



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

| | | | |
|---------------------------|---|---|------------------|
| Compressor model Mode | (4H-15.2Y) Refrigeration and Air conditioning | Suction gas temperature Operating mode | 20,00 °C Auto |
| Refrigerant | R134a | Power supply | 400V-3-50Hz |
| Reference temperature | Dew point temp. | Capacity Control | 100% |
| Liq. subc. (in condenser) | 0 K | Useful superheat | 100% |

Result

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

| tc | to | 10°C | 0°C | -10°C | -20°C | -30°C | -40°C | -50°C | -60°C |
|------|-----------|----------|----------|----------|----------|----------|-------|-------|-------|
| 30°C | Q [W] | 63228 | 42774 | 27858 | 17202 | 9820 | -- | -- | -- |
| | Qu* [W] | 63228 | 42774 | 27858 | 17202 | 9820 | | | |
| | P [kW] | 9,47 | 8,97 | 7,90 | 6,51 | 5,04 | | | |
| | I [A] | 17,61 | 16,95 | 15,58 | 13,94 | 12,43 | | | |
| | Qc [W] | 72701 | 51748 | 35762 | 23714 | 14865 | | | |
| | COP [-] | 6,67 | 4,77 | 3,52 | 2,64 | 1,95 | | | |
| | m [kg/h] | 1327 | 884 | 569 | 349 | 198,0 | | | |
| | Op. | Standard | Standard | Standard | Standard | Standard | | | |
| | th [°C] | 53,3 | 66,5 | 81,5 | 99,4 | 123,4 | | | |
| 40°C | Q [W] | 56101 | 37782 | 24389 | 14807 | 8167 | -- | -- | -- |
| | Qu* [W] | 56101 | 37782 | 24389 | 14807 | 8167 | | | |
| | P [kW] | 11,81 | 10,55 | 8,89 | 7,01 | 5,11 | | | |
| | I [A] | 20,9 | 19,10 | 16,84 | 14,51 | 12,49 | | | |
| | Qc [W] | 67910 | 48337 | 33282 | 21822 | 13273 | | | |
| | COP [-] | 4,75 | 3,58 | 2,74 | 2,11 | 1,60 | | | |
| | m [kg/h] | 1289 | 853 | 544 | 327 | 179,6 | | | |
| | Op. | Standard | Standard | Standard | Standard | Standard | | | |
| | th [°C] | 64,3 | 77,6 | 92,8 | 111,1 | 135,3 | | | |
| 50°C | Q [W] | 48846 | 32711 | 20871 | 12379 | 6482 | -- | -- | -- |
| | Qu* [W] | 48846 | 32711 | 20871 | 12379 | 6482 | | | |
| | P [kW] | 13,86 | 11,91 | 9,68 | 7,31 | 4,95 | | | |
| | I [A] | 23,9 | 21,0 | 17,88 | 14,86 | 12,34 | | | |
| | Qc [W] | 62702 | 44624 | 30549 | 19684 | 11435 | | | |
| | COP [-] | 3,53 | 2,75 | 2,16 | 1,69 | 1,31 | | | |
| | m [kg/h] | 1244 | 817 | 514 | 302 | 157,2 | | | |
| | Op. | Standard | Standard | Standard | Standard | Standard | | | |
| | th [°C] | 75,3 | 88,8 | 104,3 | 123,0 | 0 | | | |

-- No calculation possible (see message in single point selection)
 *According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

Application Limits 100%

