

Commercial Air Source Heat Pump



Product Feature

- @ Using the high-efficient American Copeland scroll compressor with outstanding performance special for heat pump.
- @ Detached heat exchanger design, stable, high-efficient, durable, not easy to corrode.
- @ Thermal expansion valve throttling system can adapt to various temperatures environment.
- @ Integrated filling water, back water, water supply, electric auxiliary heating and other engineering controls elements, it is easy to operate hot water project.
- @ Constant temperature filling water, timing water supply and other function, to meet the needs of different places, also facilitate the combination with solar energy.
- @ Modular design can be combined into large water supply systems according the project needs.

Main function

- @ Free to set the temperature, maximum 60°C
- @ Intelligent defrost function
- @ High and low voltage protection, leakage, high temperature protection
- @ Timing return water function
- @ Time Interval working
- @ Power-down memory function

COMMERCIAL AIR SOURCE HEAT PUMP – EEE

STANDARD SPECIFICATION

HEAT PUMP AIR TO WATER (PROPELLER FAN) WITHOUT WATER PUMP

Model :	EE-HPAW	40F	50F	60F	65F	70F	80F	90F	110F	120F	150F	200F	250F	300F		
Normal Heating Capacity	Hot water (Btu/h)	39,579	50,497	59,027	66,192	69,946	79,499	91,441	110,548	123,855	149,104	202,331	251,464	313,221		
	Hot water (Kw)	11.6	14.8	17.3	19.4	20.5	23.3	26.8	32.4	36.3	43.7	59.3	73.7	91.8		
Power Consumption	KW	2.88	3.43	4.1	4.57	5.14	5.81	6.67	7.82	8.67	10.63	14.05	17.63	21.43		
	COP.	4.03	4.31	4.22	4.25	3.99	4.01	4.02	4.15	4.19	4.11	4.22	4.18	4.28		
Compressor	Type	SCROLL														
	V./PH./Hz.	380 / 3 / 50														
	QTY.	1														
Coil	Type / Material	Copper Tube &Alu. Fin or Copper Fin (Option)														
	Tube size (Inch)	3/8														
	QTY.	1												2		
Fan Blade	Type	Propeller direct drive fan														
	QTY.	1														
Condenser Motor	V./PH./Hz.	220 / 1 / 50									380 / 3 / 50					
	QTY.	1														
Refrigerant	Type															
	Kgs.	2.8	3.6	4.2	4.7	5	5.6	6.5	7.8	8.8	10.6	14.3	17.8	22.2		
	Charge	Full														
Heat exchanger	Type / Material	Plate / SUS316														
Hot Water Temp. Inlet	°C(°F)	30 (86)														
Hot Water Temp. Outlet	°C(°F)	60 (140)														
Water flow rate	GPM	1.47	1.87	2.19	2.45	2.59	2.94	3.39	4.09	4.59	5.52	7.49	9.31	11.6		
	Liter./Min.	5.55	7.08	8.27	9.28	9.81	11.14	12.82	15.5	17.36	20.9	28.36	35.25	43.91		
Water Pressure Drop	Ft.WG	16.4														
Water Connection In/Out (MALE NPT.)	Inch	3/4"					1"					1-1/4"	1-1/2"			
Water drain connection (MALE NPT.)	Inch	1/2"									3/4"					
Dimension	Width	920			1050			1150			1300				1450	
	Height	1000					1070			1150			1300			
	Depth	820					900			980				1080		
Ambient Working Temp.	°	15 -> 45														
Operation Weight	Kgs.	175	185	190	195	220	240	245	275	290	305	425	495	540		

STANDARD SPECIFICATION

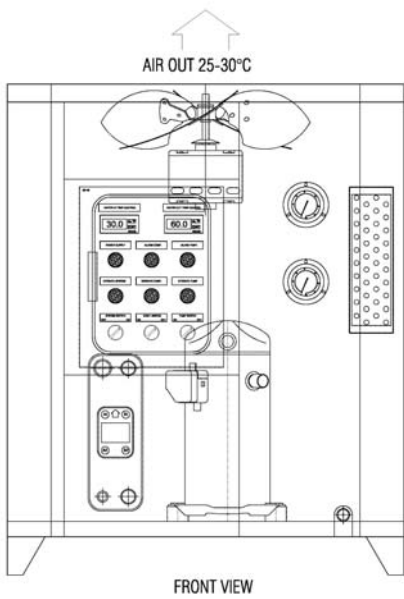
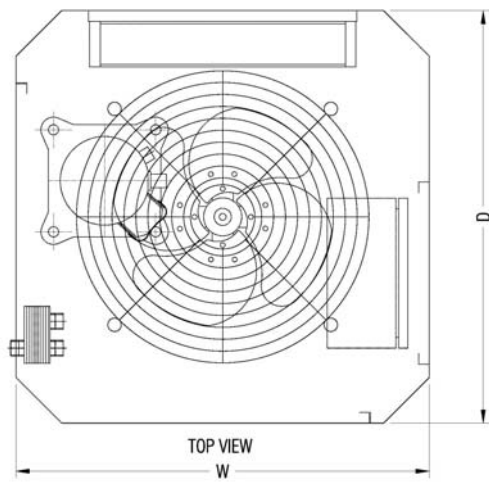
HEAT PUMP WATER TO WATER

Model	EE-HPWW	124
Nominal Heating Capacity	Hot water (Btu./h.)	124,196
	Hot water (Kw.)	36.4
	Chiled water (Btu./h.)	82,229
	Chiled water (Kw.)	24.1
Power Consumption	KW.	12.9
	KW./TON.	0.75
	COP.	4.69
	Total Amp. Max.	33.6
Compressor	Type	Tandem Scroll
	V./PH./Hz.	380/3/50
	Kw. (Input) Each	12.9
	RIA. (Amp.) Each	33.6
	QTY.	1
Refrigerant	Type	R-134a
	Kgs.	9.3
	Charge	Full
Hot water Heat exchanger	Type/Material	Plate/SUS 316
Hot water temp. Inlet	°C(°F)	30(86)
Hot water temp. Outlet	°C(°F)	60(140)
Hot water flow rate	GPM.	4.6
	Liter/Min.	17.41
Hot water pressure drop	Ft.WG.	3.5
Hot water Connection	Inch (FPT)	1
Chiled water Heat exchanger	Type/Material	Plate/SUS 316
Chiled water temp. Inlet	°C(°F)	15(59)
Chiled water temp. Outlet	°C(°F)	8(46.4)
Chiled water flow rate	GPM.	13.05
	Liter/Min.	49.4
Chiled water pressure	Ft.WG	4
Chiled water connection In/Out	Inch (FPT.)	1/1/2004
Ambient Working Temp.	°C	15->45
Operation Weight	Kgs.	350

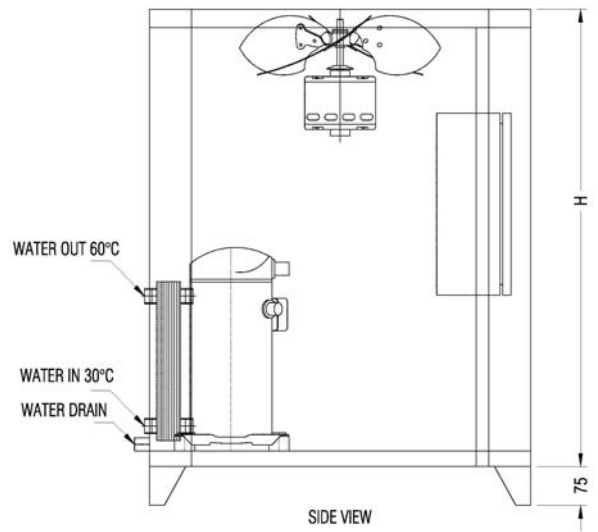
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE FOR FURTHER IMPROVEMENT

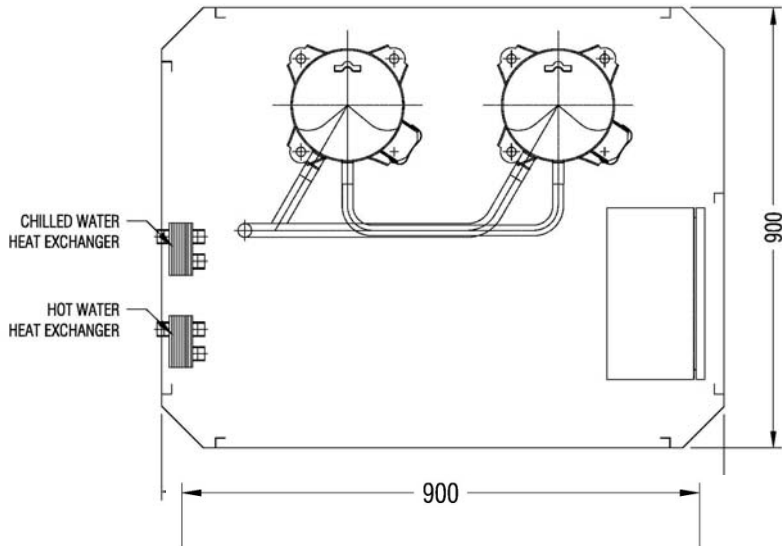
NOTE:-

- Nominal Capacity Based 38°F Suction Temp., 95°F Ambient Temp., and 149°F Condensing Temp.
- Fouling Factor 0.0005 Ft².h.°F/Btu
- RLA = Rate Load Amp.

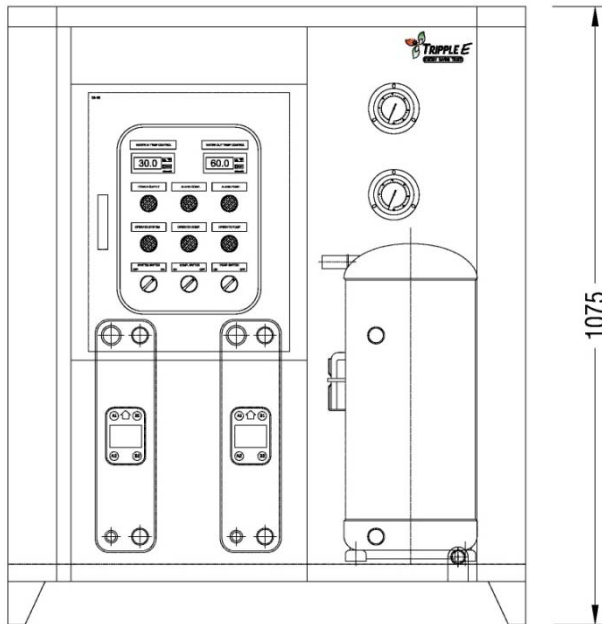


AIR IN 30-35°C

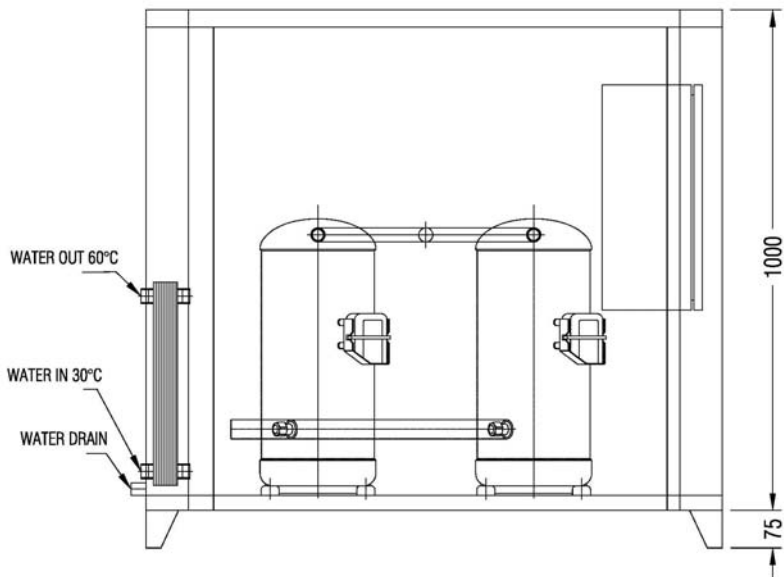




TOP VIEW



FRONT VIEW



SIDE VIEW

ITEM	DESCRIPTION	QTY.	REMARK
1.	CASING :EG.WITH COATING POWDER PAINT	1 SET.	
2.	EVAPORATOR PLATE HEAT EXCHAGER : ALFA LAVAL	1 PC.	
3.	TANDEM SCROLL COMPRESSOR : "COPELAND"	1 SET.	R-134a
4.	HEAT EXCHANGER : PLATE "ALFA LAVAL"	1 PC.	
5.	DIGITAL THERMOSTAT "HOT WATER TEMP CONTROL"	2 PCS.	
6.	DIGITAL THERMOSTAT "CHILLED WATER TEMP CONTROL"	1 PC.	
7.	THERMOSTAT "FREEZE CONTROL"	1 PC.	
8.	REFRIGERANT R-134a	FULL	
9.	CERCULATION PUMP "GRUNDFOS"	1 SET	

SPECIFICATION

- HOT WATER CAPACITY : 124,196 BTU/H
- CHILLED WATER CAPACITY 82,229 BTU/H
- CASING : ELECTRO GALVANIZED STEEL WITH COATING POWDER PAINT
- EVAPORATOR PLATE HEAT EXCHANGER : ALFA LAVAL
- TANDEM SCROLL COMPRESSOR "COPELAND" R-134a
- DIGITAL THERMOSTAT TEMP CONTROLLER, THERMOSTAT FREEZE STAT
- PHASE PROTECTION, CIRCUIT BREAKER
- EXPANSION VALVE "DANFOSS",FILTER DRIER, SIGHT GLASS, SERVICE VALVE
- HIGH-LOW PRESSURE SWITCH,HIGH-LOW PRESSURE GAUGE
- REFRIGERANT PIPING SET "COPPER"
- WATER FLOW RATE 4.60 GPM. OR 17.41 LPM. AT WATER IN/OUT TEMP. : 30/60 C
- WATER PIPING SET "COPPER TUBE"
- WATER CONECTION IN/OUT SIZE 1" MPT.
 - AIR FILTER SYNTHETIC
- POWER SUPPLY 380V-3PH-50HZ
- CERCULATION PUMP "GRUNDFOS"