EX-HG, EX-HG... HC

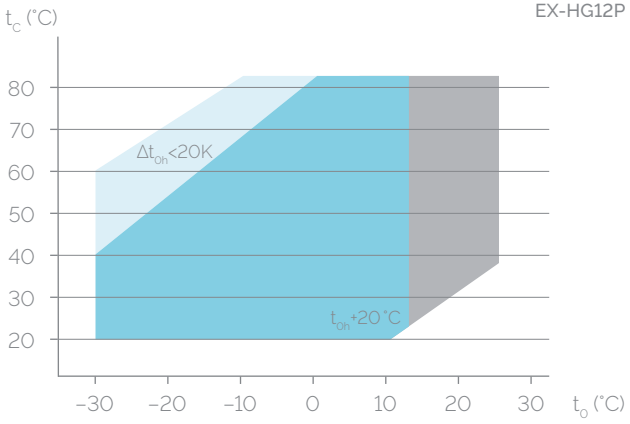
Type	Number of cylinders	Displacement 50 / 60 Hz (1.450 / 1.740 rpm)	Electrical data				Weight	Connections [5]		Oil-charge
			Voltage 1)	Max. working current [2]	Max. power consumption [2]	Starting current (rotor locked)		Discharge line DV	Suction line SV	
		m^3/h		A	kW	A	kg	mm | inch	mm | inch	Ltr.
				PW 1+2*		PW1 / PW 1+2*				
EX-HG44e/475-4 (HC)	4	41.30 / 49.60	[4]	19.0	11.0	65 / 109	164.0	28 | 1 1/8	35 | 1 3/8	2.3
EX-HG44e/475-4 S (HC)	4	41.30 / 49.60	[4]	23.0	13.1	87 / 149	168.0	28 | 1 1/8	35 | 1 3/8	2.3
EX-HG44e/565-4 (HC)	4	49.20 / 59.00	[4]	22.0	13.2	65 / 109	164.0	28 | 1 1/8	35 | 1 3/8	2.3
EX-HG44e/565-4 S (HC)	4	49.20 / 59.00	[4]	26.0	15.6	101 / 174	170.0	28 | 1 1/8	42 | 1 5/8	2.3
EX-HG44e/665-4 (HC)	4	57.70 / 69.20	[4]	26.0	15.4	87 / 149	171.0	28 | 1 1/8	42 | 1 5/8	2.3
EX-HG44e/665-4 S (HC)	4	57.70 / 69.20	[4]	30.0	18.3	101 / 174	168.0	28 | 1 1/8	42 | 1 5/8	2.3
EX-HG44e/770-4 (HC)	4	67.00 / 80.40	[4]	30.0	17.8	101 / 174	168.0	28 | 1 1/8	42 | 1 5/8	2.3
EX-HG44e/770-4 S (HC)	4	67.00 / 80.40	[4]	35.0	21.4	101 / 174	168.0	28 | 1 1/8	42 | 1 5/8	2.3
EX-HG56e/850-4 (HC)	6	73.80 / 88.60	[4]	32.6	19.7	101 / 174	194.0	35 | 1 3/8	54 | 2 1/8	2.7
EX-HG56e/850-4 S (HC)	6	73.80 / 88.60	[4]	39.4	23.5	125 / 209	211.0	35 | 1 3/8	54 | 2 1/8	2.7
EX-HG56e/995-4 (HC)	6	86.60 / 103.90	[4]	38.9	23.2	125 / 209	208.0	35 | 1 3/8	54 | 2 1/8	2.7
EX-HG56e/995-4 S (HC)	6	86.60 / 103.90	[4]	46.4	27.7	149 / 246	211.0	35 | 1 3/8	54 | 2 1/8	2.7
EX-HG56e/1155-4 (HC)	6	100.40 / 120.50	[4]	46.9	28.0	149 / 246	212.0	35 | 1 3/8	54 | 2 1/8	2.7
EX-HG56e/1155-4 S (HC)	6	100.40 / 120.50	[4]	58.3	33.3	196 / 335	221.0	35 | 1 3/8	54 | 2 1/8	2.7
EX-HG66e/1340-4 (HC)	6	116.50 / 139.80	[4]	53.7	31.9	170 / 275	282.0	42 | 1 5/8	54 | 2 1/8	4.4
EX-HG66e/1340-4 S (HC)	6	116.50 / 139.80	[4]	65.3	38.1	196 / 335	287.0	42 | 1 5/8	54 | 2 1/8	4.4
EX-HG66e/1540-4 (HC)	6	133.80 / 160.50	[4]	62.1	37.2	170 / 275	280.0	42 | 1 5/8	54 | 2 1/8	4.4
EX-HG66e/1540-4 S (HC)	6	133.80 / 160.50	[4]	75.0	44.4	196 / 335	285.0	42 | 1 5/8	54 | 2 1/8	4.4
EX-HG66e/1750-4 (HC)	6	152.20 / 182.60	[4]	71.9	42.4	196 / 335	280.0	42 | 1 5/8	54 | 2 1/8	4.4
EX-HG66e/1750-4 S (HC)	6	152.20 / 182.60	[4]	86.8	50.7	222 / 361	282.0	42 | 1 5/8	54 | 2 1/8	4.4
EX-HG66e/2070-4 (HC)	6	180.00 / 216.00	[4]	85.1	50.7	196 / 335	276.0	42 | 1 5/8	64 | 2 5/8	4.4
EX-HG66e/2070-4 S (HC)	6	180.00 / 216.00	[4]	103.0	60.7	222 / 361	278.0	42 | 1 5/8	64 | 2 5/8	4.4

* PW = Part Winding. motors for part winding start 1 = 1st part winding 2 = 2nd part winding

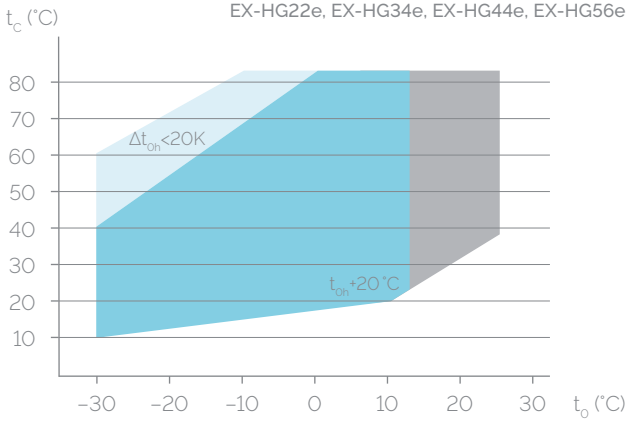
Explanations

1) Tolerance (± 10 %) relates to the mean value of the voltage range. Other voltages and current types on request.
2) The specifications for max. power consumption apply for 50 Hz operation. For 60 Hz operation, the specifications have to be multiplied by the factor 1.2. The max. working current remains unchanged.
   Take account of the max. operating current / max. power consumption when designing contactors, leads and fuses.
   Switches: Service category AC3
3) 380-420 V Y - 3 - 50 Hz
   440-480 V Y - 3 - 60 Hz
4) 380-420 V Y/YY - 3 - 50 Hz PW
   440-480 V Y/YY - 3 - 60 Hz PW
   PW = Part Winding, motors for part winding start (no start unloaders required)
   Winding ratios:
   EX-HG44e, EX-HG56e, EX-HG66e = 50% / 50%
5) For soldering connections

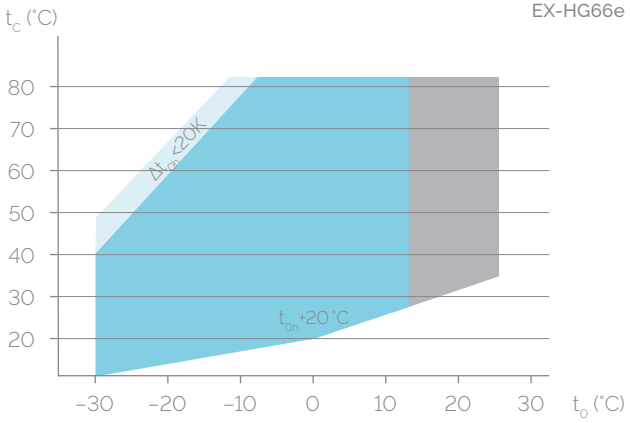
EX-HG12P



EX-HG22e, EX-HG34e, EX-HG44e, EX-HG56e



EX-HG66e



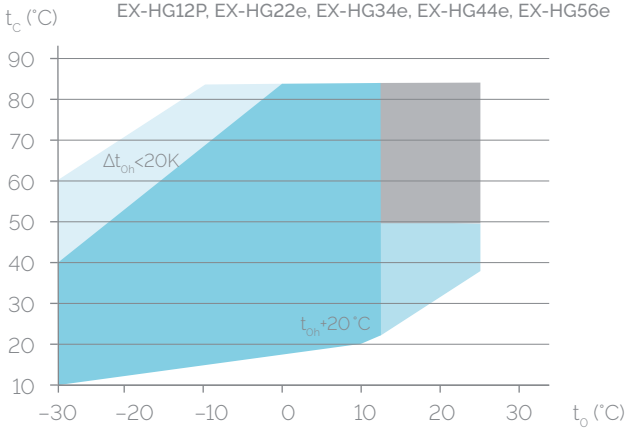
t_0 Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)

Max. permissible operating pressure (LP/HP) [1]: 19/28 bar
[1] LP = low pressure, HP = high pressure

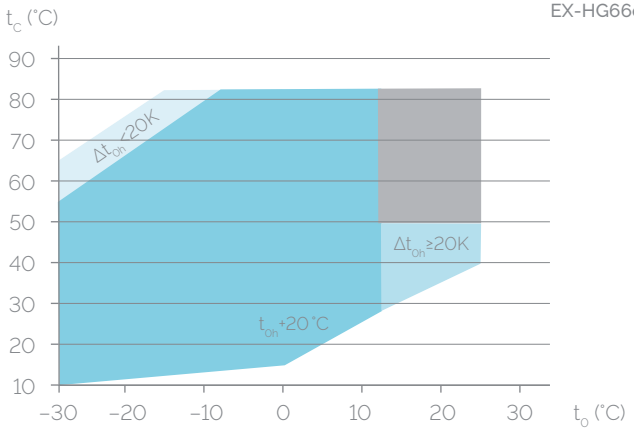
- Unlimited application range
- Motor version -S- (more powerful motor)
- Reduced suction gas temperature

R513A

EX-HG12P, EX-HG22e, EX-HG34e, EX-HG44e, EX-HG56e



EX-HG66e

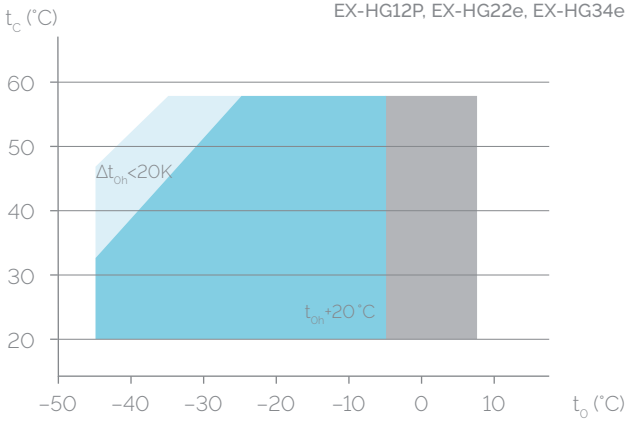


t_0 Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)

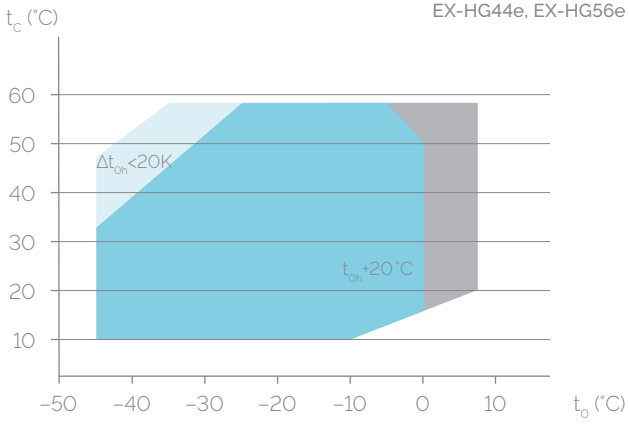
Max. permissible operating pressure (LP/HP) [1]: 19/28 bar
[1] LP = low pressure, HP = high pressure

- Unlimited application range
- Motor version -S- (more powerful motor)
- Reduced suction gas temperature
- Required minimum superheating $\Delta t0h=_{20}K$

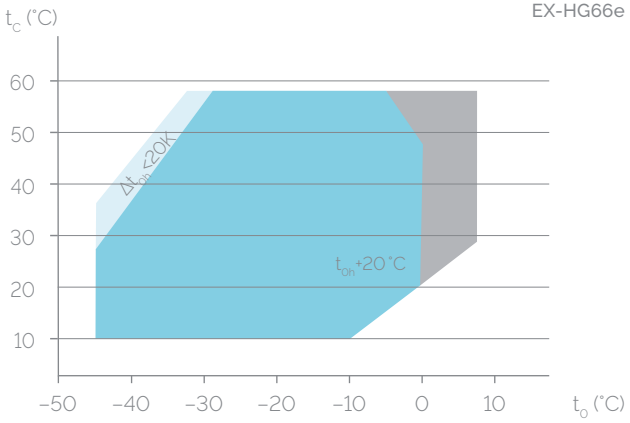
EX-HG12P, EX-HG22e, EX-HG34e



EX-HG44e, EX-HG56e



EX-HG66e

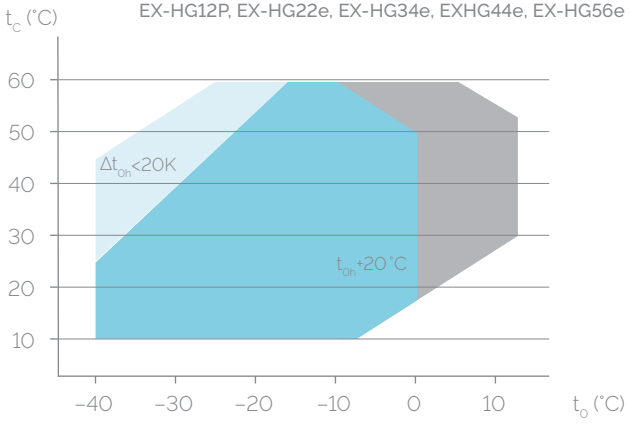


t_0 Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{Oh} Suction gas superheat (K)
t_{Oh} Suction gas temperature (°C)

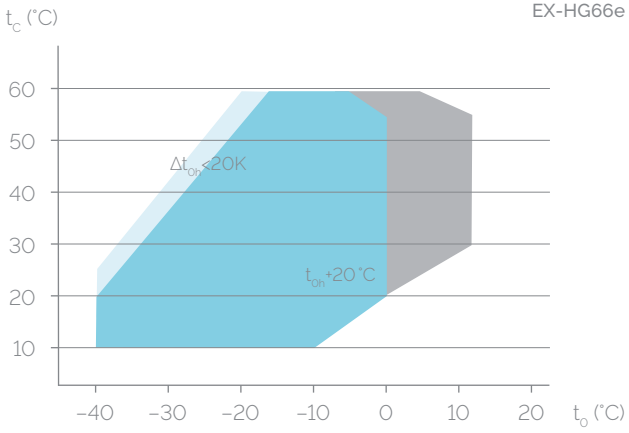
Max. permissible operating pressure (LP/HP) [1]: 19/28 bar
[1] LP = low pressure, HP = high pressure

- Unlimited application range
- Motor version -S- (more powerful motor)
- Reduced suction gas temperature

EX-HG12P, EX-HG22e, EX-HG34e, EXHG44e, EX-HG56e



EX-HG66e



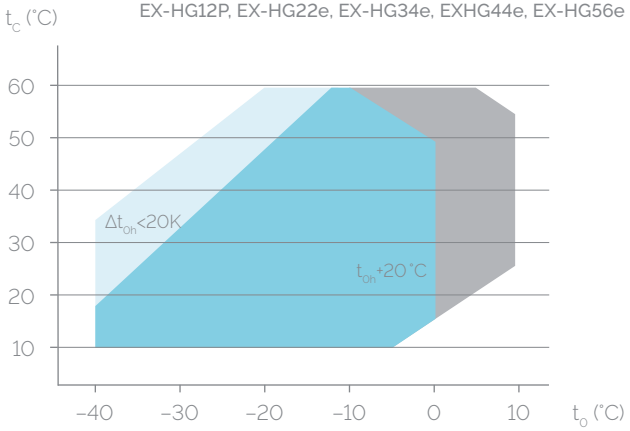
t_o Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)

Max. permissible operating pressure (LP/HP) [1]: 19/28 bar
[1] LP = low pressure, HP = high pressure

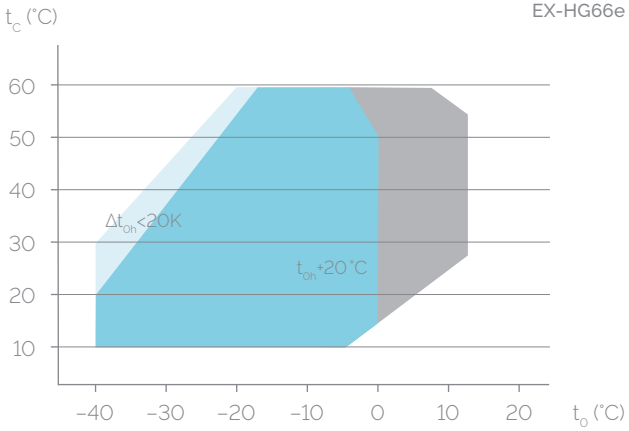
- Unlimited application range
- Motor version -S- (more powerful motor)
- Reduced suction gas temperature

R407A

EX-HG12P, EX-HG22e, EX-HG34e, EXHG44e, EX-HG56e



EX-HG66e

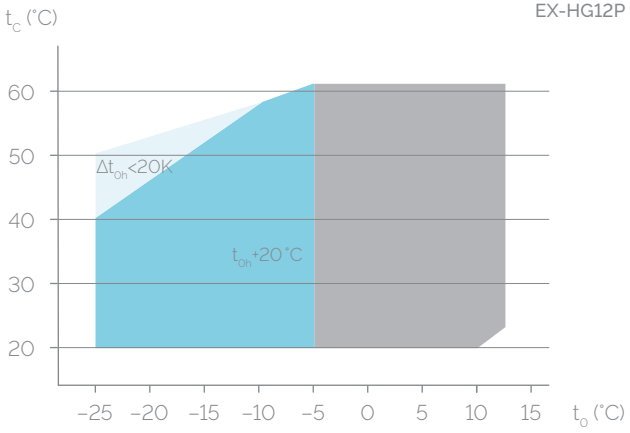


t_o Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)

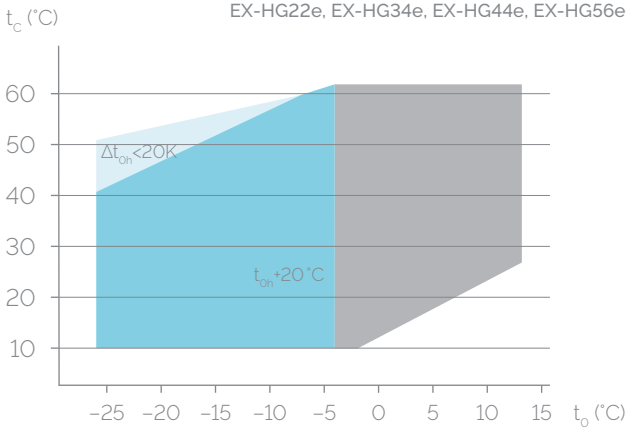
Max. permissible operating pressure (LP/HP) [1]: 19/28 bar
[1] LP = low pressure, HP = high pressure

- Unlimited application range
- Motor version -S- (more powerful motor)
- Reduced suction gas temperature

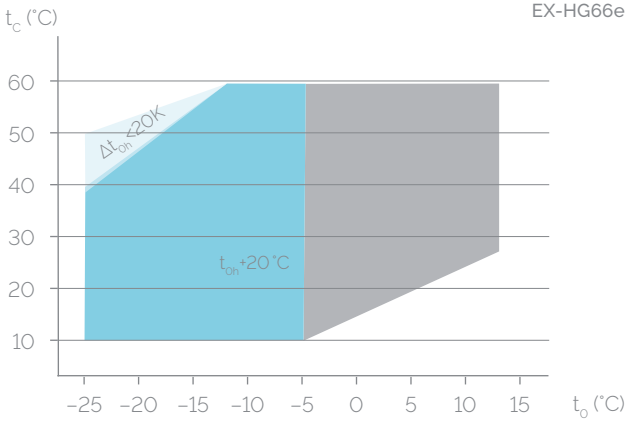
EX-HG12P



EX-HG22e, EX-HG34e, EX-HG44e, EX-HG56e



EX-HG66e

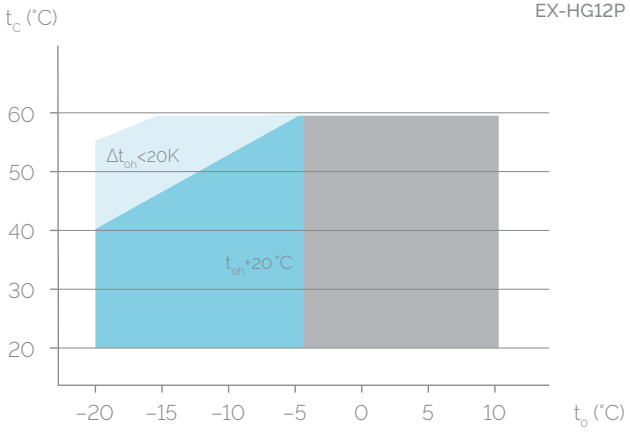


t_0 Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{Oh} Suction gas superheat (K)
t_{Oh} Suction gas temperature (°C)

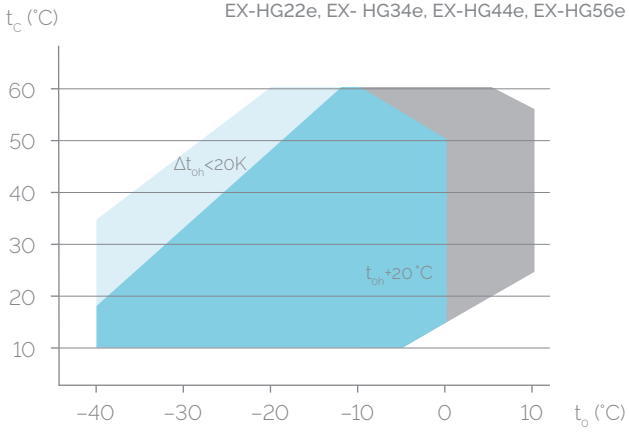
Max. permissible operating pressure (LP/HP) [1]: 19/28 bar
[1] LP = low pressure, HP = high pressure

- Unlimited application range
- Motor version -S- (more powerful motor)
- Reduced suction gas temperature

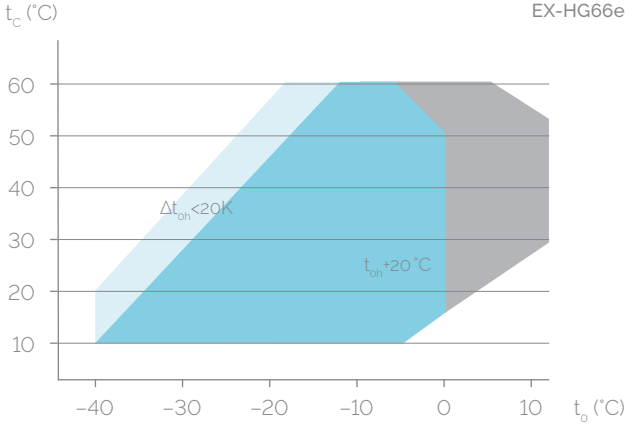
EX-HG12P



EX-HG22e, EX- HG34e, EX-HG44e, EX-HG56e



EX-HG66e



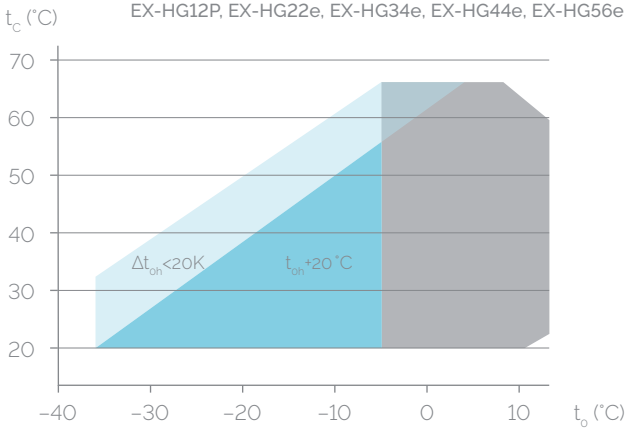
t_o Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)

Max. permissible operating pressure (LP/HP) [1]: 19/28 bar
[1] LP = low pressure, HP = high pressure

- Unlimited application range
- Motor version -S- (more powerful motor)
- Reduced suction gas temperature

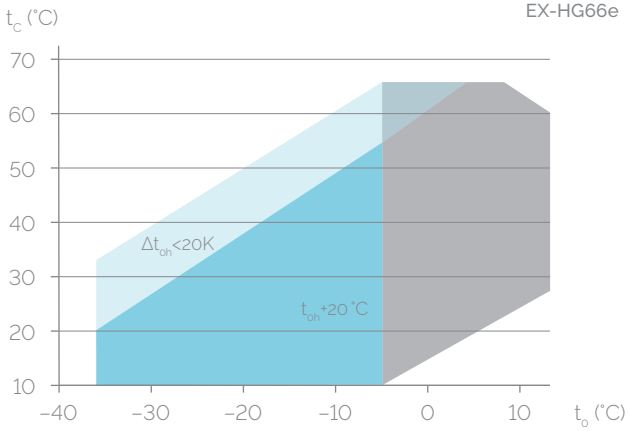
R22

EX-HG12P, EX-HG22e, EX-HG34e, EX-HG44e, EX-HG56e



t_o Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)

EX-HG66e



Max. permissible operating pressure (LP/HP) [1]: 19/28 bar
[1] LP = low pressure, HP = high pressure

- Unlimited application range
- Motor version -S- (more powerful motor)
- Reduced suction gas temperature

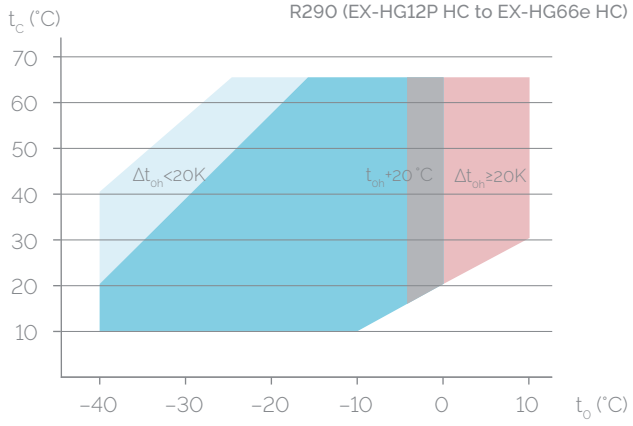
Notes

Operating limits

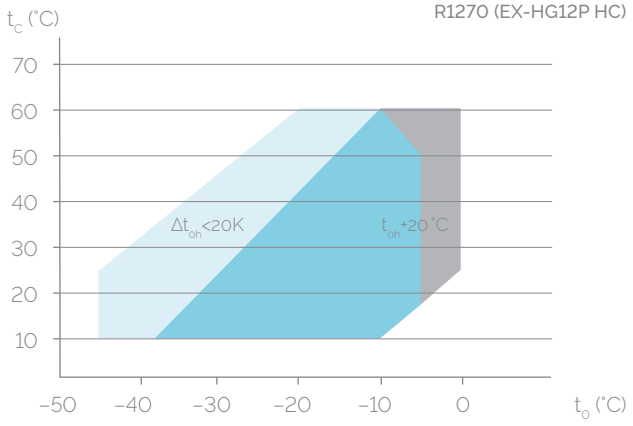
Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Operating limits: hydrocarbons

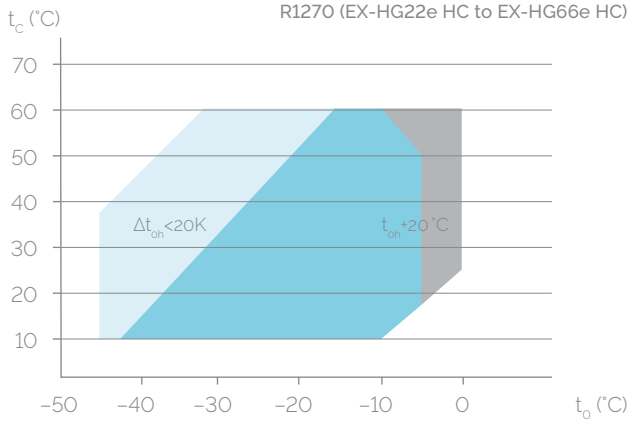
R290 (EX-HG12P HC to EX-HG66e HC)



R1270 (EX-HG12P HC)



R1270 (EX-HG22e HC to EX-HG66e HC)



Design for other ranges on request

The use of other hydrocarbons is permitted only following prior written approval from Bock

t_0 Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{Oh} Suction gas superheat (K)
t_{Oh} Suction gas temperature (°C)

- Required minimum superheating Δt0h ¸ 20 K
- Motor version -S- (more powerful motor) Required minimum superheating Δt0h ¸ 20 K
- Required minimum superheating Δt0h ¸ 20 K, the suction gas temperature must be adapted accordingly
- Reduced suction gas temperature (Δt_{Oh} < 20 K)

Max. permissible operating pressure (LP/HP) [1]: 19/28 bar

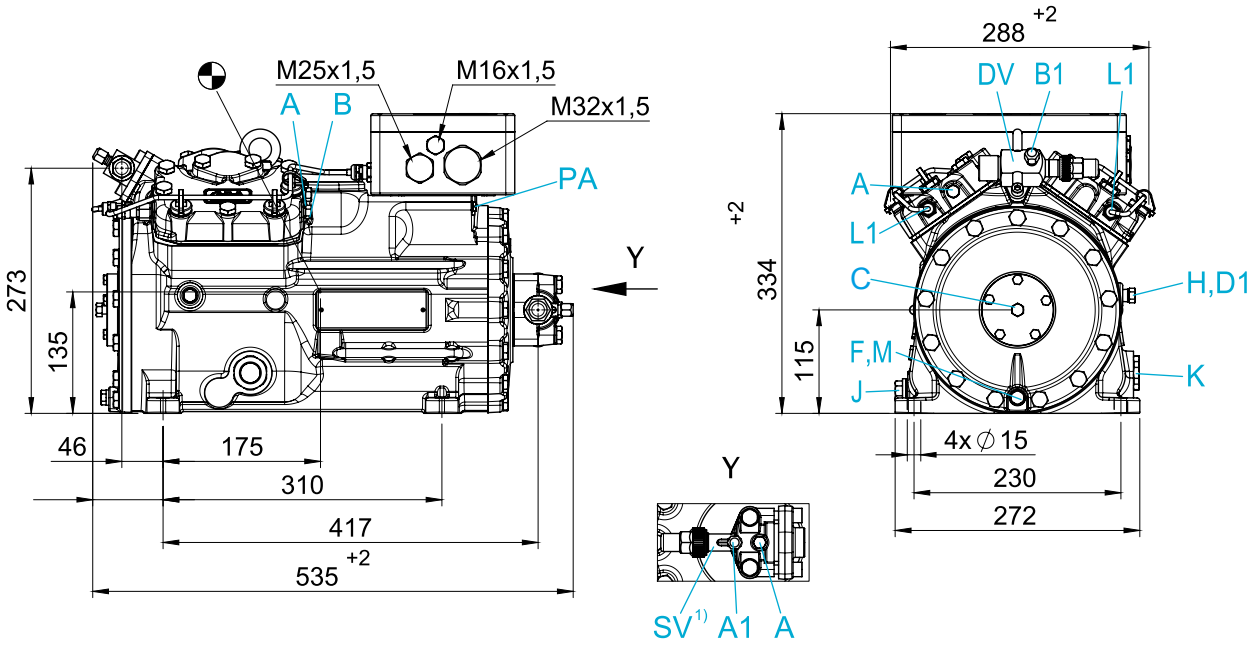
[1] LP = low pressure, HP = high pressure

Notes

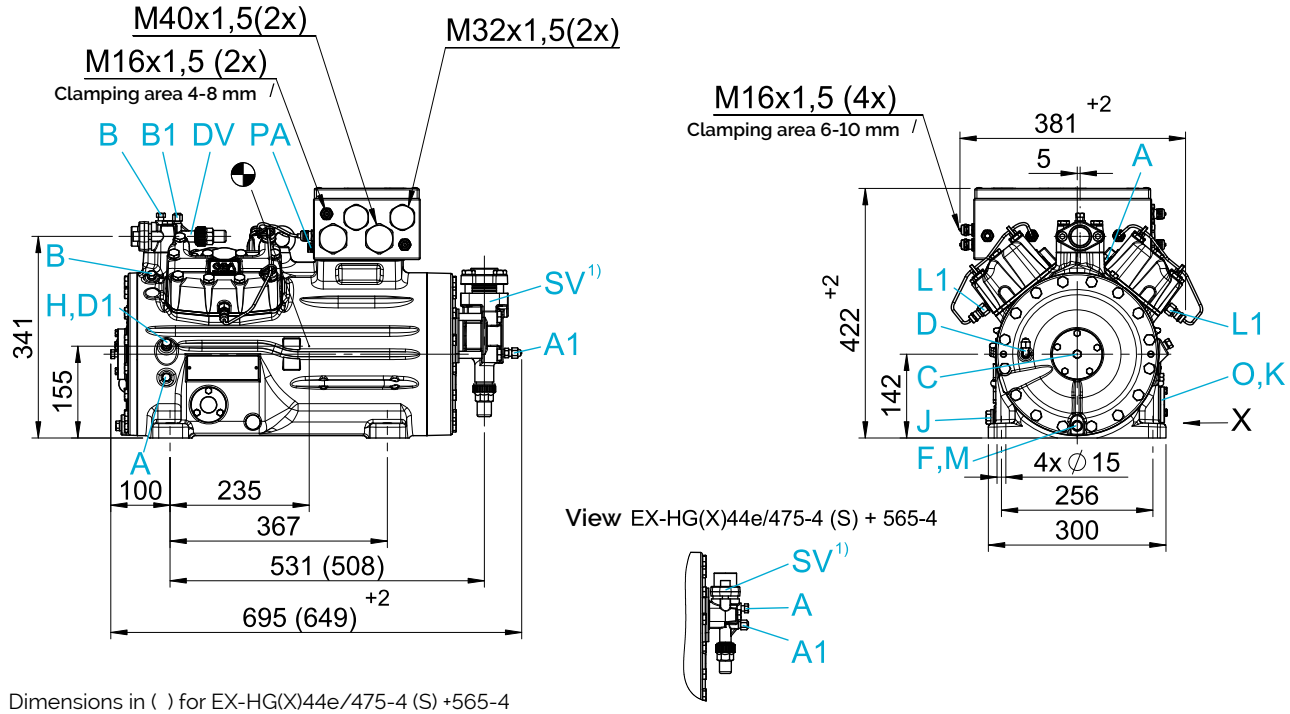
Operating limits

The compressor can be operated within the operating limits shown in the diagram. The meaning of the color-shaded areas should be observed. A minimum superheating of Δt0h = 20 K must be maintained for the dark-blue and gray application range. An internal IHX heat exchanger must be provided for this, if necessary. Thresholds should not be selected as the design point or the continuous operating point.

EX-HG34e » EX-HG34e/215-4 » EX-HG34e/215-4 S » EX-HG34e/255-4 » EX-HG34e/255-4 S
EX-HG34e... HC » EX-HG34e/315-4 » EX-HG34e/315-4 S » EX-HG34e/380-4 » EX-HG34e/380-4 S



EX-HG44e » EX-HG44e/475-4 » EX-HG44e/475-4 S » EX-HG44e/565-4 » EX-HG44e/565-4 S
EX-HG44e... HC » EX-HG44e/665-4 » EX-HG44e/665-4 S » EX-HG44e/770-4 » EX-HG44e/770-4 S

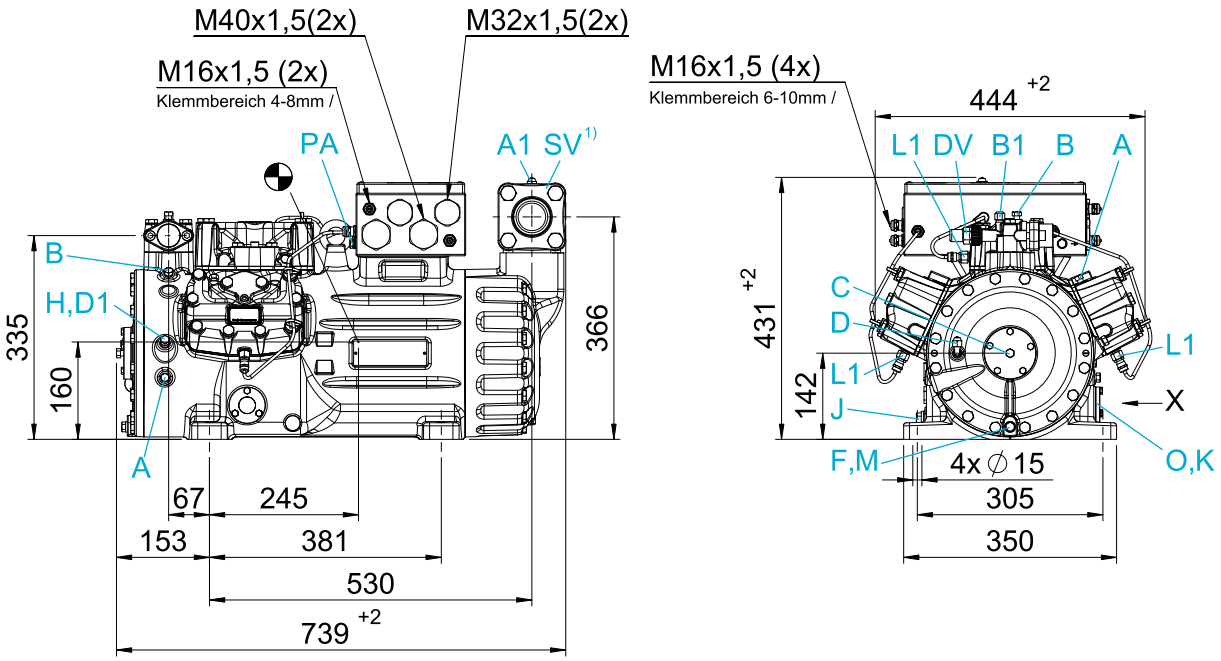


Dimensions in ( ) for EX-HG(X)44e/475-4 (S) +565-4

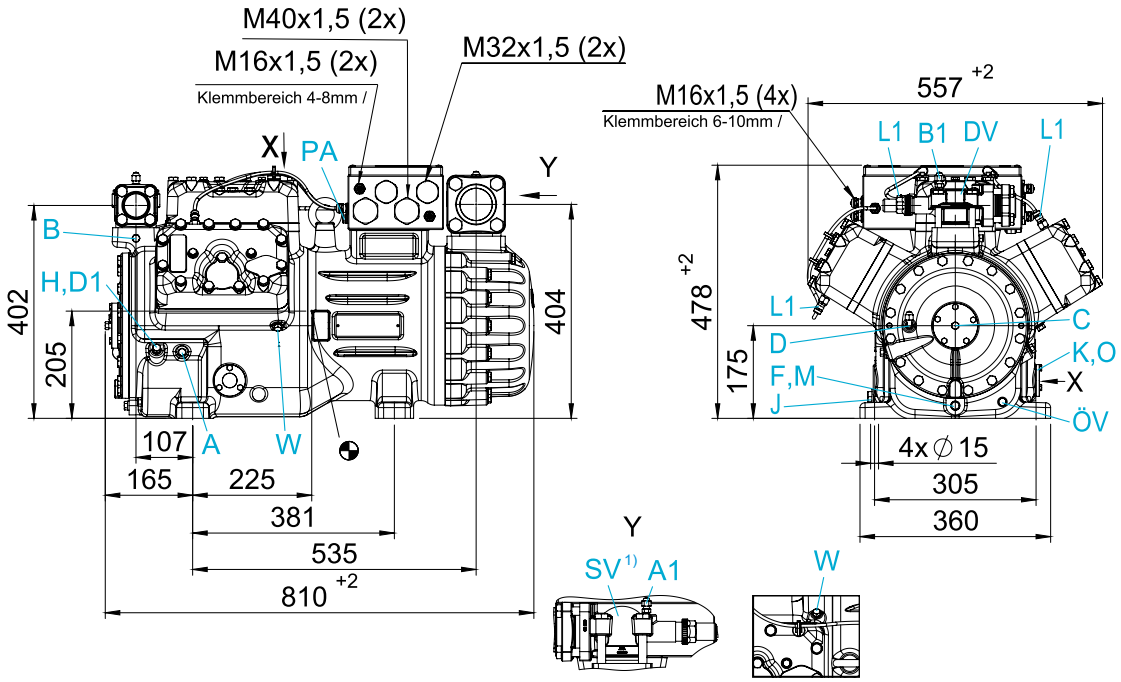
Dimensions in mm
1) Position SV see table on page 29
Center of gravity

For connections see page 30
Dimensions for anti-vibration pad, see page 29
Dimensions for view X, see page 29

EX-HG56e » EX-HG56e/850-4 » EX-HG56e/850-4 S » EX-HG56e/995-4
EX-HG56e...HC » EX-HG56e/995-4 S » EX-HG56e/1155-4 » EX-HG56e/1155-4 S



EX-HG66e » EX-HG66e/1340-4 » EX-HG66e/1340-4 S » EX-HG66e/1540-4 » EX-HG66e/1540-4 S
EX-HG66e...HC » EX-HG66e/1750-4 » EX-HG66e/1750-4 S » EX-HG66e/2070-4 » EX-HG66e/2070-4 S



Dimensions in mm
1) Position SV see table on page 29
Center of gravity

For connections see page 30
Dimensions for anti-vibration pad, see page 29
Dimensions for view X, see page 29