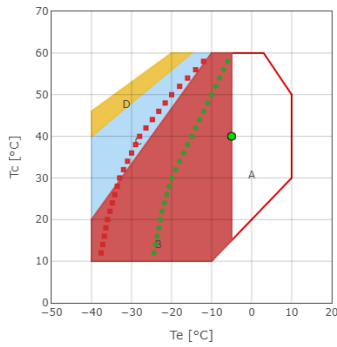




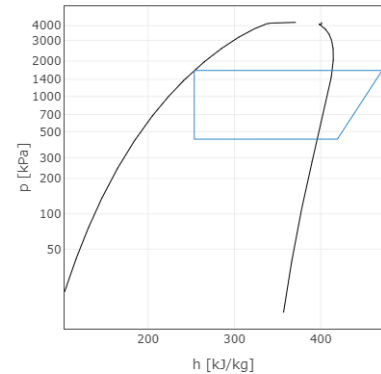
Calculation - H

Input

| | |
|-------------------------------|-----------------------|
| Model | H3501CC |
| Refrigerant | R449A |
| Evaporating temperature | -5.0 °C |
| Condensing temperature | 40.0 °C |
| Reference temperature | Dew temperature |
| Suction temperature | 20.0 °C |
| Evaporator outlet temperature | 20.0 °C |
| Liquid subcooling | 0.0 K |
| Voltage / phases / frequency | 380-420 V / 3 / 50 Hz |
| Capacity control system | 100% |



- A = "CC" models only
- B = Standard application
- C = Head cooling fan or max superheating 20K
- D = Head cooling fan + max superheating 20K
- x = Min Te 50%
- * = Min Te 50% Head cooling fan or max superheating 20K
- = Dew temperature



Performance calculation

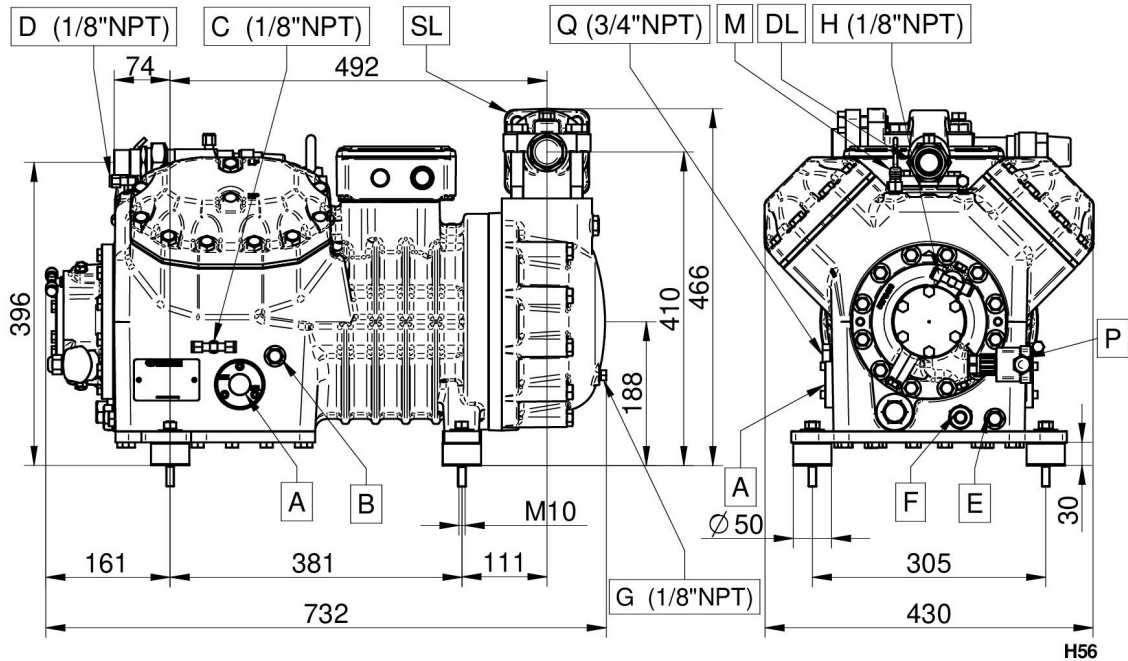
| | Standard conditions | At evaporator | At compressor |
|-----------------------|---------------------|---------------|---------------|
| Cooling capacity | 72820 W | 72820 W | 72820 W |
| Absorbed power | 23.56 kW | 23.56 kW | 23.56 kW |
| Condenser capacity | 96.36 kW | 96.36 kW | 96.36 kW |
| COP | 3.09 | 3.09 | 3.09 |
| Mass flow | 1587.0 kg/h | 1587.0 kg/h | 1587.0 kg/h |
| Absorbed current | 43.9 A | 43.9 A | 43.9 A |
| Discharge temperature | 85.1 °C | 85.1 °C | 85.1 °C |
| Max operating current | 60.0 A | 60.0 A | 60.0 A |
| Locked rotor current | 260.0 A | 260.0 A | 260.0 A |



Technical data

| | | |
|----------------------|--------|---------------------|
| No. cylinders | 4.0 | |
| Bore | 83.0 | [mm] |
| Stroke | 60.0 | [mm] |
| Displacement @ 50 Hz | 112.97 | [m ³ /h] |
| Displacement @ 60 Hz | 135.57 | [m ³ /h] |
| Suction valve | 54 s. | [mm] |
| Discharge valve | 35 s. | [mm] |
| Oil charge | 3.5 | [L] |
| Net weight | 205.0 | [kg] |

Overall dimensions [mm]



- A - Oil sight glass
- B - Oil charge plug
- C - Low pressure connection
- D - High pressure connection
- E - Oil drain plug
- F - Crankcase heater
- G - Oil return plug
- H - Oil pressure tap
- M - Max. discharge temperature sensor
- P - Oil differential pressure switch
- Q - Gas equalisation
- DL - Discharge service valve
- SL - Suction service valve



Configuration: Standard \ Optional

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| TE=Thermistor protection | Standard |
| REL=Motor protection electronic module | Standard |
| CH=Crankcase heater | Optional |
| TCH=Self-regulated crankcase heater | Optional |
| SLCR=Stepless capacity regulator | Optional |
| BF=Head cooling fan | Optional |
| US=Unloaded start by-pass | Optional |
| ISV=Internal safety valve | Standard |
| IP65=Electrical box IP65 | Standard |
| CR1=Capacity control 50-100% | Optional |
| UL=UL approved compressor | Optional |
| ODPS=Oil differential pressure switch | Standard |
| TMAX=Max discharge temperature sensor | Standard |
| For operation with HFC refrigerants the compressor must be ordered with POE OIL. For operation with HCFC refrigerant the compressor shall be ordered with mineral oil. | |
| HFC (POE 46) - HCFC (MIN 46-68) | Standard |
| Motors suitable for operation at different voltage from those listed above may be supplied on request. | |
| For low temperature application external cooling must be provided. | |
| 220-240/3/50 (Δ) 380-420/3/50 (Y) | Optional |
| 265-290/3/60 (Δ) 440-480/3/60 (Y) | Optional |
| 380-420/3/50 (PWS) 440-480/3/60 (PWS) | Standard |
| 208-230/3/60 (Δ) 360-400/3/60 (Y) | Optional |
| 208-230/3/60 (PWS) | Optional |
| 220-240/3/50 (PWS) | Optional |
| 360-400/3/60 (PWS) | Optional |
| 475-525/3/50 (PWS) 570-630/3/60 (PWS) | Optional |