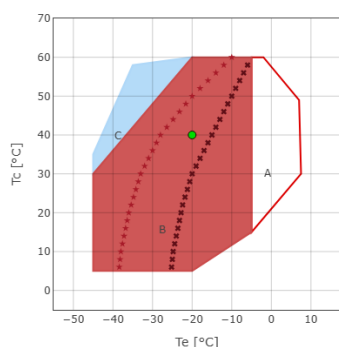




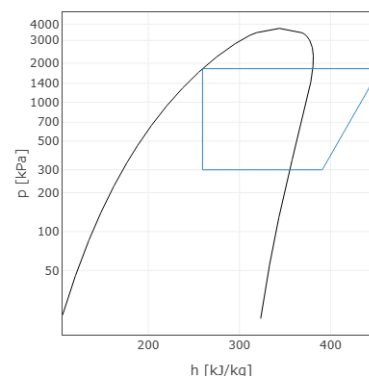
## Calculation - H

### Input

|                               |                       |
|-------------------------------|-----------------------|
| Model                         | H3501CC               |
| Refrigerant                   | R404A                 |
| Evaporating temperature       | -20.0 °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  
x = Min Te 50%  
\* = Min Te 50% Head cooling fan or max superheating 20K  
• = Dew temperature

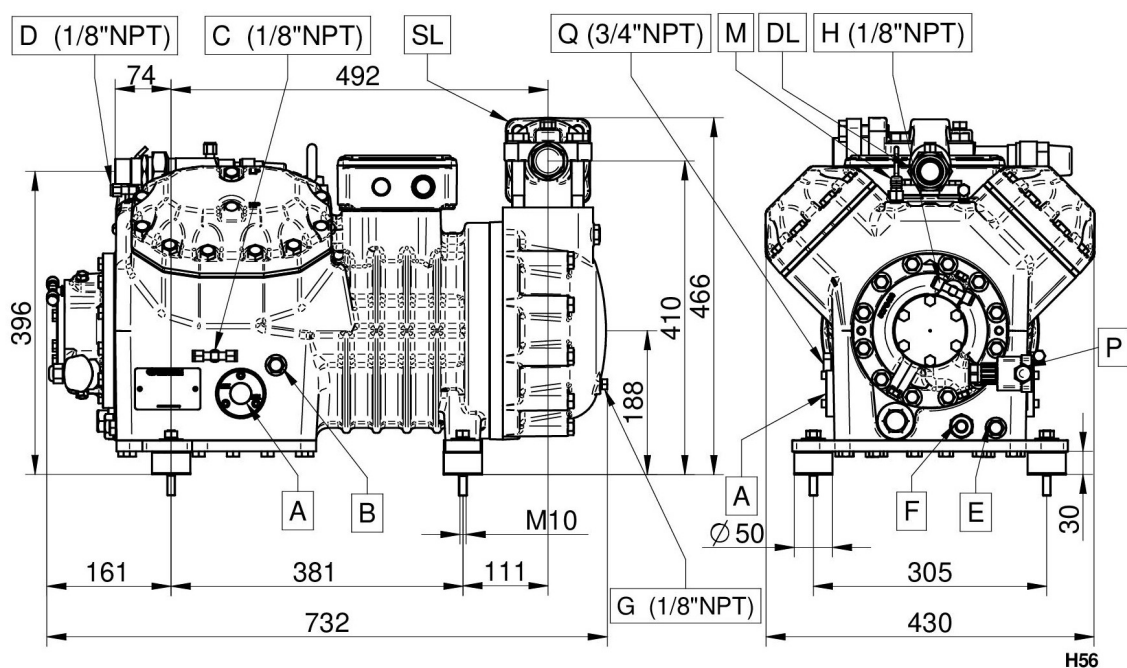


### Performance calculation

|                       | Standard conditions | At evaporator | At compressor |
|-----------------------|---------------------|---------------|---------------|
| Cooling capacity      | 40840 W             | 40840 W       | 40840 W       |
| Absorbed power        | 20.15 kW            | 20.15 kW      | 20.15 kW      |
| Condenser capacity    | 60.98 kW            | 60.98 kW      | 60.98 kW      |
| COP                   | 2.03                | 2.03          | 2.03          |
| Mass flow             | 1113.1 kg/h         | 1113.1 kg/h   | 1113.1 kg/h   |
| Absorbed current      | 39.5 A              | 39.5 A        | 39.5 A        |
| Discharge temperature | 94.9 °C             | 94.9 °C       | 94.9 °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 <sup>3</sup> /h] |
| Displacement @ 60 Hz           | 135.57 | [m <sup>3</sup> /h] |
| Suction valve                  | 54 s.  | [mm]                |
| Discharge valve                | 35 s.  | [mm]                |
| Oil charge                     | 3.5    | [L]                 |
| Net weight                     | 205.0  | [kg]                |
| Maximum absorbed power @ 50 Hz | 35.2   | [kW]                |
| Maximum absorbed power @ 60 Hz | 42.3   | [kW]                |

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 |