

MODEL PWU

PACKAGED WATER COOLED UNIT

Capacity Range from

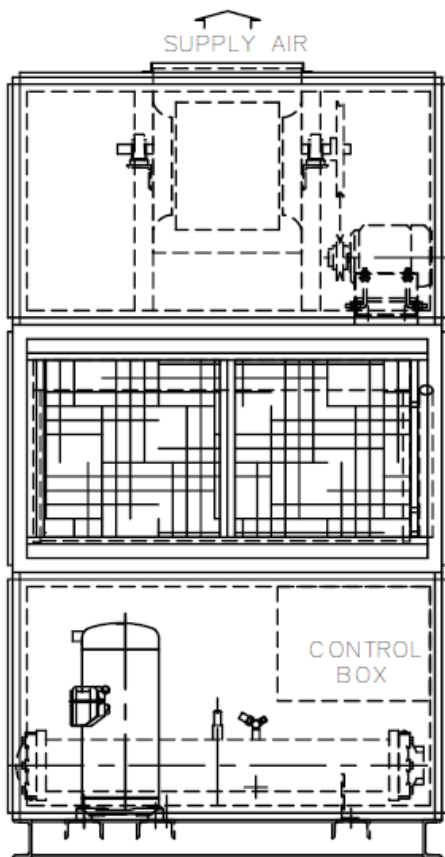
70,000 to 800,000 BTUH

(20.4 kw - 233.3 kw)

150-250 Pa External Static Pressure



Air Conditioning Experts



Features :

- High efficiency, refrigerant cooled compressor.
- High efficiency tube-in-tube condensor for unit model PWU 007 to PWU 025 and shell & tube condenser for unit model PWU 030 to PWU 080.
- Electrical supply connections and knockouts provided.
- Lower operation cost.
- HP and LP cut-out switches.
- Aluminium Air filters
- Electrical panel.

Description :

- The PWU units are single package water cooled air conditioners. Wide range of indoor
- The PWU series includes 13 models of cooling system.
- Suitable for vertical mount, indoor installation Air Filters.
- Completed with pipe, wiring and refrigeration charging at the factory.
- Ideal for quick and low cost installation.

GUIDE SPECIFICATION

GENERAL

The PWU 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

Unit model PWU 007 to 025 shell have scroll hermetic compressor. Unit model 030 to 080 shell have Semi-hermetic Reciprocating compressor. All compressor are 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.

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.

CONDENSER COIL

The water cooled condenser shall be high efficiency profiled tube-in-tube for unit model PWU 007 to 025 and shell & tube type for unit model PWU 030 to 080. 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.

FILTERS

Air filters shall be cleanable aluminium type.

With International standard quality guaranteed by customers over 70 countries

PHYSICAL DATA

SPECIFICATION MODEL : PWU															
MODEL	PWU	007	009	010	012	015	020	025	030	035	040	050	060	080	
Cooling Capacity	BTUH	70,000	90,000	100,000	125,000	140,000	200,000	250,000	300,000	350,000	400,000	500,000	600,000	800,000	
	Kw	20.4	26.3	29.2	36.5	40.8	58.3	73.0	87.5	102.1	116.7	145.8	175.0	233.3	
Nominal Air Flow	CFM	2,200	3,000	3,300	4,000	5,000	6,600	8,200	10,000	11,000	13,300	16,600	20,000	26,600	
	L/S	1,040	1,410	1,550	1,880	2,360	3,110	3,860	4,710	5,180	6,260	7,820	9,420	12,530	
Air Pressure Drop	kPa	150					250								
Compressor	Type	SCROLL						SEMI-HERMETIC RECIPROCATING							
	Numbers of Compressor	1				2			1		2				
	Refrigerant	R-22													
	Power Supply	V/Pa/Hz	380/3/50												
	Rated Current	Amps	14.2	17.3	19.5	22.9	14.2x2	19.2x2	22.9x2	52.1	54.1	75.7	40.2x2	52.1x2	75.7x2
	Compressor	HP	7	9	10	12.5	7x2	10x2	12.5x2	30	35	40	25x2	30x2	40x2
Condenser		TUBE-IN-TUBE						SHELL AND TUBE							
Water Flow Rate	GRM	17.5	22.5	25	31.3	35	50	62.5	75	87.5	100	125	150	200	
	L/S	1.10	1.42	1.58	1.97	2.21	3.10	3.94	4.73	5.51	6.30	7.88	9.45	12.60	
Evaporator		COPPER TUBE AND ALUMINIUM FINS													
Blower Motor	HP	1	2			3	5	7.5	10			15	20		

CAPACITY BASED ON 80 FDB, 67 FWB AIR ENTERING

95 °F AMBIENT TEMP. 45 °OF SUCTION TEMP

90/100oF CONDENSER INLET/OUTLET WATER TEMP.



ISO 9001
ISO 14001
ISO 45001
ISO 14064-1



TIS.2134
TIS.1529



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