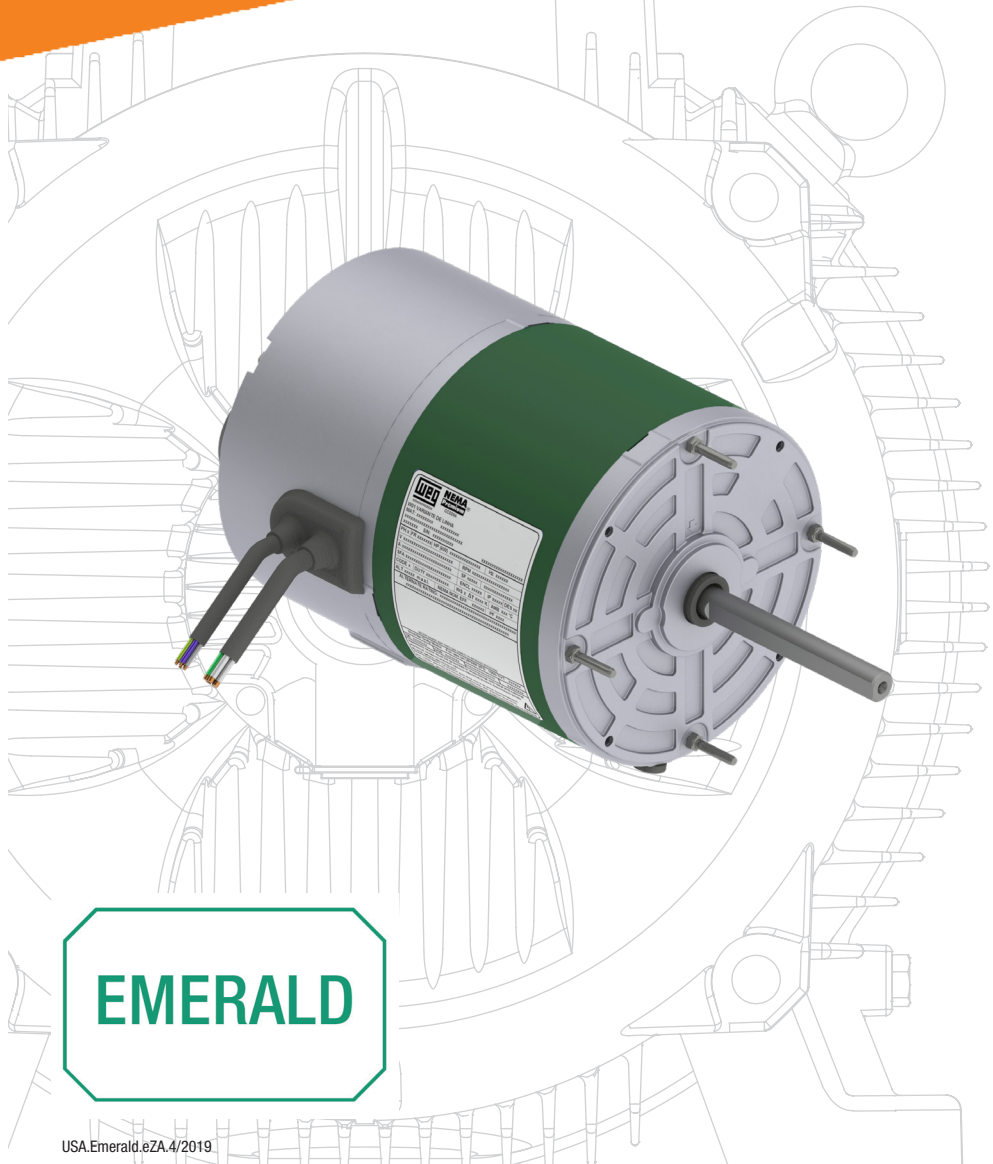


Emerald ECM - eZA

- Totally Enclosed
- IE5 System Efficiencies (motor+drive)
- Built-in 10V DC power source
- Multiple mounting options available
- Efficient, Quiet, Flexible and Reliable

0-10V DC; 4-20mA or PWM
Input Signal for Speed Control



EMERALD



The simple and efficient solution for air movement applications.

Emerald eZA - Electronically Commutated Motor

Standard Features

- Permanent Magnet, Electronically Commutated Motor
- Single-phase, 50/60Hz input
 - 115/208 to 277VAC: 1/6 to 1/2 HP
 - 115/220 to 277VAC: 3/4 HP
 - 220 to 277VAC: 1 to 1.5 HP
- Output power: 1/6 to 1.5 HP at 1800rpm
- N48, steel frame, degree of protection IP54
- Mounting: rods
- Ambient temperature
 - -4°F to 104°F (-20 to 40°C) in TENV¹
 - -4°F to 140°F (-20 to 60°C) TEAO²
- Total efficiency (motor + drive) – IE5³
- Vibration Grade A
- Direction of rotation CW/CCW (selectable)
- Continuous speed adjustment (200 to 1800rpm) by:
 - Tact buttons (local)
 - DC voltage (remote): 2 to 10VDC
 - DC current (remote): 4 to 20mA DC
 - Frequency (remote): 10 to 95%
- Local controls optically isolated
- With drain plug and 'V' ring sealing
- Sealed for life bearings
- Power and control cables with 20"(0.5m) long
- Electronic protection: overload, over temperature and locked-rotor.
- Fire mode (Override & Maximum speed mode)

- Applications
- Furnaces
 - Air Handlers
 - Air Conditioning
 - Heat Pumps
 - Refrigeration
 - Ventilation



Figure 1. Thru-bolts mounting

Notes:

1. *Totally Enclosed, Non-ventilated. Output limited to 0.85hp. Refer to WEG for electrical data.*
2. *Totally Enclosed, Air Over rated. Minimum airflow over motor frame and drive cover 16.4fps (5m/s).*
3. *Direct method - Input-Output IE levels according to 60034-30-1 and 60034-30-2.*

Optional features¹

- Foot mounting
- Terminal box
- Slinger seal for vertical shaft-up mounting

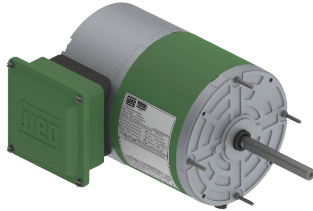


Figure 2. Thru-bolt and terminal box

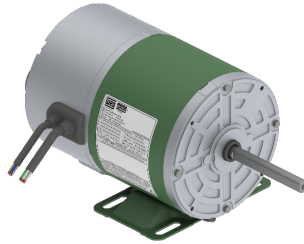


Figure 3. Foot mounting

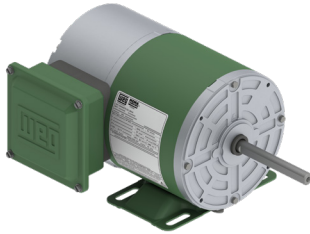


Figure 4. Foot mounting and terminal box

Nameplate

	Electronically Commutated Motor	
	<p>MODEL: EZA.5018N1FT48YZ IE5 Mar. 2019 Lot: 0002021247 PH:1 HP:1/2 MAT. No.: 14791728 HZ:50/60 INS:F UL Model: WECM-ST80-40A1 FRAME:48YZ DUTY-CONT SF:1.00 (TENV 40°C) ΔT - 80K 1.00 (TEAO 60°C)</p>	
Performance		VOLT. 115/208-277V
HP	RPM	Lb.ft
0.50	1800	1.44
0.39	1400	1.44
0.28	1000	1.44
0.17	600	1.44
<p>Voltage selection 115V – Red leads interconnected 208-230V – Red leads disconnected</p>		
<p>Power leads Line: white Neutral: black Ground: green</p>	<p>Control cable DC voltage [2-10V]: blue DC current [4-20mA]: red PWM [10-95%]: brown Speed reference: white 10VDC source: yellow Common: black</p>	
Local switch adjust		
	SW	On Off
Control	1	Local Remote
Rotation	2	CW-SE CCW-SE
<p>Local speed adjust SW1: speed down/off SW2: speed up/on</p>		
<p>WARNING: refer to motor manual before applying power AVERTISSEMENT: se référer au manuel du moteur avant de mettre sous tension</p>		

HP	Base RPM	Frame	Catalog Model	Weight (lb)	Voltage	Enclosure	C-Dim (in)	N-W (in)
0.16	1800	48YZ	EZA.1618N1BT48YZ	10.4	115/208-277	TENV	11.023	4.0
0.25	1800	48YZ	EZA.2518N1BT48YZ	11.9	115/208-277	TENV	11.220	4.0
0.33	1800	48YZ	EZA.3318N1BT48YZ	13.4	115/208-277	TENV	11.417	4.0
0.5	1800	48YZ	EZA.5018N1BT48YZ	16.3	115/208-277	TENV	11.614	4.0
0.75	1800	48YZ	EZA.7518A1RT48YZ	19.3	115/208-277	TEAO	12.401	4.0
1	1800	48YZ	EZA00118A1DT48YZ	21.2	230-277	TEAO	13.385	4.0
1.5	1800	48YZ	EZA00158A1DT48YZ	25.1	230-277	TEAO	14.172	4.0

¹Special features available upon request

WEG's scope of solutions is not limited to the products and solutions presented in this brochure.

Contact WEG for information on additional products and solutions.

For WEG's worldwide operations visit our website



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