



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

| | | | |
|--|--|--|-----------------------------|
| Compressor model Mode | (6H-35.2) Refrigeration and Air conditioning | Suction gas temperature Operating mode | 20,00 °C Auto |
| Reference temperature Liq. subc. (in condenser) | Dew point temp. 0 K | Power supply Capacity Control Useful superheat | 400V-3-50Hz 100% 100% |

Result

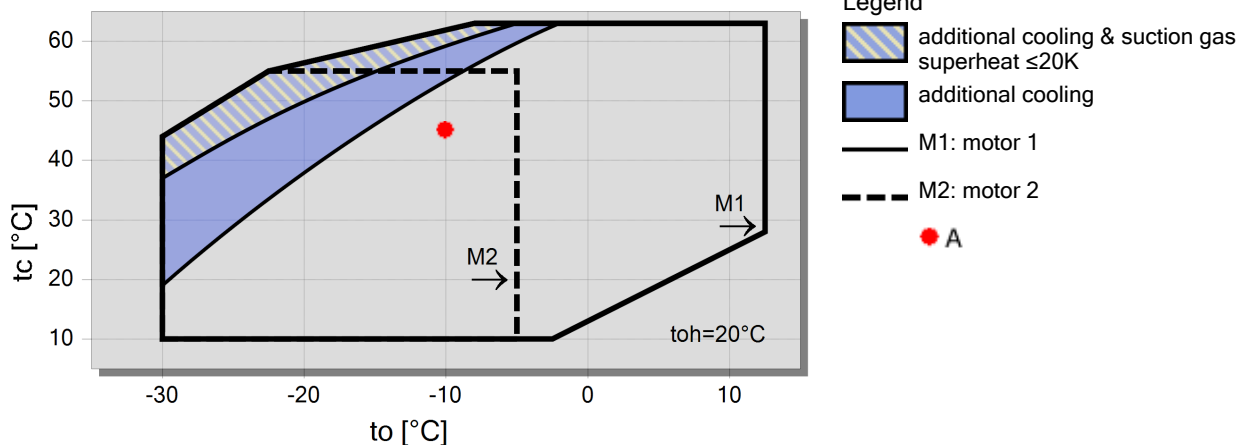
| | | | |
|--------|--------------------|----------|---------------------------------|
| Q [W] | Cooling capacity | COP [-] | COP/EER |
| Q* [W] | Cooling capacity * | COP* [-] | COP/EER * |
| P [kW] | Power input | m [kg/h] | Mass flow |
| I [A] | Current | Op. | Operating mode |
| Qc [W] | Condenser Capacity | th [°C] | Discharge gas temp. w/o cooling |

| tc | to | 10°C | 0°C | -10°C | -20°C | -30°C | -40°C | -50°C | -60°C |
|------|----------|----------|----------|----------|----------|----------|-------|-------|-------|
| 30°C | Q [W] | 136889 | 95635 | 64503 | 41318 | 24412 | -- | -- | -- |
| | Q* [W] | 136889 | 95635 | 64503 | 41318 | 24412 | -- | -- | -- |
| | P [kW] | 20,6 | 19,27 | 17,24 | 14,52 | 11,12 | -- | -- | -- |
| | I [A] | 38,5 | 36,6 | 34,0 | 30,6 | 27,0 | -- | -- | -- |
| | Qc [W] | 157515 | 114908 | 81739 | 55836 | 35531 | -- | -- | -- |
| | COP [-] | 6,64 | 4,96 | 3,74 | 2,85 | 2,20 | -- | -- | -- |
| | COP* [-] | 6,64 | 4,96 | 3,74 | 2,85 | 2,20 | -- | -- | -- |
| | m [kg/h] | 2736 | 1877 | 1250 | 793 | 465 | -- | -- | -- |
| | Op. | Standard | Standard | Standard | Standard | Standard | -- | -- | -- |
| | th [°C] | 64,4 | 80,5 | 99,2 | 121,4 | 0 | -- | -- | -- |
| 40°C | Q [W] | 123484 | 85970 | 57581 | 36395 | 20921 | -- | -- | -- |
| | Q* [W] | 123484 | 85970 | 57581 | 36395 | 20921 | -- | -- | -- |
| | P [kW] | 24,7 | 22,6 | 19,78 | 16,29 | 12,14 | -- | -- | -- |
| | I [A] | 44,3 | 41,2 | 37,3 | 32,8 | 28,0 | -- | -- | -- |
| | Qc [W] | 148213 | 108566 | 77362 | 52686 | 33058 | -- | -- | -- |
| | COP [-] | 4,99 | 3,80 | 2,91 | 2,23 | 1,72 | -- | -- | -- |
| | COP* [-] | 4,99 | 3,80 | 2,91 | 2,23 | 1,72 | -- | -- | -- |
| | m [kg/h] | 2660 | 1816 | 1199 | 750 | 428 | -- | -- | -- |
| | Op. | Standard | Standard | Standard | Standard | Standard | -- | -- | -- |
| | th [°C] | 77,2 | 94,4 | 114,7 | 139,3 | 0 | -- | -- | -- |
| 50°C | Q [W] | 110793 | 76756 | 50943 | 31666 | -- | -- | -- | -- |
| | Q* [W] | 110793 | 76756 | 50943 | 31666 | -- | -- | -- | -- |
| | P [kW] | 28,8 | 25,9 | 22,3 | 17,92 | -- | -- | -- | -- |
| | I [A] | 50,2 | 46,0 | 40,8 | 34,8 | -- | -- | -- | -- |
| | Qc [W] | 139565 | 102657 | 73210 | 49589 | -- | -- | -- | -- |
| | COP [-] | 3,85 | 2,96 | 2,29 | 1,77 | -- | -- | -- | -- |
| | COP* [-] | 3,85 | 2,96 | 2,29 | 1,77 | -- | -- | -- | -- |
| | m [kg/h] | 2597 | 1761 | 1151 | 708 | -- | -- | -- | -- |
| | Op. | Standard | Standard | Standard | Standard | -- | -- | -- | -- |
| | th [°C] | 90,2 | 108,7 | 130,8 | 0 | -- | -- | -- | -- |

-- No calculation possible (see message in single point selection)

*According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

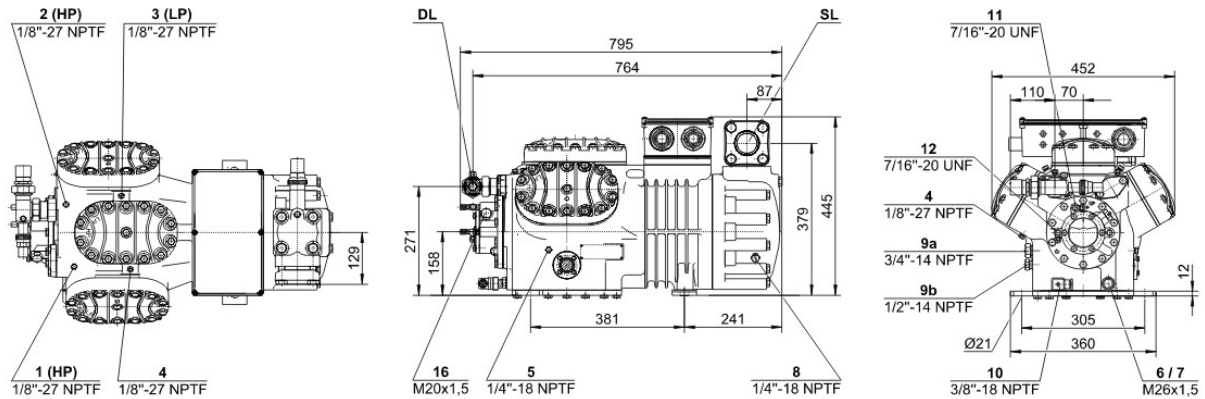
Application Limits 100%





Technical Data: (6H-35.2)

Dimensions and Connections



Technical Data

Technical Data

| | |
|--|--|
| Displacement (1450 RPM 50Hz) | 110,5 m ³ /h |
| Displacement (1750 RPM 60Hz) | 133,4 m ³ /h |
| No. of cylinder x bore x stroke | 6 x 70 mm x 55 mm |
| Weight | 235 kg |
| Max. pressure (LP/HP) | 19 / 28 bar |
| Connection suction line | 54 mm - 2 1/8" |
| Connection discharge line | 35 mm - 1 3/8" |
| Connection cooling water | R 3/4" |
| Oil type R134a/R407C/R404A/R507A/R407A/R407F | tc<55°C: BSE32 / tc>55°C: BSE55 (Option) |
| Oil type R22 (R12/R502) | B5.2 (Standard) |
| Oil type R290/R1270 | SHC226E (Standard) |

Motor data

| | |
|---------------------------------|------------------------|
| Motor voltage (more on request) | 380-420V PW-3-50Hz |
| Max operating current | 61.0 A |
| Winding ratio | 50/50 |
| Starting current (Rotor locked) | 147.0 A Y / 262.0 A YY |
| Max. Power input | 37,4 kW |

Extent of delivery (Standard)

| | |
|-------------------|--------------------------------|
| Motor protection | SE-B2 |
| Enclosure class | IP54 (Standard), IP66 (Option) |
| Vibration dampers | Standard |
| Oil charge | 4,75 dm ³ |

Available Options

| | |
|----------------------------------|---|
| Discharge gas temperature sensor | Option |
| Start unloading | Option |
| Capacity control | 100-66-33% (Option) |
| Additional fan | Option |
| Water-cooled cylinder heads | Option |
| Oil service valve | Option |
| Crankcase heater | 140 W (Option) |
| Oil pressure monitoring | MP54 (Option), Delta-PII (Option, not for R290/R1270) |

Sound measurement

| | |
|--|---------------------|
| Sound power level (+5°C / 50°C) | 81,5 dB(A) @ 50Hz |
| Sound power level (-10°C / 45°C) | 82,0 dB(A) @ 50Hz |
| Sound power level (-35°C / 40°C) | (90,5) dB(A) @ 50Hz |
| Sound pressure level @ 1m (+5°C / 50°C) | 73,5 dB(A) @ 50Hz |
| Sound pressure level @ 1m (-10°C / 45°C) | 74,0 dB(A) @ 50Hz |
| Sound pressure level @ 1m (-35°C / 40°C) | (82,5) dB(A) @ 50Hz |