



HP - Range

Long - lasting and highly reliable technology

Air cooled screw chiller utilize mechanical refrigeration cycle to produce chilled water or chilled water and antifreeze mixture. They reject the building heat to the ambient with an air cooled condensing coil. Air cooled chiller typically have a lower instant and maintenance cost than water cooled system. It does not require a cooling towers condenser water pump and piping also need smaller mechanical room and associated condenser water chemical treatment system. Hepaco air cooled screw chiller are reliable for outdoor installation with the overall protection class of IP54, all chillers are designed and manufactured for medium- sized as well as large projects both commercial and residential . Chillers designed in both single and dual circuits according to the cooling capacity and the regional ambient condition. Each unit includes semi-hermetic screw compressor(s)with outstanding durability ,a liquid evaporator (shell &tube or plates) centrifugal propeller condenser fan(s) and user-friendly controller (PLC) Mounted in an electrical panel with best electrical equipment in the market. For the tropical weather air cooled chillers are modified to prevent aluminum corrosion.

Available customization

A complete range of High Efficiency cooling equipment



- 24 model to meet current and future requirements in terms of energy efficiency,
- low or very low noise levels
- R134a with zero ozone depletion potential or R22 as refrigerant
- Low temperature chilled water/glycol down to -5c
- Structure and panels made of special materials
- summer operation for hot climates +40c
- Hydraulic packs including pumps pressurization units and expansion vessels
- Special design for industrial and process applications
- Special design for marine and sub-marine application

1-Equipment List

GENERAL

Screw Bitzer /hanbell Compressor	shell &tube or brazed plate heat exchanger Evaporator
Air cooled V or W condenser	Digital multistep / PLC or PCB controller with BMS CONTROL PANEL
Installed , wired Power box	outstanding structure(galvanized or baked paint) coated
1Year guaranty	cooling capacity Test in factory
-Alchillers manufactured in accordance with Hepaco quality Management system to meet applicable requirements of ANSI and ARI standards.	
Optional	
Heat pump mode	BMS mode in control panel
High efficiency chiller and low energy consumption with Adiabatic condenser (20%less energy consumption in equal capacity)	
EC fans	Heat recovery for domestic hot water
Free cooling Exchanger	Flooded Evaporator
inverter compressor and fans	silencer / (low noise or super low noise) box

REFRIGERANT CIRCUIT

Filter driers, Sight glass, moisture indicator, Service valve, Suction line insulation

SAFETY CONTROLS

Crankcase heater, Low &High pressure switch (manual reset)
Phase control&Freeze protection thermostat, Evaporator flow switch& pressure relieve valve.

INSTRUMENT PANEL and OPERATION CONTROLS

Refrigeration cycle display unit Indicators(high-pressure, overload, compressor capacity,water temperature,...) Discharge and suction pressure gages.
Liquid line solenoid valves, Thermostatic (or Electronic) Expansion valves, recycle pump down type , Manual ON/Off - Reset - Run switch.

Equipment List

2-Compressor



Hepaco air cooled chillers compressors are based on the proven design elements of the innovative best producer which are recognized as a benchmark around the world. They were developed with respect to universal application in air cooled liquid chillers and heat pumps. Besides their known attributes, the compressors are distinguished by further improvements to energy efficiency under full and part-load conditions. Additionally, the application limits were greatly expanded both in terms of low saturation discharge temperatures and high pressure ratios (heat pumps) – without compromising operating reliability.

3-Evaporator-DX OR FLOODED

Strong and vibration less design

The main applications of our Dry or Flooded Evaporator are water or brine solutions cooling in refrigeration plants and hot water production in heat pumps.. Hepaco shell & tube compact exchangers series have cooling capacity range, at specified standard conditions, from about 18 up to 1400 kW with 1 to 2 refrigerant circuits or more. Hepaco design and install first chiller with flooded evaporator in Central building of the Maskan bank in Tehran. **Strong and vibration less design**

screw compressor increase reliability and efficiency at once

Compressor

3-1 Technical Information

Maximum Design Working Pressure

- Tube side (refrigerant): 200 psig
- Shell side (water): 450 psig

Shell

Carbon Steel

Tubes

16 mm (5/8") OD heavy gauge 1 mm wall thickness; dioxidized copper fitted with especially designed inserted aluminum turbulators to increase the heat transfer coefficient

Baffles

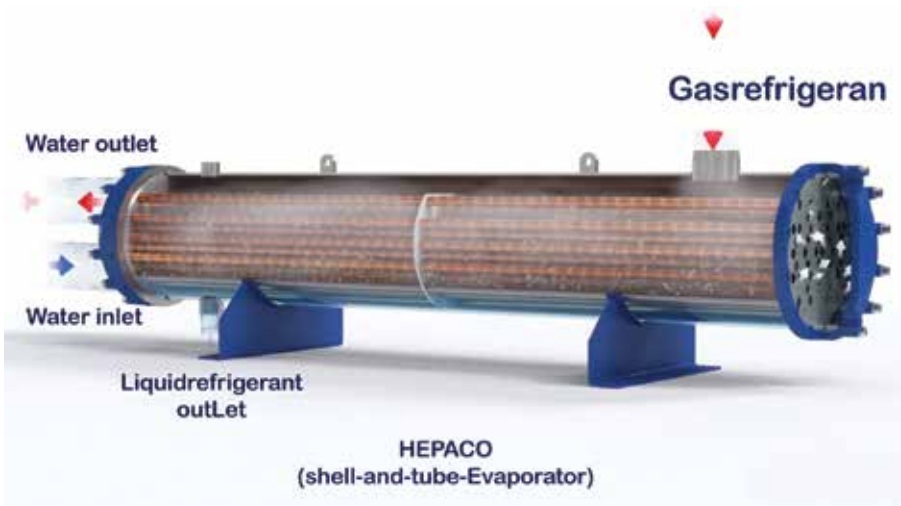
The poly-ethylene baffles are designed to suit the heat exchange and to give bundle structure an adequate mechanical strength.

Insulation

Completely insulated with proper insulation to prevent heat gain or sweating.

Tube Sheet

Carbon steel alloy ST-52, especially finished, the tube bundle is fixed to tube sheets by means of mechanical rolling expansion and special chemical glue for long time heavy duty operation.



Evaporator

4-Electronic expansion valve(optional)

Hepaco has chosen to use expansion valves which guarantee a very precise control of superheat. In this way, the evaporator is always filled with the optimal amount of refrigerant, even in the presence of significant variations in load.

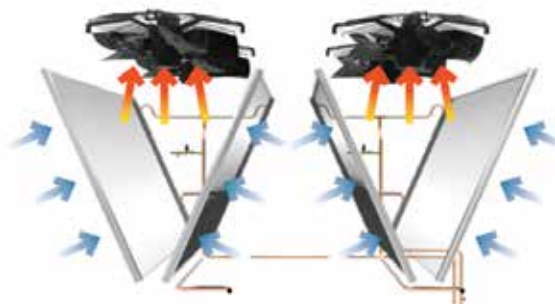
This is possible because the current value of superheating in the evaporator is continuously detected by a pressure transducer and a highly sensitive temperature sensor, which transmit information relating to the regulator in real time. This means low superheat, use of the maximum evaporation pressure and, therefore, improvement of the COP and energy efficiency.



5- Condenser Coils

Condenser designed and built with finest seamless copper tube mechanically expanded in hydrophilic/hydrophobic aluminum fins. (Black-Blue/Gold) in V or W shape. Aluminum plate fins are mechanically bonded on seamless 3/8-inch OD copper tubes in a staggered configuration for maximum heat transfer efficiency. Copper plate fins are another coil option which is proper for moderate coastal ambient condition. This will improve cooling capacity of the units too. Condenser coils are factory leak tested at 470 psig (33.0 Kg/cm²) air pressure underwater and vacuum dehydrated. Over 10°F of liquid sub cooling may be obtained, depending upon the difference between condensing temperature and the outside ambient temperature. Sub cooling adds to the efficiency of the system and assures liquid refrigerant at the expansion valve even though vertical lifts or long runs of piping may be necessary.

Condenser designed and built with finest seamless copper tube mechanically expanded in hydrophilic/hydrophobic aluminum fins. (Black-Blue/Gold) in V or W shape.



Ex-valve

Condenser

6-Power and control system

All Hepaco Chillers are equipped with friendly designed fault detection and display boards for each circuit. The display unit provides monitoring the operation and fault of components.. The controller system can be PLC or PCB and has the ability to connect to BMS systems. It automatically controls the regulation of water temperature, the compressor timing and the alarms. The electrical control panel is made in a painted galvanized sheet-iron box with forced ventilation and IP54 protection rating.

6-1 electrical control panel of the basic unit comprises

- Main disconnect switch
- Reinforced air tightness to protect against sand penetration (protection level IP54)
- Forced ventilation to prevent overheating of the electrical components
- fuses to protect the compressors, fans and auxiliary circuits
- Electronic motor protection against overloads and power supply faults
- Fan contactors and Phase monitor
- Potential-free general alarm contacts
- Single potential free operating contacts
- External air temperature probe
- Microprocessor controller with display accessible from the outside
- Capacitive backup battery for electronic expansion valve

All the electrical cables inside the panel are numbered



Control panel





6-2 Main controller functions

Pro-Dialog control

Pro-Dialog combines intelligence with operating simplicity. The control constantly monitors all machine parameters and precisely manages the operation of compressors, electronic expansion devices, fans and of the evaporator water pump for optimum energy efficiency.

6-3 The microprocessor control allows the following functions

- Water temperature control,with control of the water leaving the user-side exchanger
- freeze protection
- Compressor timings and Hour meter of operation and number of start-ups of the unit,the compressors and the pumps (if present)
- Automatic rotation of compressor starting sequence
- Recording of the log of all machine inputs,outputs and states
- Automatic rotation of compressor starting sequence and unloading based on the condensing pressure.
- Recording of the alarm log
- Digital input for general ON/OFF
- Digital input for hot circuit ON/OFF
- Water inlet and outlet temperature
- set temperature and differential set points
- Description of alarms
- High and low pressure values, and relevant condensing and evaporating temperatures
- External air temperature
- superheating at compressor suction. Superheating at compressor suction.

6-4 Standard power supply [V/ph/Hz]

400/3~/50

7-CONTROLS AND SAFETY

All the units are fitted with the following control and safety components:

- High pressure switch with manual reset
- High pressure safety device with automatic reset, for a limited number of occurrences, managed by the controller
- Low pressure safety device with automatic reset and limited tripping managed by the controller
- High pressure safety valves
- Antifreeze probe at the outlet of the user-side heat exchangers
- Over temperature protection for compressors and fans.
- High pressure switch with automatic reset and limited interventions managed by the control;
- Low pressure switch with automatic reset and limited interventions managed by the control;
- High pressure safety valve;
- Protection against over temperature for compressors;

8-Part load performances

With the rapid increase in energy costs and the care about environmental impacts of electricity production, power consumption of air conditioning equipment has become an important topic. The energy efficiency of a liquid chiller at full load is rarely representative of the actual performance of the units, as on average a chiller works less than 5% of the time at full load.

Safety

Performances

8-1 IPLV (in accordance with ARI 550/590-98)

The IPLV (integrated part load value) allows evaluation of the average energy efficiency based on four operating conditions defined by the ARI (American Refrigeration Institute).

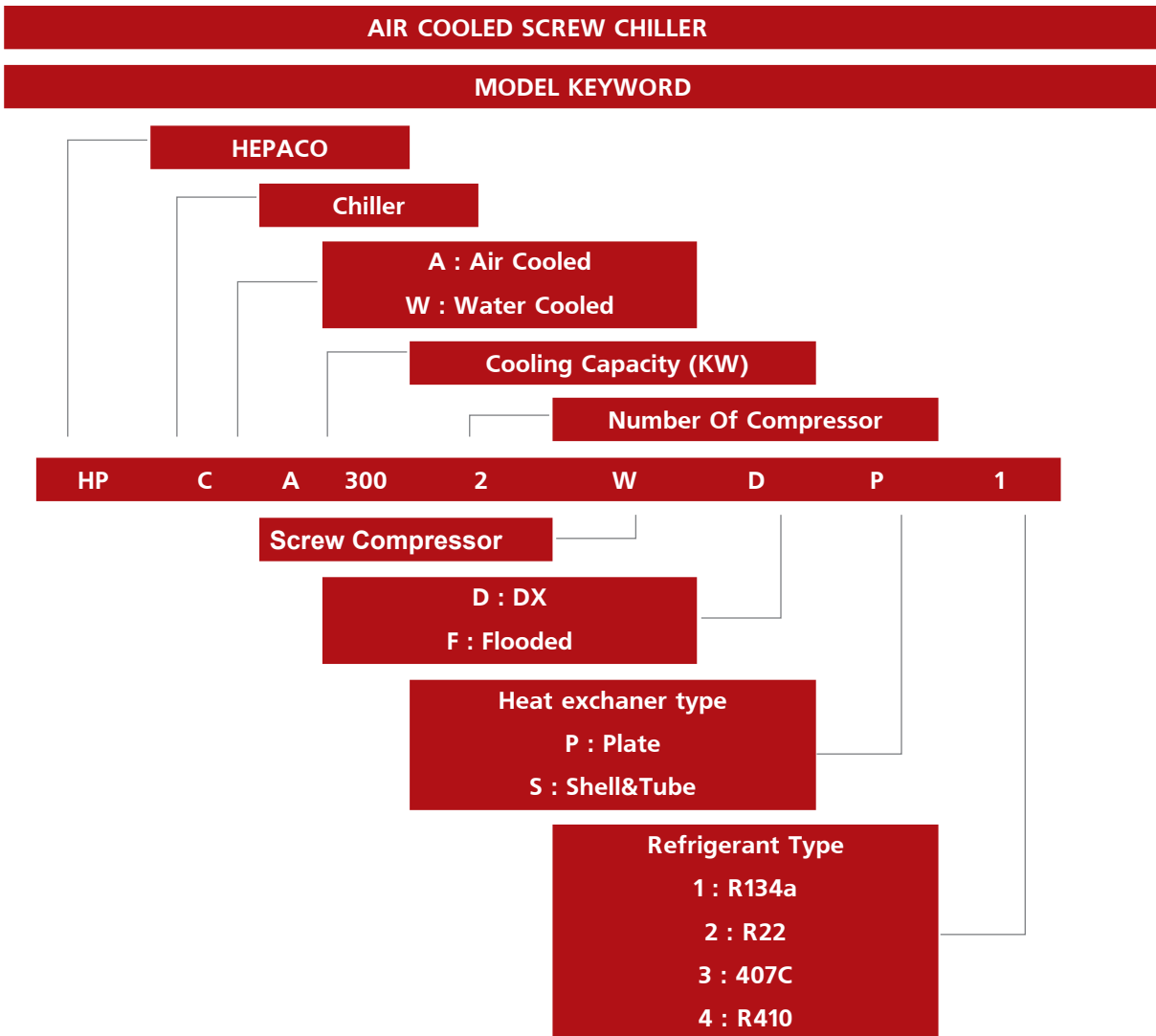
The IPLV is the average weighted value of the energy efficiency ratios (EER) at different operating conditions, weighted by the operating time.

IPLV(Integrated Pat Load Value)

Load (%)	Air temperature (°C)	Energy efficiency	Operating time, %
100	35	EER1	1
75	26.7	EER2	42
50	18.3	EER3	45
25	12.8	EER4	12

$$\text{IPLV} = \text{EER1} \times 1\% + \text{EER2} \times 42\% + \text{EER3} \times 45\% + \text{EER4} \times 12\%$$





HEPACO (Air Processing & Heat Recovery Sys.)

Screw compressor R134a



Quick Selection Table

Model:	HPCA...WDS2		470-2	580-2	700-2	770-2
Refrigerant						
Type			R22			
Cooling						
Cooling Capacity	•	Kw	472	576	690	772
COP			2.93	2.98	2.96	3.09
Heating						
Heating capacity		Kw				
COP						
Compressor						
Quantity/Refrigerant Circuit		n/n	2./2	2./2	2./2	2./2
Type			Semi Hermetic Screw			
Minimum capacity step		%	13	13	13	13
Total Absorbed power		Kw	161.3	193.4	233.2	249.6
Comp. total current	••	A	260.2	332.2	384.1	410.3
Fans						
Quantity		n	12	12	14	16
Type			Axial fan			
Air flow		m ³ /h41000	240	240	280	320
Total Absorbed power		Kw	21.6	21.6	25.2	28.8
User side exchanger						
Quantity		n	1	1	1	1
Type			Shell & Tube Exchanger			
Water flow rate	•	m ³ /h	81.2	99.1	118.7	132.8
Pressure drop		kpa	51	54	57	57
Dimenssion and Weight						
Length		mm	6270	6270	7240	8210
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	4220	4230	5670	6540
Electrical data						
power supply		v/ph/Hz	380/3~+N/50			
<ul style="list-style-type: none"> • Ambient air temperature 35 °C : User side exchanger inlet/outlet water temperature 12-7 °C •• Ambient air temperature 35 °C : Full load capacity steps 100% 						

HEPACO (Air Processing & Heat Recovery Sys.)

Performance Data										
chilled water inlet/outlet temp. : 12/7 (°C)										
Refrigerant R22										
Ambient temp. (C°)										
	35		37		40		42		45	
Model	Capacity	power	Capacity	power	Capacity	power	Capacity	power	Capacity	power
HEPCA ... WDS2	kw	kw	kw	kw	kw	kw	kw	kw	kw	kw
180-1	175.7	68.1	169.5	70.4	159.8	74.00	153.1	76.60	142.7	80.6
270-1	269.2	102.5	261	106.2	249	112.30	240	116.70	232	121.4
350-2	351.4	136.4	339	140.7	320	148.00	306	153.10	285	161.3
430-2	428.2	158.8	414	164.2	393	172.80	378	178.90	355	188.6
470-2	472	182.9	458	189	437	199.60	423	207.30	401	219.9
570-2	576	215	558	223.6	529	236.60	510	246.60	480	261.6
700-2	690	258.4	668	266.2	632	279.20	606	288.20	564	302.2
770-2	772	278.4	748	287.8	710	301.80
900-2	908	319	883	329.4	845	345.40	819	356.40	780	374.4
1050-2	1060	363.4	1032	375	989	393.00	960	406.00	914	426
1200-2	1218	406	1186	418.6	1138	437.60	1106	451.60	1057	473.6
1400-1	1410	461.2	1377	476.2	1326	498.20	1291	514.20	1235	539.2

comp					
fan	35	37	40	42	45
kw	kw	kw	kw	kw	kw
7.2	60.9	63.2	66.80	69.40	73.40
10.8	91.7	95.4	101.50	105.90	111
14.4	122	126	133.60	138.70	147
18	141	146	154.80	160.90	171
21.6	161	167	178.00	185.70	198

comp					
21.6	193	202	215	225	240
25.2	233	241	254	263	277
28.8	250	259	273
32.4	287	297	313	324	342
36	327	339	357	370	390
39.6	366	379	398	412	434
43.2	418	433	455	471	496

Quick Selection Table

Screw compressor **R22**



180-1 270-1 350-1 430-2

model: HPCA...WDS2

Cooling						
Cooling Capacity	•	Kw	175.7	269.2	351.1	428.2
	•	Ton	50.0	76.5	99.8	121.8
Fans						
Quantity	n	4	6	8	10	
Dimension and Weight						
Length	mm	2390	3360	4330	5300	
depht	mm	2250	2250	2250	2250	
Height	mm	2300	2300	2300	2300	
Net Weight	Kg	2900	3100	3150	3420	
model:	HPCA...WDS2		470-2	580-2	700-2	770-2
Cooling						
Cooling Capacity	•	Kw	472	576	690	772
	•	Ton	134	164	196	220
Fans						
Quantity	n	12	12	14	16	
Dimension and Weight						
Length	mm	6270	6270	7240	8210	
depht	mm	2250	2250	2250	2250	
Height	mm	2300	2300	2300	2300	
Net Weight	Kg	4220	4230	5670	6540	
model:	HPCA...WDS2		900-2	1050-2	1200-2	1400-2
Cooling						
Cooling Capacity	•	Kw	908	1,060	1,218	1,410
	•	Ton	258	301	346	401
Fans						
Quantity	n	18	20	22	24	
Dimension and Weight						
Length	mm	9180	10150	11120	12090	
depht	mm	2250	2250	2250	2250	
Height	mm	2300	2300	2300	2300	
Net Weight	Kg	6850	7510	8500	8620	
• Ambient air temperature 35 °C : User side exchanger inlet/outlet water temperature 12-7 °C						
HEPACO			AIR COOLED CHILLER			

Model :	HPCA...WDS1		180-1	230-1	290-1	360-2
Refrigerant						
Type		R134a				
Cooling						
Cooling Capacity	•	Kw	181.1	226	285	362.2
COP	•		3.22	3.28	3.24	3.22
Heating						
Heating capacity		Kw				
COP						
Compressor						
Quantity/Refrigerant Circuit		n/n	1./1	1./1	1./1	2./2
Type			Semi Hermetic Screw			
Minimum capacity step		%	25	25	25	13
Total Absorbed power		Kw	56.2	68.8	88	112.4
Comp. total current		••	A	93	116.9	149.8
Fans						
Quantity		n	4	6	6	8
Type			Axial fan			
Air flow		m3/h×1000	80	120	120	160
Total Absorbed power		Kw	7.2	10.8	10.8	14.4
User side exchanger						
Quantity		n	1	1	1	1
Type			Shell & Tube Exchanger			
Water flow rate		m3/h	31.1	38.9	49	62.3
Pressure drop		kpa	44	49	35	46
Dimenssion and Weight						
Length		mm	2550	3570	3570	4550
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	2850	3250	3350	4350
Electrical data						
power supply		v/ph/Hz	380/3~+N/50			

HEPACO (Air Processing & Heat Recovery Sys.)

Model :	HPCA...WDS1		450-2	570-2	670-2	800-2
Refrigerant						
Type			R134a			
Cooling						
Cooling Capacity	•	Kw	452	570	674	788
COP	•		3.28	3.24	3.27	3.42
Heating						
Heating capacity		Kw				
COP						
Compressor						
Quantity/Refrigerant Circuit		n/n	2./2	2./2	2./2	2./2
Type			Semi Hermetic Screw			
Minimum capacity step		%	13	13	13	13
Total Absorbed power		Kw	137.6	176.0	206.4	230.2
Comp. total current	••	A	233.8	299.6	340.8	373
Fans						
Quantity		n	10	14	16	18
Type			Axial fan			
Air flow		m ³ /h×1000	200	280	320	360
Total Absorbed power		Kw	18	25.2	28.8	32.4
User side exchanger						
Quantity		n	1	1	1	1
Type			Shell & Tube Exchanger			
Water flow rate	•	m ³ /h	77.7	98	115.9	135.5
Pressure drop		kpa	52	51	54	55
Dimension and Weight						
Length		mm	5570	7550	8550	9550
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	5520	6700	8350	8700
Electrical data						
power supply		v/ph/Hz	380/3~+N/50			
• Ambient air temperature 35 °C : User side exchanger inlet/outlet water temperature 12-7 °C						
•• Ambient air temperature 35 °C : Full load capacity steps 100%						

HEPACO (Air Processing & Heat Recovery Sys.)

model :	HPCA...WDS1		900-2	1000-2	1100-2	1200-2
Refrigerant						
Type		R134a				
Cooling						
Cooling Capacity	•	Kw	910	1,034	1,112	1,218
COP	•		3.40	3.41	3.23	3.29
Heating						
Heating capacity		Kw				
COP						
Compressor						
Quantity/Refrigerant Circuit		n/n	2./2	2./2	2./2	2./2
Type		Semi Hermetic Screw				
Minimum capacity step		%	13	13	13	13
Total Absorbed power		Kw	268.1	303.2	344.4	370.2
Comp. total current	••	A	448.4	502.3	750.1	620.2
Fans						
Quantity		n	20	24	26	28
Type		Axial fan				
Air flow		m ³ /h×1000	400	480	520	560
Total Absorbed power		Kw	36	43.2	46.8	50.4
User side exchanger						
Quantity		n	1	1	1	1
Type		Shell & Tube Exchanger				
Water flow rate	•	m ³ /h	156.5	177.8	191.3	209.5
Pressure drop		kpa	77	72	72	71
Dimension and Weight						
Length		mm	10550	12570	13570	14570
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	11510	13200	14150	14330
Electrical data						
power supply		v/ph/Hz	380/3~+N/50			
• Ambient air temperature 35 °C : User side exchanger inlet/outlet water temperature 12-7 °C						
•• Ambient air temperature 35 °C : Full load capacity steps 100%						

HEPACO (Air Processing & Heat Recovery Sys.)

Performance Data										
chilled water inlet/outlet temp. :12/7 (°C)										
Refrigerant	R134a									
Ambient temp. (°C)										
	35		37		40		42		45	
Model:	Capacity	power	Capacity	power	Capacity	power	Capacity	power	Capacity	power
HPCA ... WDS1	kw	kw	kw	kw	kw	kw	kw	kw	kw	kw
180-1	181.1	63.4	175.5	65.7	166.9	69.50	161	72.20	151.9	76.7
230-1	226	76	219	78.9	208	83.60	201	87.00	190.2	92.5
290-1	285	98.8	276	102.6	263	108.60	255	112.90	241	119.9
360-2	362.2	126.8	351	131.4	334	139.00	322	144.40	304	153.4
450-2	452	155.6	438	161.4	416	170.90	402	177.60	380	188.6
570-2	570	197.6	552	205.1	527	217.20	509	225.60	483	239.6
670-2	674	231.6	653	240.2	621	253.20	599	263.20	566	277.2
800-2	788	258.8	763	267.8	726	281.80	701	290.80	664	306.8
900-2	910	300.5	885	311.4	846	328.40	820	339.40	780	358.4
1000-2	1034	339.2	1005	351	962	370.00	932	384.00	887	404
1100-2	1112	384	1080	396.6	1031	416.60	997	430.60	946	453.6
1200-2	1218	413.4	1185	427.2	1134	449.20	1099	464.20	1047	489.2

HEPACO (Air Processing & Heat Recovery Sys.)

Screw compressor R22

Quick Selection Table



model :	HPCA...WDS2		180-1	270-1	350-1	430-2
Cooling						
Cooling Capacity •	•	Kw	175.7	269.2	351.1	428.2
	Ton	50.0	76.5	99.8	121.8	
Fans						
Quantity		n	4	6	8	10
Dimension and Weight						
Length		mm	2570	3570	4550	5570
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	2790	3400	4360	5200
model :	HPCA...WDS2		470-2	580-2	700-2	770-2
Cooling						
Cooling Capacity •	•	Kw	472	576	690	772
	Ton	134	164	196	220	
Fans						
Quantity		n	12	14	16	18
Dimension and Weight						
Length		mm	6570	7570	8550	9550
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	6730	7300	8450	8900
model :	HPCA...WDS2		900-2	1050-2	1200-2	1400-2
Cooling						
Cooling Capacity •	•	Kw	908	1,060	1,218	1,410
	Ton	258	301	346	401	
Fans						
Quantity		n	20	24	28	30
Dimension and Weight						
Length		mm	10570	12550	14550	15550
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	11300	13200	14100	14750
• Ambient air temperature 35 °C : User side exchanger inlet/outlet water temperature 12-7 °C						
HEPACO		AIR COOLED CHILLER		www.hepa-co.com		

HEPACO (Air Processing & Heat Recovery Sys.)

Model :	HPCA...WDS2		180-1	270-1	350-2	430-2
Refrigerant						
Type	R22					
Cooling						
Cooling Capacity	•	Kw	175.7	269.2	351.1	428.2
COP	•		2.88	2.93	2.88	3.04
Heating						
Heating capacity		Kw				
COP						
Compressor						
Quantity/Refrigerant Circuit		n/n	1./1	1./1	2./2	2./2
Type			Semi Hermetic Screw			
Minimum capacity step		%	25	25	13	13
Total Absorbed power		Kw	61.2	91.7	122.0	140.8
Comp. total current	••	A	101.4	148.7	202.8	227.8
Fans						
Quantity		n	4	6	8	10
Type			Axial fan			
Air flow		m ³ h×1000	80	120	160	200
Total Absorbed power		Kw	7.2	10.8	14.4	18
User side exchanger						
Quantity		n	1	1	1	1
Type			Shell & Tube Exchanger			
Water flow rate		m ³ h	30.2	46.3	60.4	73.6
Pressure drop		kpa	43	45	50	52
Dimension and Weight						
Length		mm	2570	3570	4550	5570
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	2790	3400	4360	5200
Electrical data						
power supply		v/ph/Hz	380/3~+N/50			
• Ambient air temperature 35 °C : User side exchanger inlet/outlet water temperature 12-7 °C						
•• Ambient air temperature 35 °C : Full load capacity steps 100%						

HEPACO (Air Processing & Heat Recovery Sys.)

Model :	HPCA...WDS2		470-2	580-2	700-2	770-2
Refrigerant						
Type	R22					
Cooling						
Cooling Capacity	•	Kw	472	576	690	772
COP	•		2.93	2.98	2.96	3.09
Heating						
Heating capacity		Kw				
COP						
Compressor						
Quantity/Refrigerant Circuit		n/n	2./2	2./2	2./2	2./2
Type	Semi Hermetic Screw					
Minimum capacity step		%	13	13	13	13
Total Absorbed power		Kw	161.3	193.4	233.2	249.6
Comp. total current	••	A	260.2	332.2	384.1	410.3
Fans						
Quantity		n	12	14	16	18
Type	Axial fan					
Air flow		m ³ h×1000	240	280	320	360
Total Absorbed power		Kw	21.6	25.2	28.8	32.4
User side exchanger						
Quantity		n	1	1	1	1
Type	Shell & Tube Exchanger					
Water flow rate	•	m ³ /h	81.2	99.1	118.7	132.8
Pressure drop		kpa	51	54	57	57
Dimension and Weight						
Length		mm	6570	7570	8550	9550
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	6730	7300	8450	8900
Electrical data						
power supply		v/ph/Hz	380/3~+N/50			
<ul style="list-style-type: none"> • Ambient air temperature 35 °C : User side exchanger inlet/outlet water temperature 12-7 °C 						
<ul style="list-style-type: none"> •• Ambient air temperature 35 °C : Full load capacity steps 100% 						

HEPACO (Air Processing & Heat Recovery Sys.)

Model :	HPCA...WDS2		900-2	1050-2	1200-2	1400-2
Refrigerant						
Type		R22				
Cooling						
Cooling Capacity	•	Kw	908	1,060	1,218	1,410
COP	•		3.17	3.24	3.32	3.37
Heating						
Heating capacity		Kw				
COP						
Compressor						
Quantity/Refrigerant Circuit		n/n	2./2	2./2	2./2	2./2
Type			Semi Hermetic Screw			
Minimum capacity step		%	13	13	13	13
Total Absorbed power		Kw	286.6	327.4	366.4	418.0
Comp. total current	••	A	460.3	536.2	598.7	682.5
Fans						
Quantity		n	20	24	28	30
Type			Axial fan			
Air flow		m ³ /h×1000	400	480	560	600
Total Absorbed power		Kw	36	43.2	50.4	54
User side exchanger						
Quantity		n	1	1	1	1
Type			Shell & Tube Exchanger			
Water flow rate	•	m ³ /h	156.2	182.3	209.5	242.5
Pressure drop		kpa	77	72	72	74
Dimension and Weight						
Length		mm	10570	12550	14550	15550
depht		mm	2250	2250	2250	2250
Height		mm	2300	2300	2300	2300
Net Weight		Kg	11300	13200	14100	14750
Electrical data						
power supply		v/ph/Hz	380/3~+N/50			
• Ambient air temperature 35 °C : User side exchanger inlet/outlet water temperature 12-7 °C						
•• Ambient air temperature 35 °C : Full load capacity steps 100%						