

FORMAX[®]

HERE BEGINS YOUR ULTIMATE VALUE

FAC Series
FAC Air-Cooled Chillers

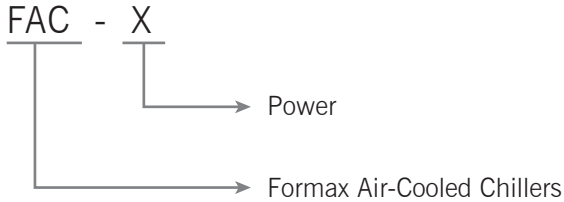
FAC



Please read the brochure carefully before operation.

FAC Series FAC Air-Cooled Chillers

■ Coding Principle



■ Features

- Cooling temperature range 3-30°C.
- Stainless steel insulated water tank.
- Anti-icing protection device.
- Using R22 insulation refrigerant, the refrigeration effect is good.
- Compressor and pump with overload protection.
- High precision controller with display accuracy of $\pm 0.1^{\circ}\text{C}$.
- Adopt brand compressor, low noise, high energy efficiency and long service life.
- High efficiency purple copper string with aluminum wings + low noise of shaft fan condenser has good heat transfer effect, and it does not need to provide cooling water for fast heat dissipation.
- Equipped with a hot air bypass valve to balance the cooling capacity and achieve precise temperature control.
- Wire-operated can separate the main machine from the controller.
- waterproof level : IP54
- Equipped with RS485 communication interface for centralized monitoring and computer networking.

■ Options

Voltage: 200~230V/60HZ
Environment protection refrigerant : R407

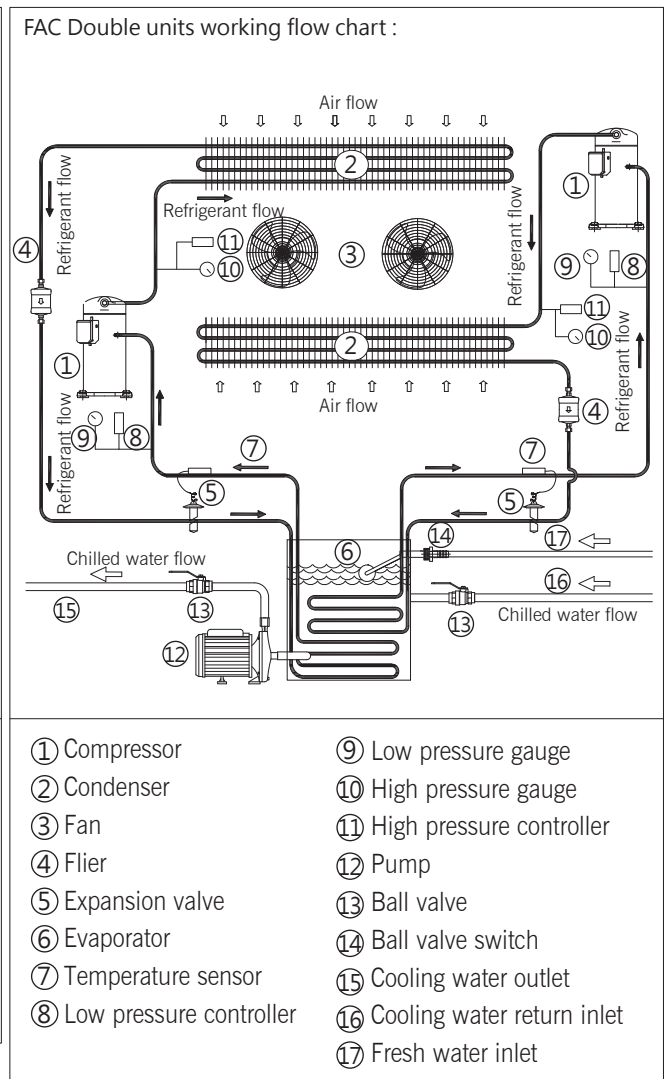
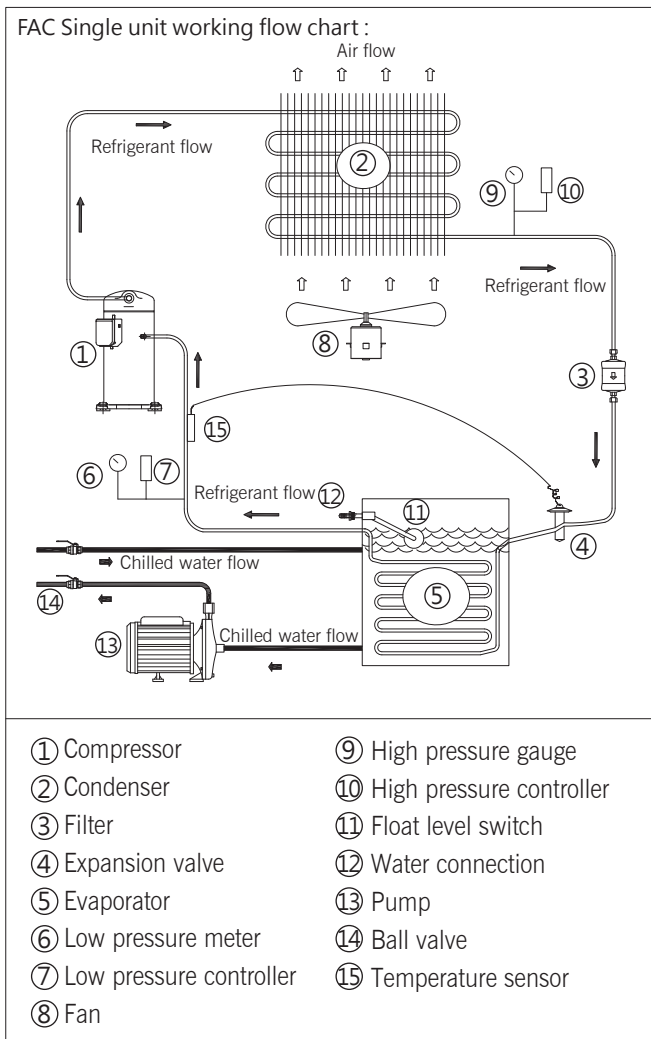
■ Application

Applied to mold cooling to reduce product molding cycle time, and it also can be used for cooling to keep the temperature of the equipment at normal temperature or other cooling industrial areas needed it.

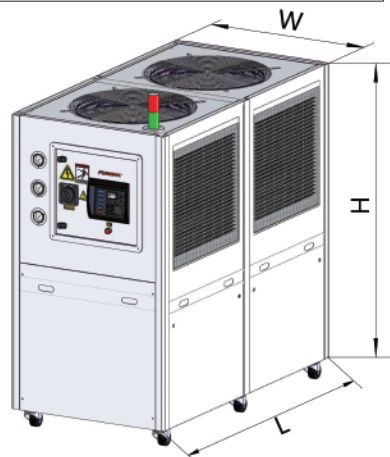
Working Principle

The air-cooled chiller is mainly composed of compressor, condenser, filter, expansion valve, evaporator, air filter, blower. The liquid refrigerant enters the evaporator after being throttled by the expansion valve, where it evaporates and absorbs the heat of the cooled air, then inhaled by the compressor via the return pipe, super-

heated steam that is compressed to become high temperature and high pressure, cooled by outdoor air after entering the condenser, then delivered to the expansion valve through a dry filter, going to the next cycle. This continuous cycle will cool the room and maintain the proper air conditioning temperature.



Outline Drawings



FAC Air-Cooled Chillers

■ Specifications

| Model | FAC | | 3 | 5 | 8 | 10 | 12 |
|------------------------|--------------------------|---------|--|--------------|------------------------------|--------|---------------|
| Cool Water Temperature | °C | | 3~30 | | | | |
| Cooling Capacity | kW | | 8.39 | 13.95 | 21.8 | 28.01 | 33.79 |
| | kcal / hr | | 7216 | 11990 | 18748 | 24089 | 29059 |
| Compressor | Type | | Hermetic scroll type | | | | |
| | Power | kW | 2.2 | 3.75 | 3x2 | 3.75x2 | 4.5x2 |
| | | hp | 3 | 5 | 8 | 5x2 | 6x2 |
| Refrigerant | Filling Volume | kg | 3.6 | 4.3 | 7 | 8 | 11 |
| | Control Way | | Thermo expansion valve | | | | |
| | Type | | R22 (CE type W / R407) | | | | |
| Evaporator | Type | | Coil-pipe (single circuit) | | Coil-pipe (multiple circuit) | | |
| Condenser | Type | | High efficiency purple copper string with aluminum wings + low noise shaft fan | | | | |
| | Blower | kW | 0.28 | 0.36 | 0.9 | 0.9 | 0.9 |
| | Cooled Air Flow | cmh | 3000 | 5000 | 8000 | 10000 | 12000 |
| Water Tank Capacity(L) | | | 50 | 65 | 130 | 180 | 180 |
| Pump | Power | kW | 0.37 | 0.75 | 0.75 | 1.5 | 1.5 |
| | Working Pressure | bar | 2.2 | 2.3 | 2.3 | 2.15 | 2.15 |
| | Pump Flow | (L/min) | 24 | 40 | 62.5 | 80 | 97 |
| Total Power(kW) | | | 2.85 | 4.86 | 7.65 | 9.9 | 11.4 |
| Pipe Coupling | Chilled Water Outlet | inch | 3/4 | 1 | 1.5 | 2 | 2 |
| | Chilled Water Inlet | | 3/4 | 1 | 1.5 | 2 | 2 |
| | Water Tank Drainage Port | | 1/2 | 1/2 | 1 | 1 | 1 |
| | Water Tank Overflow Port | | 1/2 | 1/2 | 1 | 1 | 1 |
| Protective Devices | Compressor | | Overload relay | | | | |
| | Pump | | Overload relay | | | | |
| | Cooling Water Circuit | | High and low pressure switches/Anti-freeze switch(optional) | | | | |
| | Water Circuit | | Flow switch(optional)/Water level switch/By-pass valve | | | | |
| Voltage (Phase) | | | 3P, 380~415V, 50HZ | | 220V(optional) | | |
| Dimensions | (LxWxH) | mm | 940x555x1060 | 1045x555x116 | 1330 x 725 x 1330 | | 1550x750x1460 |
| Weight | | | 130 | 170 | 270 | 350 | 370 |

Specifications are subject to change without prior notice.

■ Specifications

| Model | FAC | | 15 | 20 | 25 | 30 | 40 | 50 |
|------------------------|--------------------------|---------|--|---------------|---------------|----------------|----------------|--------|
| Cool Water Temperature | °C | | 3~30 | | | | | |
| Cooling Capacity | kW | | 44.15 | 59.08 | 71.72 | 87.2 | 113.58 | 135.49 |
| | kcal / hr | | 37965 | 50805 | 61683 | 74992 | 97675 | 116521 |
| Compressor | Type | | Hermetic scroll type | | | | | |
| | Power | kW | 5.5x2 | 7.5x2 | 9.4x2 | 7.5x3 | 7.5x4 | 9.4x4 |
| | | hp | 7.5x2 | 10x2 | 12.5x2 | 10x3 | 10x4 | 12.5x4 |
| Refrigerant | Filling Volume | kg | 13 | 18 | 22 | 26 | 34 | 48 |
| | Control Way | | Thermo expansion valve | | | | | |
| | Type | | R22 (CE type W / R407) | | | | | |
| Evaporator | Type | | Coil-pipe (multiple circuit) | | | | | |
| Condenser | Type | | High efficiency purple copper string with aluminum wings + low noise shaft fan | | | | | |
| | Blower | kW | 1.2 | 1.6 | 1.8 | 2.5 | 3.1 | 4.7 |
| | Cooled Air Flow | cmh | 15000 | 20000 | 25000 | 30000 | 40000 | 50000 |
| Water Tank Capacity(L) | | | 210 | 280 | 320 | 320 | 610 | 660 |
| Pump | Power | kW | 1.5 | 2.2 | 2.2 | 4 | 4 | 4 |
| | Working Pressure | bar | 2.15 | 2.2 | 2.2 | 2.5 | 2.5 | 2.5 |
| | Pump Flow | (L/min) | 127 | 170 | 206 | 253 | 326 | 388 |
| Total Power(kW) | | | 13.7 | 18.8 | 22.75 | 28.5 | 37.1 | 46.2 |
| Pipe Coupling | Chilled Water Outlet | inch | 2 | 2 | 2.5 | 2.5 | 3 | 3 |
| | Chilled Water Inlet | | 2 | 2 | 2.5 | 2.5 | 3 | 3 |
| | Water Tank Drainage Port | | 1 | 1 | 1 | 1 | 1 | 1 |
| | Water Tank Overflow Port | | 1 | 1 | 1 | 1 | 1 | 1 |
| Protective Devices | Compressor | | Overload relay | | | | | |
| | Pump | | Overload relay | | | | | |
| | Cooling Water Circuit | | High and low pressure switches/Anti-freeze switch(optional) | | | | | |
| | Water Circuit | | Flow switch(optional)/Water level switch/By-pass valve | | | | | |
| Voltage (Phase) | | | 3P, 380~415V, 50HZ | | | 220V(optional) | | |
| Dimensions | (LxWxH) | mm | 1550x750x1460 | 1760x860x1560 | 1970x900x1700 | 1900x1450x1700 | 2400x1450x1700 | |
| Weight | | | 480 | 590 | 790 | 880 | 1000 | 1280 |

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