

Water Cooled Packaged Unit

2.5kW~130kW  
0.7Ton~37.7Ton

Application areas

- Offices, hotels, hospitals
- Industry
- Administration
- Commercial buildings

Why this choice?

- Saving space
- Galvanised steel construction
- AMWCP are well insulated to minimise condensation and attenuate noise.



Characteristics

Structure

Galvanised steel construction, closed cell foam lined compressor and fan compartments, with an insulated and powder coated drain tray for complete moisture protection, the drain tray is easily removed for inspection and cleaning.

Refrigerant

Each unit is factory charged with refrigerant R410a, which is deemed to have zero ozone depletion potential.

Hermetic compressor

Single phase rotary compressor is used for this type unit, with built-in thermal overload cut-out, mounted on rubber vibration dampers.

Centrifugal fan

High efficiency, double inlet centrifugal fan Protection level IP44. Low noise, low speed, big air flow and high ESP.

Water side heat exchanger

High efficiency coaxial heat exchanger, factory insulated with flexible close cell material.

Air filter

An optional filter integrated return air spigot is available on all models. The filter is a washable polypropylene net media. Care should be taken, when locating each unit, that to enough space is provided to enable the one-piece filter to be withdrawn to its full length from either side of the unit.

Electric heater(optional)

Electric heater is optional on cooling only versions. Electric elements have spirally wound stainless steel fins to give increased area and low surface temperature. They are totally enclosed within the unit and are supplied with safety cutouts. An optional fan run-on timer for rapid heat dissipation is available.

Electric panel

Consists of:

Compressor contactor

Compressor protection breaker

Microprocessor with function display

Insulation

AMWCP are well insulated to minimise condensation and attenuate noise.

All models are equipped with wire controller with the following features

- 7 days programmable timer
- Auto random restart
- Error self diagnostic

Safety protection

High pressure switch

Low pressure switch

Discharge temperature protection

Anti freezing protection

Technical Data

Model		WCP2.5	WCP3.5	WCP5	WCP7	WCP10	WCP12	
Nominal cooling capacity	kW	2.5	3.5	5	7	10	12.2	
	Ton	0.7	1	1.4	2	2.9	3.5	
Cooling power input	kW	0.71	0.98	1.4	1.92	2.8	3.32	
Nominal heating capacity	kW	3	4.5	6.4	8.1	12.2	14.5	
	Ton	0.9	1.3	1.8	2.3	3.5	4.1	
Heating power input	kW	0.72	1.07	1.5	2	2.9	3.25	
Power	V/Ph/Hz	220V/1Ph/50Hz						
Minimum wiring specification	mm ²	2×1.5mm ² +1×1mm ²		2×2.5mm ² +1×1.5mm ²		2×4mm ² +1×2.5mm ²		
Compressor type		Rotary						
Air flow amount	m ³ /h	490	680	950	1280	1900	2160	
External static pressure	Pa	60	60	120	120	160	200	
Refrigerant	Type	R410A						
	Charge	kg	0.4	0.6	0.85	1.1	1.7	1.9
Condenser	Type	- Tube in tube coaxial heat exchanger						
Fan	Type	- High efficiency low noise centrifugal fan						
	Power	V/Ph/Hz 220V/1Ph/50Hz						
Evaporator	Type	- High efficiency copper tubes aluminum fins heat exchanger						
Water flow amount	m ³ /h	0.6	0.8	1.1	1.5	2.2	2.7	
Water pressure drop	Kpa	8	8	10	14	16	20	
Diameter of water in/out pipe	mm	DN20						
Diameter of condensing pipe	mm	DN25						
Dimension	L	mm	1040	1040	1140	1140	1590	1590
	W	mm	655	655	815	815	815	815
	H	mm	345	345	445	445	445	445
Weight	kg	70	75	90	100	130	135	
Noise level	dB (A)	54	54	57	57	60	60	

Technical Data

Model		WCP14	WCP18	WCP23	WCP30	WCP35	WCP45	
Nominal cooling capacity	kW	14.4	18	23	30	34	46	
	Ton	4.1	5.1	6.6	8.6	9.7	13.1	
Cooling power input	kW	4.06	5.1	6.18	7.8	8.26	11.6	
Nominal heating capacity	kW	17.3	22.6	25.9	33	35.4	49	
	Ton	4.9	6.5	7.4	9.4	10.1	14	
Heating power input	kW	4	5.6	6.86	8.6	9.1	12.84	
Power	V/Ph/Hz	220V/1Ph/50Hz		380~420V/3Ph/50Hz				
Minimum wiring specification	mm ²	2×6mm ² +1×4mm ²		3×2.5mm ² +1×1.5mm ²		3×4mm ² +1×2.5mm ²		
Compressor type		Rotary			Scroll			
Air flow amount	m ³ /h	2500	3200	4000	5200	6200	8000	
External static pressure	Pa	200	200	250	250	250	250	
Refrigerant	Type	R410A						
	Charge	kg	2.2	3	4	4.8	6	8
Condenser	Type	Tube in tube coaxial heat exchanger						
Fan	Type	High efficiency low noise centrifugal fan						
	Power	V/Ph/Hz	220V/1Ph/50Hz		380~420V/3Ph/50Hz			
Evaporator	Type	High efficiency copper tubes aluminum fins heat exchanger						
Water flow amount	m ³ /h	3.2	4.0	5.0	6.5	7.3	9.9	
Water pressure drop	Kpa	20	23	26	30	33	33	
Diameter of water in/out pipe	mm	DN20			DN40			
Diameter of condensing pipe	mm	DN25						
Dimension	L	mm	1590	1750	1750	2100	2350	2800
	W	mm	815	970	970	1100	1100	1100
	H	mm	445	495	495	645	645	645
Weight	kg	140	155	170	200	220	245	
Noise level	dB (A)	63	66	66	68	68	69	

Note:

1. Nominal cooling capacity test condition: Water side water inlet/outlet 30°C/35°C, Ambient temperature DB 27 °C, WB 19 °C.
2. Nominal heating capacity test condition: Water side water inlet 20°C, Ambient temperature DB 20 °C, WB 15 °C.
3. Noise level measured in the noise lab with background noise of 25 dB(A), at a distance of 1 m.
4. As our continuous products improvement, Amrta reserves the right to change specifications and design without notice.



Model		WCP60	WCP72	WCP90	WCP110	WCP130	
Nominal cooling capacity	kW	60.5	72	92	108	132	
	Ton	17.3	20.6	26.3	30.9	37.7	
Cooling power input	kW	15.6	17	23.2	25.5	35.1	
Nominal heating capacity	kW	66	76	98	114	142	
	Ton	18.9	21.7	28	32.6	40.6	
Heating power input	kW	17.3	19.6	25.8	29.4	38.7	
Power	V/Ph/Hz	380~420V/3Ph/50Hz					
Minimum wiring specification	mm ²	3×6mm ² +1×4mm ²		3×12mm ² +1×6mm ²			
Compressor type		Scroll					
Air flow amount	m ³ /h	10500	12800	16000	19000	24500	
External static pressure	Pa	260	280	300	320	330	
Refrigerant	Type	R410A					
	Charge	kg	16	17	18	21	24
Condenser	Type	- Tube in tube coaxial heat exchanger					
Fan	Type	- High efficiency low noise centrifugal fan					
	Power	V/Ph/Hz	380~420V/3Ph/50Hz				
Evaporator	Type	- High efficiency copper tubes aluminum fins heat exchanger					
Water flow amount	m ³ /h	13.1	15.3	19.8	23.0	28.7	
Water pressure drop	Kpa	34	35	35	36	36	
Diameter of water in/out pipe	mm	DN50					
Diameter of condensing pipe	mm	DN25					
Dimension	L	mm	2800	3000	3000	3300	3300
	W	mm	1230	1230	1270	1270	1270
	H	mm	850	850	850	850	850
Weight	kg	500	600	720	780	860	
Noise level	dB (A)	73	73	74	75	77	

Note:

1. Nominal cooling capacity test condition: Water side water inlet/outlet 30°C/35°C, Ambient temperature DB 27 °C, WB 19 °C.
2. Nominal heating capacity test condition: Water side water inlet 20°C, Ambient temperature DB 20 °C, WB 15 °C.
3. Noise level measured in the noise lab with background noise of 25 dB(A), at a distance of 1 m.
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