torque pulsations, even at low speeds with virtually no cable length restriction. VersaBridge® MVD produces an output voltage which has at least 7 levels measured line-to-neutral and 13 levels measured line-to-line, allowing VersaBridge MVDs to be applied to new or existing motors having standard insulation systems without the need for harmonic mitigation.

Ultra Low Utility-Side Harmonics exceed the IEEE-519 Standard requirements without any additional components.

Power Cube Bypass: VersaBridge® MVD keeps your system running reliably by automatically bypassing failed power cubes and continuing operation within ¼ of a second of the initiating fault event. VersaBridge® cube bypass is software configurable to be Automatic or Manual. Both modes of bypass are designed to eliminate unnecessary voltage stress on the motor by keeping the neutral voltage balanced.

N+1…N+N Redundancy: Due to the modularity of VersaBridge® MVD, redundant Slices can be added to any system (new installation or retrofit) to achieve N+1 or more redundancy. This ensures that the process continues to operate at full rated power after a power cube bypass event.

Flying Start into a Spinning Load: VersaBridge® MVD offers the ability to smoothly catch and accelerate a spinning load without producing any severe torque, voltage, or current transients on the driven equipment.

Power Dip Ride-Through: VersaBridge® MVD provides greater than five cycle power loss ride-through to keep the process running without the need for auxiliary UPS systems.

One Drive for Multiple Motors: Using the VersaBridge® MVDs' Synchronous Transfer feature, multiple motors can be started and synchronously transferred from the drive bus to the utility bus (Up Transfer) or from the utility bus to the drive bus (Down Transfer).

Industry Standard Modbus TCP Communication: Standard protocols allow the VersaBridge® MVDs to easily integrate with various SCADA or DCS systems using Ethernet.

VERSABRIDGE® SPECIFICATIONS

Effective 03-24-17
Supercedes 06-14-15

Electrical

Output voltage	0 – 13.8 kV
Output frequency Min - Max	0 – 120 Hz
Auxiliary Supply	200 – 240 V, 1φ std; optional configurations available
Rated Supply Voltage	2.3 – 13.8 kV ±10%
Rated System Frequency	60 Hz ±5%
Voltage Variation	-30% to +10% for 30 line cycles
Input Current Harmonics THD	≤ 2% exceeds IEEE-519 requirements (36-pulse)
Inverter Topology	IGBT H-Bridge
Cooling	Advanced 2-phase cooling, forced-air cooling
Capacitors	Film
Regulatory Compliance	IEEE, ANSI, NEMA, CSA, cUL (listed), UL (listed)
Controls	V/Hz, Vector
Speed Regulation	0.1% with feedback, 0.5% without feedback
Connection	Top, bottom or both cable entry/exit
Power Ride Through	Minimum 5 cycles
Peak Efficiency	97%
Power Factor	≥97%
Output Current Harmonics THD	<1%
Power Transformer Topology	Modular, multi-pulse, phase-shifted, isolated
Power Transformer Rating	750 kVA / Slice
Spinning Load	Catch a spinning load
Power Cube Bypass	Auto Bypass and restart, Manual Bypass modes
Synchronous Transfer	Automatically transfer the motor to/from the utility bus
Control Isolation	Fiber optic cable
Service Duty	CT: 150% , VT: 110% for 1 min every 10 min
HMI	7" TFT color LCD screen, LED backlighting
Communication Interface	Modbus TCP/IP (Ethernet), RS-232 , and RS-485, PLC I/O, Others Available Upon Request

Mechanical

Standard Rating	NEMA 1, NEMA 3R
Cabinet Dimension (Mains or Slice)	H: 105" x W: 25" x D: 68.4"
Material	ASTM A366 steel
Color	Light Grey
Total Weight	Mains: 1,289 lbs, Slice: 4,852 lbs

Environmental Condition

Ambient Temperature	-20 to +40 ˚C (lower/higher temperatures*)
Altitude	0 – 1000m (higher elevations*)
Humidity	95%, non-condensing
Noise Level	≤ 78 dB

* Consult factory for extended temperature or altitude ranges

Cooling System

Transformer	Choice of forced-air cooling or advanced 2-phase cooling options
Electronics	Advanced 2-phase cooling
Cooling Unit	Choice of integral or remote unit options

VERSABRIDGE® AC FEATURES

Effective 03-24-17
Supercedes 06-14-15

FEATURES

Quick and Easy Installation: VersaBridge® Air-Cooled (AC) provides both top and bottom cable entry as standard on all models. All shipping sections are delivered to the customer pre-terminated, making field assembly fast and efficient. Front-access only is required for installation and maintenance.

Serviceability: VersaBridge® AC power cubes are interchangeable and can be easily replaced within 15 minutes.

Multi-level, Cascaded H-Bridge Topology produces near sinusoidal voltage output which reduces motor harmonics and torque pulsations, even at low speeds with virtually no cable length restriction. Every VersaBridge® AC MVD produces an output voltage which has 9 levels measured line-to-neutral and 17 levels measured line-to-line, allowing VersaBridge MVDs to be applied to new or existing motors having standard insulation systems without the need for harmonic mitigation.

Ultra Low Utility-Side Harmonics exceed the IEEE-519 Standard requirements without any additional components.

Power Cube Bypass: VersaBridge® MVD keeps your system running reliably by automatically bypassing failed power cubes and continuing operation within ¼ of a second of the initiating fault event. VersaBridge® cube bypass is software configurable to be Automatic or Manual. Both modes of bypass are designed to eliminate unnecessary voltage stress on the motor by keeping the neutral voltage balanced.

Flying Start into a Spinning Load: VersaBridge® AC MVD offers the ability to smoothly catch and accelerate a spinning load without producing any severe torque, voltage, or current transients on the driven equipment.

Power Dip Ride-Through: The VersaBridge® AC MVD can operate continuously at voltages down to 70% and is designed to provide greater than five cycle total power loss ride-through to keep the process running without the need for auxiliary UPS systems.

One Drive for Multiple Motors: Using the VersaBridge® MVDs' Synchronous Transfer feature, multiple motors can be started and synchronously transferred from the drive bus to the utility bus (Up Transfer) or from the utility bus to the drive bus (Down Transfer).

Industry Standard Modbus TCP Communication: Standard protocols allow the VersaBridge® MVDs to easily integrate with various SCADA or DCS systems using Ethernet.

VERSABRIDGE® AC SPECIFICATIONS

Effective 03-24-17
Supercedes 06-14-15

Electrical

Output voltage	0 – 4.16 kV
Output frequency Min - Max	0 – 120 Hz
Auxiliary Supply	480 V, 3φ standard; optional configurations available
Rated Supply Voltage	4.16 kV, ±10%
Rated System Frequency	60 Hz, ±5%
Voltage Variation	-30% to +10% for 30 line cycles
Input Current Harmonics THD	≤ 2% exceeds IEEE-519 requirements (24-pulse)
Inverter Topology	IGBT H-Bridge
Cooling	Forced-air cooling with redundant fans
Regulatory Compliance	IEEE, ANSI, NEMA,CSA, cUL (listed), UL (listed)
Control modes	V/Hz, Vector
Speed Regulation	0.1% with feedback, 0.5% without feedback
Connection	Top, bottom, or both cable entry/exit
Power Ride Through	Minimum 5 cycles
Peak Efficiency	97%
Power Factor	≥97%
Output Current Harmonics THD	<1%
Power Transformer Topology	24-pulse, phase-shifted, isolated
Power Transformer Rating	1 MVA
Spinning Load	Catch a spinning load
Power Cube Bypass	Auto Bypass and restart, Manual Bypass modes
Synchronous Transfer	Automatically transfer the motor to/from the utility bus
Control Isolation	Fiber optic cable
Service Duty	CT: 150% , VT: 110% for 1 min every 10 min
HMI	7" TFT color LCD screen, LED backlighting
Communication Interface	Modbus TCP/IP (Ethernet), RS-232 , and RS-485, PLC I/O, Others Available Upon Request

Mechanical

Standard Rating	NEMA 1
Dimensions	H: 95" x W: 178" x D: 59"
Material	ASTM A366 steel
Color	Light Grey
Total Weight	11,910 lbs

Environmental Condition

Operating Temperature	0 to +40 ˚C (lower/higher temperature*)
Altitude	0 – 1000 m (higher elevation*)
Humidity	95%, non-condensing
Noise Level	≤ 78 dB

* Consult factory for extended temperature or altitude ranges

TECO Westinghouse

APPLICATION CHECKLIST FOR
TWMC VARIABLE FREQUENCY DRIVES

The following checklist is provided to gather the necessary information to ensure that our product will meet your requirements and we can provide the most cost effective solution for your application.

** Please complete with as much detail as possible and fax this form to 512-218-7378. **

DATE:_____

General Information

Customer: _____

Contact Information - Name: _____ Phone: _____

Fax: _____ Email: _____

TWMC Salesperson: _____

Application Description: _____

_____

Quote Due Date _____

Driven Load Information/ Details

Quantity: _____ HP _____ HP (unit 2) _____ HP (unit 3) _____ HP (unit 4) _____

Load Description ☐ Variable Torque ☐ Constant Torque Machine Type: _____

Accel time: _____ sec from _____ RPM to _____ RPM

Decel time: _____ sec from _____ RPM to _____ RPM

Ratio or Minimum Speed _____ Maximum Speed _____

Duty Cycle Information _____

Vertical Load? ☐ Yes ☐ No If yes, please indicate weight of load _____

AC Motor Details

☐ New ☐ Existing Manufacturer _____ Model # _____

HP _____ Rated Speed _____ Rated Frequency _____ Rated Voltage _____ Frame _____

FLA _____ Service Factor _____ Insulation Class _____ Enclosure _____

Number of Motors: _____ Cable Distance from Motor to Drive: _____

☐ Tach/ Generator/ Encoder: _____ Pulses per Revolution ☐ Single Channel ☐ Dual Channel

Line Power Supply

Voltage _____ Frequency _____

Generator Power ☐ Yes ☐ No If yes, indicate generator capacity: _____

Reactors or isolation transformer required? _____ Existing? _____

Serial Communications

☐ Modbus ☐ Johnson Metasys ☐ Profibus ☐ BACNet ☐ LonWorks ☐ Siemens FLN ☐ Other _____

Monitor only or control? _____ Baud Rate _____

Drive Enclosure/ Environment

NEMA Rating ☐ NEMA 1 ☐ NEMA 12 ☐ NEMA 3R ☐ NEMA 4 ☐ NEMA 4X

(See attachment for NEMA definitions.)

☐ Wall Mounted ☐ Free Standing ☐ Installed Units in MCC ☐ Indoor Installation ☐ Outdoor Installation

Ambient Temperature Range: _____

Elevation _____

AC Drive Control Characterisics

Speed Reference Source*: _____ (4-20mA, 0-10VDC, Keypad, Speed Pot, Serial)

Run/ Stop Command Source*: _____ (Keypad, Terminal I/O, Serial)

Stop Function Types*: _____ (E-stop, Coast to Stop, Interlocks)

PID Control Based on Process ☐ Input ☐ Pressure ☐ Temperature Other _____

Protective Function: _____ (Motor Thermostat, PTC, RTD)

Braking Requirements: _____ (Dynamic Braking, Mechanical, or Other)

Other Inputs: _____ (Reset, Auto Restart, Encoder)

Analog Outputs: _____ (4-20mA, 0-10VDC, Pulse)

Digital Outputs: _____ (Run, Fault, High or Low Speed, etc.)

Two or Three Wire Start: _____ (Applies to Terminal I/O Only)

Communications: _____ (Telephone Modem, Wireless Modem, Ethernet)

Options: _____ (Analog, Serial, Relay)

*Indicate if Door Mounted

TECO Westinghouse

ENCLOSURE OPTIONS AND MODIFICATIONS

Auxiliary Equipment
(Mounted and wired in an enclosure as specified per the NEMA rating selected.)
☐ Manual or Automatic Bypass ☐ 3-Contactor ☐ 2-Contactor
☐ Motor Overload Relay
☐ Input Circuit Breaker ☐ Input Disconnect ☐ Fused ☐ Non-fused
☐ AC Drive Fuses ☐ Blower Motor Starter
☐ Output Load Reactors ☐ Output Contactor
☐ dV/dt Filters ☐ Dynamic Braking
☐ Control Power Transformer ☐ Secondary Volts _____ ☐ Capacity _____ VA
☐ Interior Mounted 120VAC Power Outlet ☐ Interior Cabinet Lighting
☐ Additional Power Supply ☐ Interior Cabinet Lighting ☐ 120VAC ☐ 240VAC ☐ Other _____
☐ Heat Sink Extension

Auxiliary Controls (Please specify devices in the Project Description below.)
☐ Operator Controls ☐ Door Mounted ☐ Remote
☐ Control Terminals ☐ Pilot Lights
☐ Pushbuttons ☐ Speed Potentiometer
☐ Control Power Supply Volts _____ Capacity _____ mA
☐ Transfer to Bypass on Fault ☐ Fireman's Override
☐ Damper Actuation on Start ☐ Time Delay on Bypass Transfer

Input Power Quality Conditioning
☐ Line Reactors ☐ Isolation Transformers
☐ Active Harmonics Filter ☐ EMC Suppression
☐ EMF/ RFI Filters ☐ Line Noise Filter
☐ Lightning Arrestors

Documentation Number of Copies _____
☐ Wiring Diagrams ☐ Dimensional Drawings
☐ Cabinet Layout Drawings ☐ Additional Instruction Manuals

Support Services
☐ Spare Parts List ☐ Service/ Start up Assistance
☐ Witness Testing

Special Optional Requirements_____
_____

PROJECT DESCRIPTION

_____
_____
_____
_____
_____
_____

TECO Westinghouse

NEMA ENCLOSURE RATING DESCRIPTIONS

NEMA 1 – Enclosures constructed for indoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment and to provide a degree of protection against falling dirt.

NEMA 3R – Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt, rain, sleet, and snow; and that will be undamaged by the external formation of ice on the enclosure.

NEMA 4 – Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt, rain, sleet, snow, windblown dust, splashing water, and hose-directed water; and that will be undamaged by the external formation of ice on the enclosure. Contact the factory if NEMA 4 is required for your application.

NEMA 4X – Same as NEMA 4, but also including protection against corrosion. Contact the factory if NEMA 4X is required for your application.

NEMA 12 (UL1) – Enclosures constructed (without knockouts) for indoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment; to provide a degree of protection against falling dirt; against circulating dust, lint, fibers, and flyings; and against dripping and light splashing of liquids.

NOTES

GLOBAL RESOURCES

TECO-Westinghouse Motor Company is dedicated to servicing our customers' needs in a variety of ways. Our manufacturing plants are located in the U.S., Taiwan, Mexico, Malaysia, Australia, Great Britain and China. A full line of induction, synchronous and DC motors and generators are available in both horizontal and vertical configurations from 1/4 hp to 100,000 hp. We also offer complimenting AC drive products. From wastewater, petrochemical, irrigation and water treatment, to pumping and lift stations, TECO-Westinghouse has the AC drive product that will enhance your application. In North America there are several regional warehouses stocking a vast array of motors and drive products for our customers' convenience.

Our Round Rock, Texas facility conducts sales and marketing, customer service, engineering, drafting, manufacturing, testing, final shipment, field service, and repairs of many types of large custom-designed and specialty motors.

These global resources uniquely position us to satisfy the market's diverse needs. Please contact us for more information.

TECO Westinghouse

5100 N. IH-35
Round Rock, Texas 78681
1-800-USE-TECO

UN-PB 03-17

www.tecowestinghouse.com