

FLOOR STANDING UNIT (FREE BLOW)

MODEL: FS-WC (Marine Water Cooled)

CAPACITY: 4.2 to 21.4 Tons

50,000 to 256,925 BtuH

14.7 to 75.3 KW



Features/Benefits

- Vertical arrangements for heating, cooling, ventilation applications
- Small footprint assures rigging ease and reduced space requirements
- High-efficiency fan minimizes surging and turbulence and reduces operating costs
- Exclusive Nu-Fin coil surface provides peak heat transfer. We delivers the air handler components for your stringent specification requirements. The FS-WC series floor standing unit are compact and fully assembled; they combine versatility with economical, dependable performance.

Description :

- The FS-WC units are single package water cooled air conditioners.
- The FS-WC series includes 4 models of cooling system.
- Suitable for vertical mount, indoor installation.
- Completed with pipe, wiring and refrigeration charging at the factory.
- Ideal for quick and low cost installation.

GUIDE SPECIFICATION

GENERAL

The FS-WC Packaged water cooled unit shall be completely factory assembled, leak-tested, evacuated and pre-charged with R-22, ready for installation.

UNIT CASING

The unit shall be constructed from electro galvanized steel. The exterior panels shall be acoustically lined with 1/2" thick, 2.5 lb./cu.ft, fiber glass insulation. The insulation shall be affixed to the casing with the water proof adhesive. All steel metal parts shall be degreased, zicc phosphate bonderized before begin ovenbaked with a thick coat of polyester paint.

COMPRESSOR

Each unit shell have scroll hermetic compressor mounted on vibration isolators. The refrigerant gas cooled, high torque motor, quiet running with internal suspension system to eliminate vibration, and internal line break motor protection and motor overheating.

CONDENSER COIL

The water cooled condenser shall be high efficiency profiled shell & tube for unit model FS-WC 005 to 012. The copper tube inside the steel pipe shall offer efficient refrigerant cooling. The refrigerant side of the condenser shall be cleaned, dehydrated and tested for 350 psig design working pressure. The condenser including water shall be tested for leakage at the factory.

EVAPORATOR COIL

The direct expansion evaporator shall consist of full face coil with counter flow circuits, seamless 3/8 inch OD staggered copper tubes mechanically bonded into aluminum fins with a maximum of 12 fins per inch. Each coil shall be degreased internally and externally, brazed in nitrogen atmosphere. leak tested at 350 psig and completely dehydrated before assembly.

EVAPORATOR FAN AND MOTOR

The evaporator fan shall be the double inlet. multi-blade centrifugal type. The fan wheel shall be constructed from galvanized steel and statically and dynamically balanced.

REFRIGERANT CIRCUIT

The refrigerant circuit shall be factory piped, leak tested and pre-charged with R-22. Each refrigerant circuit shall consist of a compressor, expansion valve and service valve.

UNIT CONTROL

Each system shall contain factory mounted wired and tested controls required to operate and protect the unit. The control system shall include compressor overload protection, motor winding protection, high and low pressure switches to guard against compressor damage due to high discharge head pressure and system leakage.

FILTERS

Air filter shall be cleanable washable PP.net

PERFORMANCE DATA

Fan Coil Unit Model	FS-WC	005	006	008	012	020	025
Nominal Capacity	BTUH	50,000	60,000	80,000	120,000	200,625	256,925
	Tons	4.17	5.00	6.67	10	16.72	21.41
	WATT	14,654	17,584	23,446	35,169	58,797	75,297
Rated Air Flow At High Speed	CFM	1,600	2,000	3,000	4,000	6,000	8,000
	CMH	2,718	3,398	5,097	6,796	10,194	13,592
Fan Coil Unit	TYPE	Free Blow Or Ducted Floor Standing Type					
	SIZE (INCH)	8" x 10"		9" x 9"	10" x 10"	15" x 9"	15" x 11"
Motor Power Supply	WATT	352		290 x 2		2,200	2,200
	AMP	3.2		2.25 x 2		5	5
	V/P/Hz	220V / 1P/ 50Hz				380V ~ 415V / 3PH / 50Hz	
	V/P/Hz	208V / 1P/ 60Hz				440V ~ 480V / 3PH / 60Hz	
Compressor	TYPE	Scroll (Hermetic Type)					
	WATT	3,728	4,472	5,963	8,944	5,593 x 2	7,457 x 2
	H.P.	5	6	8	12	7.5 x 2	10 x 2
	Qty.	1				2	
Power Supply	V/P/Hz	220V - 380V - 415V / 3PH / 50Hz					
	V/P/Hz	208V - 440V - 480V / 3PH / 60Hz					
Water Cooled Condenser	TYPE	Shell & Tube					
	MATERIAL	copper nickel 90/10					
	EACH	1					
	GPM	12.5	15	20	30	45	60
Entering Water Temperature	° C	32 ° C					
leaving Water Temperature	° C	38 ° C					
Water pressure Drop	FT.WG	10.8	19	11.5	9.5	2 x 14.9	2 x 9.5
No. of Water Pass		4					
Water Connection In	INCH	1-1/2"					2-1/2"
Water Connection Out	INCH	1-1/2"					2-1/2"
Coil	TYPE	Aluminium Or Copper Corrugated Fin With Plain Tube					
Control	TYPE	Control Digital Thermostat					
Expansion Device	TYPE	Thermostic Expansion Valve					
Insulation	TYPE	Fiber Glass					
Air Filter	TYPE	Washable P. P. Net					
Dimension	Width	mm.	910	1070	1450	1625	1830
	Height	mm.	1925	2000	2100	2100	2110
	Depth	mm.	605	625	658	740	830

Note:

Option power supply: 460V/3P/60Hz

Actual capacity is performance within +/- 5 % variation from Nominal cooling capacity.