

BOCK® HGX34e/315-4

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

Refrigerant: R452A



Subject:

Performance data

Application: Refrigeration & AC

Refrigerant	R452A	Compressor refrigeration capacity	12.30 kW
Reference temperature	Dew point	Evaporator refrigeration capacity	12.30 kW
Power supply	50 Hz, 400 V	Power consumption	5.80 kW
Supply frequency	50 Hz	Current draw (400 V)	9.89 A
Evaporating temperature	-10.0 °C	Coefficient of performance (COP/EER)	2.12
<i>Evaporating pressure (abs.)</i>	<i>3.99 bar</i>	Condensing capacity	18.10 kW
Condensing temperature	45.0 °C	Mass flow	0.117 kg/s
<i>Condensing pressure (abs.)</i>	<i>19.83 bar</i>	Discharge end temperature	74.9 °C ¹⁾
Suction gas superheat	10 K		
Subcooling (outside cond.)	0 K		
Usable superheat	100%		

Preliminary capacity data.

-
- 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.

Subject to change without notice

To:

From:

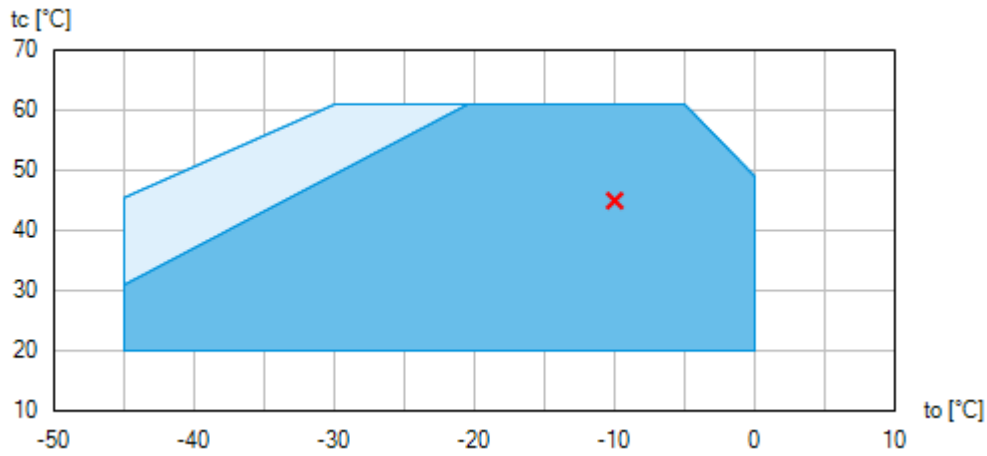
13.03.2026



Page 1 of 11

VAP 11.15.3 – vap.danfoss.com

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).

BOCK® HGX34e/315-4

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

Refrigerant: R452A



Subject:

Technical data

Number of cylinders / Bore / Stroke	4 / 50 mm / 40 mm
Displacement 50/60 Hz (1450/1740 ¹ /min)	27,30 / 32,80 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⁾	21.3 / 12.3 A
Max. power consumption ²⁾	7.4 kW
Starting current (rotor blocked) ²⁾	104.0 / 60.0 A
Motor protection	INT69 G
Protection terminal box	IP 66
Weight	93 kg
Frequency range ³⁾	25 - 70 Hz
Max. permissible overpressure (g) (LP/HP) ⁴⁾	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	BOCKlub E55
Oil type R22	BOCKlub A46
Oil charge	1,3 Ltr.
Dimensions Length / Width / Height	535 / 282 / 318 mm
Sound power level L _{WA} ⁵⁾	71 dB(A) @ -35 °C / +40 °C
	67 dB(A) @ -10 °C / +45 °C
Sound pressure level L _{pA} ⁵⁾	58 dB(A) @ -35 °C / +40 °C
	55 dB(A) @ -10 °C / +45 °C

1) Tolerance (± 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 motor contractors, feed lines, fuses and motor protection switches. Motor contractors: Consumption category AC3.

3) The maximum permissible working current of the compressor (I_{max}) must not be exceeded. Take account of the guidelines for use of frequency inverter (see compressor assembly instruction or selection software).

Subject to change without notice

To:

From:

13.03.2026
Page 3 of 11

VAP 11.15.3 – vap.danfoss.com

BOCK® HGX34e/315-4

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

Refrigerant: R452A



Subject:

- 4) LP = Low pressure
HP = High pressure
- 5) Declared dual-number noise emission values are in accordance with ISO 4871. The corresponding uncertainty to the sound power level is $K_{WA} = 2,5$ dB and to the sound pressure level is $K_{pA} = 2,5$ dB. The values are valid for 50 Hz with the refrigerant R404A at the standard rating points according to EN 12900.
 - A-weighted sound power level L_{WA} (re 1 pW), in decibel. To determine the values, measurement methods of the ISO 3740 standard with accuracy class 2 or higher were used .
 - A-weighted sound pressure level L_{pA} (re 20 μ Pa), in decibel. The values are calculated from the sound power level in accordance with ISO 11203: $L_{pA} = L_{WA} - Q_2$ at a distance of $d = 1$ m to the reference box.

Subject to change without notice

To:

From:

13.03.2026
Page 4 of 11

VAP 11.15.3 – vap.danfoss.com

BOCK® HGX34e/315-4

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

Refrigerant: R452A



Subject:

Performance data table

Application: Refrigeration & AC
Reference temperature: Dew point
Supply frequency: 50 Hz
Voltage: 400 V
Suction gas superheat: 10 K
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
15.0	Q [W]										
	P [kW]										
	I [A]										
20.0	Q [W]	28600	23700	19400	15600	12300	9500	7170	5270	3780	2680
	P [kW]	4.31	4.32	4.21	4.02	3.76	3.43	3.07	2.67	2.27	1.87
	I [A]	7.82	7.83	7.70	7.45	7.11	6.72	6.29	5.86	5.44	5.05
25.0	Q [W]	26600	22000	18000	14400	11300	8630	6450	4680	3290	2260
	P [kW]	4.87	4.77	4.58	4.31	3.97	3.58	3.15	2.71	2.27	1.84
	I [A]	8.57	8.44	8.18	7.81	7.38	6.89	6.39	5.90	5.44	5.02
30.0	Q [W]	24700	20400	16500	13200	10300	7800	5770	4120	2840	1890
	P [kW]	5.41	5.21	4.93	4.57	4.16	3.70	3.22	2.73	2.25	1.80
	I [A]	9.33	9.05	8.65	8.16	7.62	7.05	6.47	5.92	5.42	4.98
35.0	Q [W]	22800	18700	15100	12000	9260	6990	5110	3600	2420	1550
	P [kW]	5.92	5.62	5.25	4.81	4.32	3.80	3.27	2.74	2.22	1.73
	I [A]	10.10	9.63	9.10	8.49	7.84	7.17	6.53	5.93	5.39	4.92
40.0	Q [W]	20900	17100	13700	10800	8290	6200	4480	3100	2030	1240
	P [kW]	6.39	6.00	5.54	5.02	4.46	3.88	3.29	2.71	2.16	1.65
	I [A]	10.80	10.20	9.51	8.78	8.02	7.27	6.56	5.90	5.33	4.85
45.0	Q [W]	19000	15500	12300	9610	7330	5430	3870	2620	1660	952.00
	P [kW]	6.84	6.35	5.80	5.20	4.57	3.93	3.29	2.66	2.07	1.54
	I [A]	11.50	10.80	9.89	9.03	8.16	7.33	6.55	5.85	5.24	4.75
50.0	Q [W]		13800	10900	8440	6370	4660	3260	2150	1300	
	P [kW]		6.66	6.02	5.34	4.64	3.94	3.25	2.58	1.96	
	I [A]		11.20	10.30	9.23	8.26	7.34	6.50	5.76	5.13	
55.0	Q [W]		12100	9480	7260	5410	3880	2650	1680		
	P [kW]		6.92	6.19	5.44	4.67	3.91	3.17	2.46		
	I [A]		11.60	10.50	9.37	8.30	7.31	6.41	5.63		
60.0	Q [W]		10400	8040	6060	4430	3100	2040			
	P [kW]		7.14	6.33	5.50	4.66	3.84	3.05			
	I [A]		12.00	10.70	9.45	8.29	7.22	6.27			

Preliminary capacity data.



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

Subject to change without notice

To:

From:

13.03.2026
Page 5 of 11

VAP 11.15.3 – vap.danfoss.com

BOCK® HGX34e/315-4

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

Refrigerant: R452A



Subject:

Scope of supply

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

Winding protection with PTC resistor sensors and electronic trigger unit INT69 G
115-230 V AC, 50/60 Hz, IP00

Oil pump

Possibility for connection of oil pressure safety switch MP55

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

Oil charge:

HG: **BOCK**lub A46

HGX: **BOCK**lub E55

Sight glass

Suction and discharge line valve

Inert gas charge

Accessories

(Digital) capacity regulator DCR14 230 V - 1 - 50/60 Hz, IP65
possible equipment see Capacity regulator 09900-DGbF

Cylinder cover prepared for digital 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⁾

USB converter for INT69 G Diagnose ²⁾

INT69 G Diagnose 115-230 V AC, 50/60 Hz, IP00 (INT69 G not applicable)

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⁾

Step protection

Injection nozzle for liquid injection ²⁾

4 anti-vibration pads enclosed

Special voltage and/or frequency (on request)

Subject to change without notice

To:

From:

13.03.2026
Page 6 of 11

VAP 11.15.3 – vap.danfoss.com

BOCK® HGX34e/315-4

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

Refrigerant: R452A



Subject:

- 1) Only with additional adapter possible
- 2) Enclosure
- 3) Mounted

Subject to change without notice

To:

From:

13.03.2026
Page 7 of 11

VAP 11.15.3 – vap.danfoss.com

BOCK® HGX34e/315-4

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

Refrigerant: R452A



Subject:

Dimensions and connections

Subject to change without notice

To:

From:

13.03.2026
Page 8 of 11

VAP 11.15.3 – vap.danfoss.com

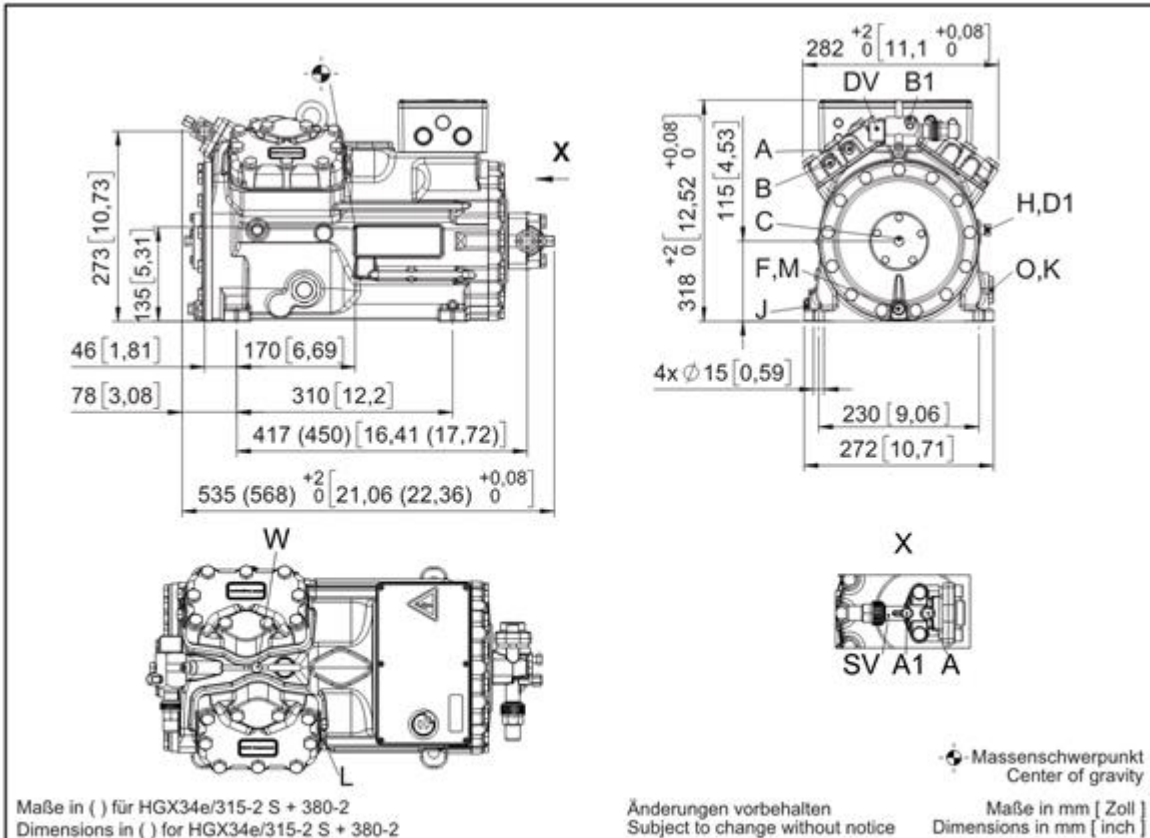
BOCK® HGX34e/315-4

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

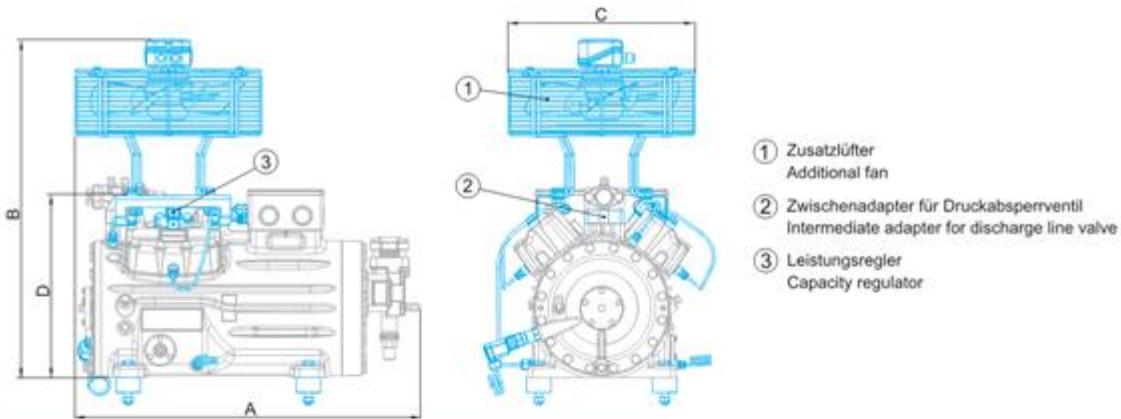
Refrigerant: R452A



Subject:



Maße Zubehör / Dimensions Accessories

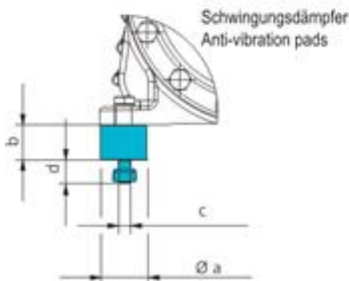


Typ / Type	A mm / inch	B mm / inch	C mm / inch	D mm / inch
HG12P	ca. 460 / 18	ca. 500 / 20	ca. 315 / 12	-
HG22e	ca. 525 / 21	ca. 610 / 24	ca. 380 / 15	-
HG34e	ca. 580 / 23	ca. 640 / 25	ca. 380 / 15	-
HG44e	ca. 710 / 28	ca. 685 / 27	ca. 380 / 15	368 / 14
HG56e	-	ca. 710 / 28	ca. 380 / 15	-
HG66e	ca. 820 / 32	ca. 800 / 31	ca. 380 / 15	-

Ansicht X: Anschlussmöglichkeit für Ötspiegelregulator
View X: Possibility of connection of oil level regulator



- Dreilochanschluss für TRAXOIL (3xM6x10)
Three-hole connection for TRAXOIL (3xM6x10)
- Dreilochanschluss für ESK, AC+R, CARLY (3xM6x10)
Three-hole connection for ESK, AC+R, CARLY (3xM6x10)



Typ / Type	Øa mm / inch	b mm / inch	c mm / inch	d mm / inch
HG12P	30 / 1.2	30 / 1.2	M8	20 / 0.8
HG22e	40 / 1.6	30 / 1.2	M10	20 / 0.8
HG34e	40 / 1.6	30 / 1.2	M10	20 / 0.8
HG44e	50 / 2.0	30 / 1.2	M12	25 / 1.0
HG56e	50 / 2.0	30 / 1.2	M12	25 / 1.0
HG66e	50 / 2.0	30 / 1.2	M12	25 / 1.0
HG88e	70 / 2.8	45 / 1.8	M12	37 / 1.5

ange without notice

13.03.2026
Page 9 of 11

l.15.3 - vap.danfoss.com

BOCK® HGX34e/315-4

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

Refrigerant: R452A

**Subject:**

SV	Suction line valve, tube \varnothing ¹⁾	28 mm - 1 1/8 "
DV	Discharge line valve, tube \varnothing ¹⁾	22 mm - 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
C	Connection oil pressure safety switch OIL	1/8 " NPTF
D1	Connection oil return from oil separator	1/4 " NPTF
F	Oil drain	M 12 x 1.5
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
M	Oil strainer	M 12 x 1.5
O	Connection oil level regulator	1 1/8 " - 18 UNEF

1) Brazing connection

Subject to change without notice

To:

From:

13.03.2026
Page 10 of 11VAP 11.15.3 – vap.danfoss.com

BOCK® HGX34e/315-4

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

Refrigerant: R452A



Subject:

Product photo



Subject to change without notice

To:

From:

13.03.2026
Page 11 of 11

VAP 11.15.3 – vap.danfoss.com