

Subject:**Performance data****Application: Refrigeration & AC**

Refrigerant	R404A, R507	Compressor refrigeration capacity	26.00 kW
Reference temperature	Dew point	Evaporator refrigeration capacity	26.00 kW
Power supply	50 Hz, 400 V	Power consumption	9.86 kW
Supply frequency	50 Hz	Current draw (400 V)	16.30 A
Evaporating temperature	5.0 °C	Coefficient of performance (COP/EER)	2.64
<i>Evaporating pressure (abs.)</i>	<i>7.06 bar</i>	Condensing capacity	35.90 kW
Condensing temperature	50.0 °C	Mass flow	0.245 kg/s
<i>Condensing pressure (abs.)</i>	<i>22.98 bar</i>	Discharge end temperature	79.6 °C ¹⁾
Suction gas temperature	20 °C		
Subcooling (outside cond.)	0 K		
Usable superheat	100%		

Certifications

**ASERCOM certified performance data**

The performance data of compressors bearing this label has been certified to the strict requirements of ASERCOM.

ASERCOM is the Association of European Refrigeration Compressors and Controls Manufacturers. Information about the Association and the constantly updated overview of certified GEA compressors can be found at www.asercom.org.

This certification is based on EN 12900. This signifies: 20 °C suction gas temperature without liquid subcooling at 50 Hz power supply frequency.

- 1) The stated value of the discharge end temperature is a mere calculated value. Additional cooling and heat dissipation are not considered. Deviations (particularly in deep freezing applications) from the real measured discharge temperature during operation are possible.

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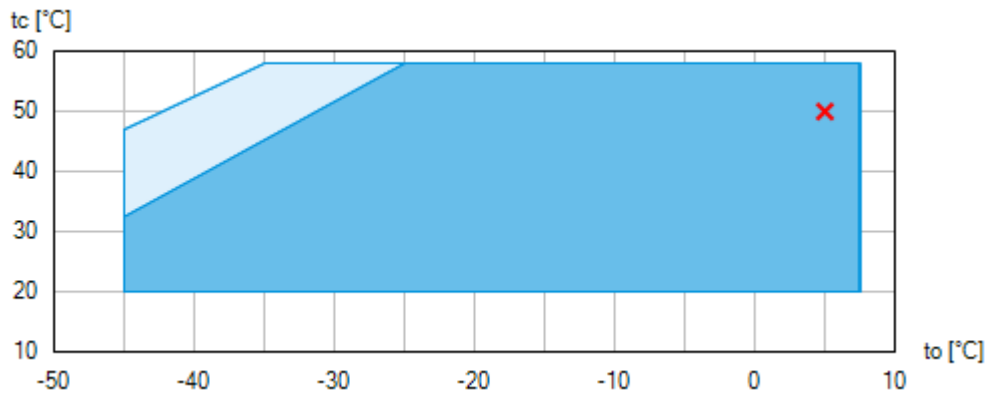
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Subject:

Operating limits



- Unlimited application range
- Supplementary cooling or reduced suction gas temperature ($\Delta t_{oh} < 20K$)

Compressor operation is possible within the limits shown on the diagrams of application. Please note the coloured areas. Compressor application limits should not be chosen for design purposes or continuous operation. Axis values refer to dew point (saturated vapour line).

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Subject:**Technical data**

Number of cylinders / Bore / Stroke	4 / 55 mm / 40 mm
Displacement 50/60 Hz (1450/1740 ¹ /min)	33,10 / 39,70 m ³ /h
Voltage ¹⁾	220-240V Δ / 380-420V Y -3- 50Hz
	265-290V Δ / 440-480V Y -3- 60Hz
Max. working current ²⁾	31.2 / 18.0 A
Max. power consumption ²⁾	11.1 kW
Starting current (rotor blocked) ²⁾	132.0 / 76.0 A
Motor protection	INT69 G
Protection terminal box	IP 66
Weight	96 kg
Max. permissible pressure (LP/HP) ³⁾	19 / 28 bar
Connection suction line SV	28 mm - 1 1/8 "
Connection discharge line DV	22 mm - 7/8 "
Lubrication	Oil pump
Oil type R134a, R404A, R407A/C/F, R448A, R449A, R450A, R513A	FUCHS Reniso Triton SE 55
Oil type R22	FUCHS Reniso SP 46
Oil charge	1,3 Ltr.
Dimensions Length / Width / Height	540 / 285 / 320 mm

1) Tolerance ($\pm 10\%$) relates to the mean value of the voltage range. Other voltages and current types on request

All data are based on voltage rms values

2) - The stated value for the max. power consumption is valid for the adjusted power supply.

- Starting current (rotor blocked):

- Part winding (PW) motors: Winding 1 / Winding 1+2
- Delta/Star (Δ/Y) motors: Δ / Y

- Take account of the max. operating current / max. power consumption for designing fuses, supply lines and safety devices. Fuse: Consumption category AC3.

3) LP = Low pressure
HP = High pressure

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HGX34e/380-4 S

Engine: 220-240V Δ / 380-420V Y -3- 50Hz

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Subject:

Performance data table

Application: Refrigeration & AC
Reference temperature: Dew point
Supply frequency: 50 Hz
Voltage: 400 V
Suction gas temperature: 20 °C
Subcooling (outside cond.): 0 K

tc [°C]		to [°C]									
		0.0	-5.0	-10.0	-15.0	-20.0	-25.0	-30.0	-35.0	-40.0	-45.0
30.0	Q [W]	31700	26400	21700	17600	14100	11100	8530	6420	4680	3300
	P [kW]	6.98	6.70	6.33	5.88	5.37	4.82	4.25	3.65	3.06	2.49
	I [A]	12.00	11.60	11.00	10.40	9.70	8.99	8.28	7.59	6.96	6.39
35.0	Q [W]	29200	24300	20000	16200	13000	10200	7760	5790	4160	2840
	P [kW]	7.59	7.21	6.74	6.20	5.61	4.98	4.34	3.68	3.04	2.43
	I [A]	12.90	12.30	11.60	10.90	10.10	9.19	8.39	7.63	6.94	6.33
40.0	Q [W]	26700	22200	18200	14800	11800	9160	6980	5150	3620	2360
	P [kW]	8.18	7.69	7.12	6.49	5.82	5.12	4.41	3.70	3.00	2.34
	I [A]	13.70	13.00	12.20	11.30	10.30	9.37	8.47	7.64	6.90	6.25
45.0	Q [W]	24200	20100	16500	13300	10600	8180	6190	4490	3070	1860
	P [kW]	8.73	8.13	7.47	6.75	6.00	5.22	4.44	3.68	2.93	2.23
	I [A]	14.60	13.70	12.70	11.60	10.60	9.50	8.52	7.62	6.83	6.15
50.0	Q [W]	21800	18000	14700	11800	9330	7210	5390	3840	2510	
	P [kW]	9.23	8.53	7.76	6.96	6.13	5.28	4.44	3.62	2.83	
	I [A]	15.30	14.20	13.10	11.90	10.80	9.58	8.52	7.55	6.72	



Supplementary cooling or reduced suction gas temperature ($\Delta t_{oh} < 20K$)

to Evaporating temperature
tc Condensing temperature
Q Compressor refrigeration capacity
P Power consumption
I Current draw

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Subject:

Scope of supply

Semi-hermetic four cylinder reciprocating compressor with drive motor
Single-section compressor housing with hermetically integrated electric motor

Oil pump

Winding protection with PTC resistor sensors and electronic trigger unit INT69 G

Possibility of connection of oil level controllers ESK, Traxoil, AC+R or CARLY ¹⁾

Possibility for connection of oil pressure safety switch MP55

Oil charge:

HG: FUCHS Reniso SP 46

HGX: FUCHS Reniso Triton SE 55

Sight glass

Suction and discharge line valve

Inert gas charge

4 anti-vibration pads enclosed

Accessories

Start unloader by means of a ESS (Electronic Soft Start), 400 V - 3 - 50/60 Hz, IP20 (Connection clamps IP00) for installation in switch cabinet ²⁾

Capacity regulator 230 V - 1 - 50/60 Hz, IP65

1 capacity regulator = 50% residual capacity

Cylinder cover prepared for capacity regulator

Oil sump heater

110-240 V - 1 - 50/60 Hz, 50-120 W, IP66

PTC heater self-regulating

Oil pressure safety switch MP55 230 V - 1 - 50/60 Hz, IP20 ²⁾

Thermal protection thermostat per cylinder cover ³⁾

Additional fan

230 V AC - 1 - 50 Hz, 97 W, IP44

230 V AC - 1 - 60 Hz, 128 W ²⁾

Special voltage and/or frequency (on request)

1) Only with additional adapter possible

2) Enclosure

HGX34e/380-4 S

Engine: 220-240V Δ / 380-420V Y -3- 50Hz

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3) Mounted

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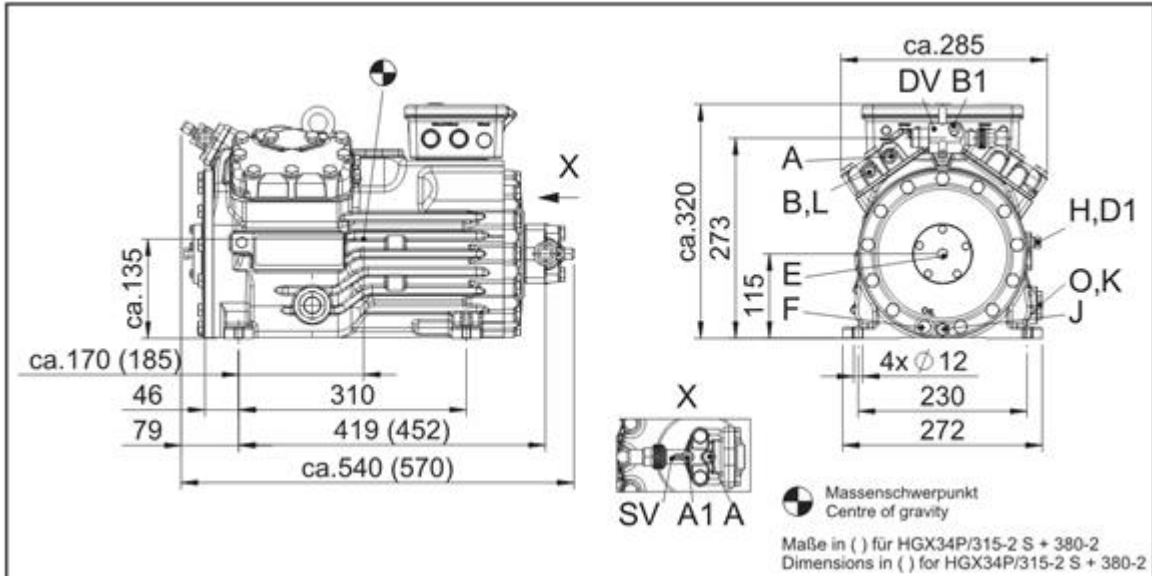
Engine: 220-240V Δ / 380-420V Y -3- 50Hz

GEA Commercial Compressors

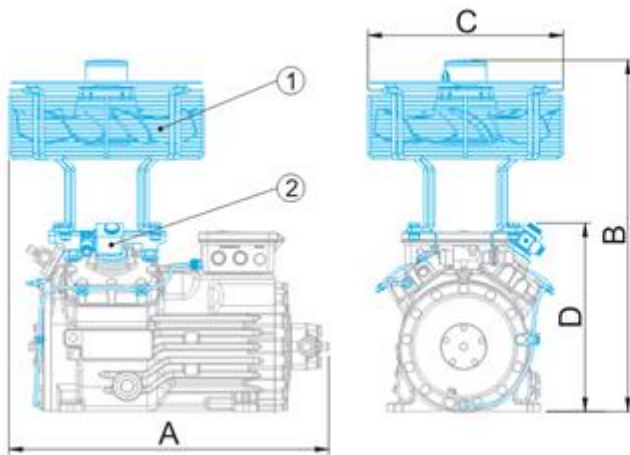


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Dimensions and connections



Maße Zubehör / Dimensions Accessories



	A mm / inch	B mm / inch	C mm / inch	D mm / inch
HG12P	ca. 460	ca. 500	ca. 315	-
HA12P	-	-	-	-
HG22e	ca. 515	ca. 595	ca. 350	-
HA22P	-	-	-	-
HG34e	ca. 570	ca. 620	ca. 350	ca. 340
HA34P	-	-	-	ca. 370

- ① Zusatzlüfter / Additional fan
- ② Leistungsregler / Capacity regulator

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HGX34e/380-4 S

Engine: 220-240V Δ / 380-420V Y -3- 50Hz

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Subject:

SV	Suction line valve, tube \varnothing ¹⁾	28 - 1 1/8
DV	Discharge line valve, tube \varnothing ¹⁾	22 - 7/8
A	Connection suction side, not lockable	1/8 " NPTF
A1	Connection suction side, lockable	7/16 " UNF
B	Connection discharge side, not lockable	1/8 " NPTF
B1	Connection discharge side, lockable	7/16 " UNF
D1	Connection oil return from oil separator	1/4 " NPTF
E	Connection oil pressure gauge	1/8 " NPTF
F	Oil drain	M 10
H	Oil charge plug	1/4 " NPTF
J	Connection oil sump heater	3/8 " NPTF
K	Sight glass	1 1/8 " - 18 UNEF
L	Connection thermal protection thermostat	1/8 " NPTF
O	Connection oil level regulator	1 1/8 " - 18 UNEF

1) Brazing connection

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HGX34e/380-4 S

Engine: 220-240V Δ / 380-420V Y -3- 50Hz

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Product photo



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