

**FORMAX**®

HERE BEGINS YOUR ULTIMATE VALUE

**FAC** Series  
FAC Air-Cooled Chillers

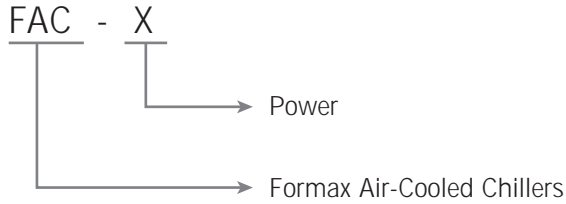
FAC



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

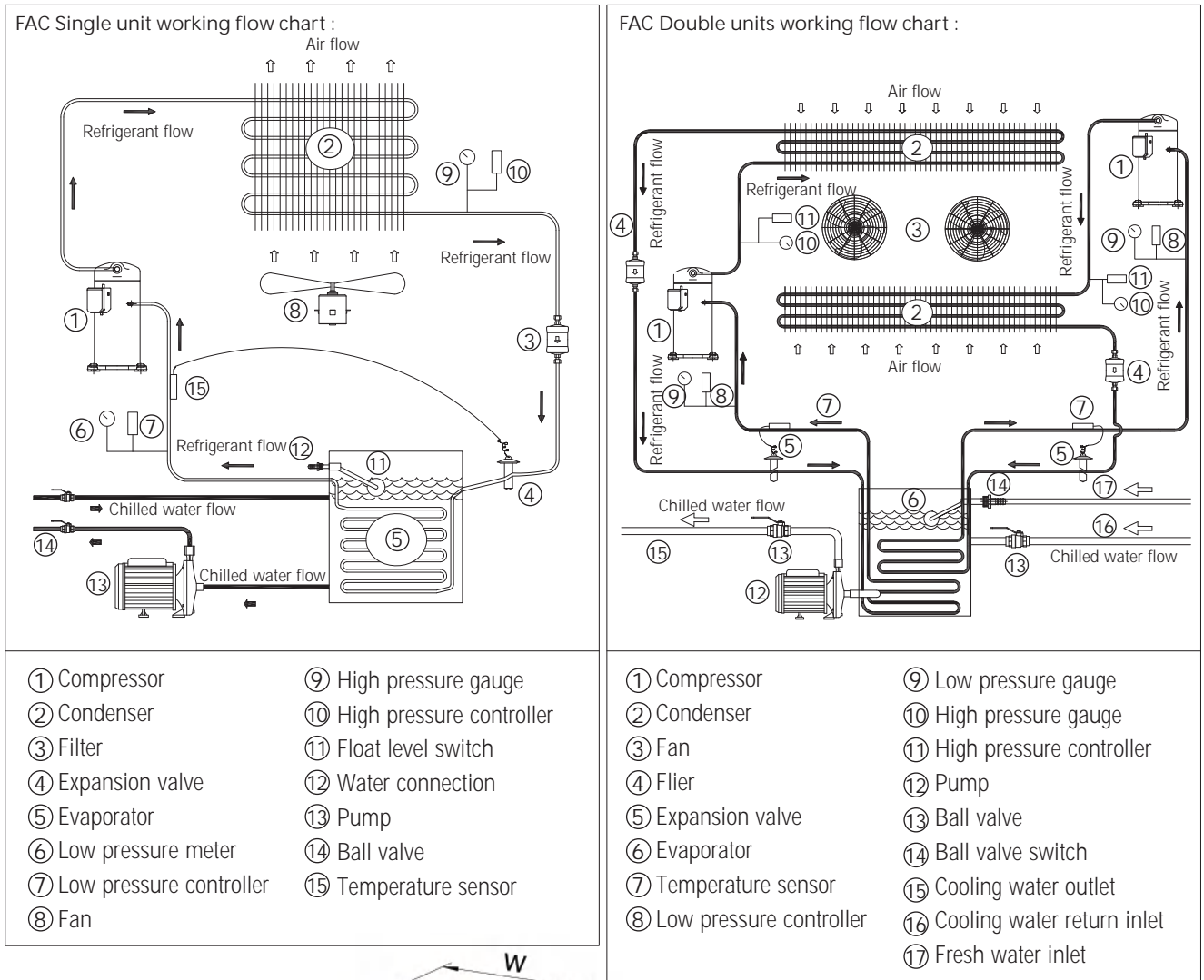
## ■ Application

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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