

Air cooled chiller AQL 20-35

 19-36 kW

 HFC 410A

 Scroll

Technical feature

- 4 sizes.
- Cooling capacity from 19 to 36 kW.
- One refrigerant circuit.
- Scroll tandem compressors.
- ILTC control.
- Operating low water content in the plant.
- Pump as standard.

Accessories and options

- Water filter (standard).
- Flow switch.
- Differential pressure switch (standard).
- Fan speed control (standard).
- Sequence phases control (standard).
- Automatic circuit breaker (standard).
- Hydrometer (standard).
- Mechanical gauges.
- Softstart.
- Power factor corrector capacitors.
- Buffer tank placed under unit.
- Coils treatments.
- Coil grilles (standard).



Operating limit

| AQL | | 20 | | 25 | | 30 | | 35 | |
|----------------------------|----|------|-----|-----|-----|-----|-----|-----|-----|
| | | Min | Max | Min | Max | Min | Max | Min | Max |
| Leaving water temperature* | °C | -8 | 18 | -8 | 18 | -8 | 18 | -8 | 18 |
| Δ T water | K | 3 -8 | | | | | | | |
| Air temperature** | °C | -10 | 50 | -10 | 50 | -10 | 50 | -10 | 50 |

* Below 5°C, glycol is required.

** -10°C is given for unit with fan speed controller (optional). Without fan speed controller, the limit is 10°C.

Chillers suitable for operation without buffer tank for water content greater than 2.5 liters of water per kW of output.

Technical feature AQL 20-35

| Model AQL | | 20 | 25 | 30 | 35 |
|----------------------------------|-------------------|--------------------------|-------------|-------------|-------------|
| Cooling capacity (1) | kW | 19,1 | 24,9 | 30,9 | 35,9 |
| Power input (2) | kW | 5,5 | 7,5 | 10,0 | 11,2 |
| GROSS EER | | 3,13 | 3,07 | 2,92 | 3,04 |
| Energy class | | A | B | B | B |
| GROSS ESEER | | 4,86 | 4,29 | 4,37 | 4,08 |
| EER | | 3,24 | 3,15 | 2,97 | 3,07 |
| ESEER | | 4,67 | 4,10 | 4,16 | 3,85 |
| Number of refrigerant circuits | | 1 | 1 | 1 | 1 |
| Part load steps | % | 0-50-100 | 0-50-100 | 0-50-100 | 0-50-100 |
| Power supply | V/Ph/Hz | 400/3+N/50 | | | |
| Startup type | | Direct | | | |
| Refrigerant | | | | | |
| Type | | HFC 410A | | | |
| Qty | kg | 5,7 | 7,2 | 7,2 | 8,0 |
| Compressor | | | | | |
| Qty | | 2 | 2 | 2 | 2 |
| Type | | Scroll | | | |
| Crankcase heater | W | 70 | 70 | 70 | 70 |
| Evaporator | | | | | |
| Qty | | 1 | 1 | 1 | 1 |
| Type | | Plate exchanger AISI 316 | | | |
| Water flow | m ³ /h | 3.285 | 4.282 | 5.314 | 6.174 |
| Pressure drop | kPa | 21 | 38 | 39 | 53 |
| Antifreeze heater | kW | 35 | 35 | 35 | 35 |
| Connection type | | Male gas threaded | | | |
| Inlet/outlet diameter | inch | 1½" | 1½" | 1½" | 1½" |
| Water drain connection | inch | ¾" | ¾" | ¾" | ¾" |
| Condenser | | | | | |
| Qty | | 1 | 1 | 1 | 1 |
| Frontal surface | mm | 986x1.500 | 1.350x1.500 | 1.350x1.500 | 1.350x1.500 |
| Number of rows | | 2 | 2 | 2 | 3 |
| Fan | | | | | |
| Qty | | 2 | 2 | 2 | 2 |
| Air flow | m ³ /h | 11.300 | 13.000 | 13.000 | 12.500 |
| Speed | rpm/min | 630 | 630 | 630 | 630 |
| Power input | kW | 0,6 | 0,6 | 0,6 | 0,6 |
| Pump | | | | | |
| Qty | | 1 | 1 | 1 | 1 |
| Power input | kW | 0,49 | 0,53 | 0,80 | 0,83 |
| Static head pressure | kPa | 163 | 128 | 174 | 129 |
| Weight | | | | | |
| Shipping | kg | 283 | 301 | 308 | 322 |
| Operating | kg | 276 | 294 | 302 | 316 |
| Dimensions | | | | | |
| Length | mm | 1.477 | 1.477 | 1.477 | 1.477 |
| Width | mm | 538 | 538 | 538 | 538 |
| Height | mm | 1.625 | 1.625 | 1.625 | 1.625 |
| Acoustical data | | | | | |
| Sound power level (3) | dB(A) | 74 | 75 | 75 | 75 |
| Sound pressure level at 10 m (4) | dB(A) | 43 | 44 | 44 | 44 |

(1) Data based on 7°C leaving chilled water temperature and 35°C ambient air temperature.

(2) Compressors only.

(3) Acoustic data are at full load. Sound power values in accordance with ISO 3744 and Eurovent 8/1.

(4) Sound pressure values in accordance with ISO 3744.

GROSS EER: efficiency in cooling mode without considering the available head of the pump or the pressure drop of the heat exchanger.

EER: efficiency in cooling unit according to EN14511-2011.