

TECHNICAL BROCHURE



SWIMMING POOL HEAT PUMPS

6kW – 100kW

MANUFACTURED BY:



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ENERFLOW EP-MT HEAT PUMPS: ENERGY EFFICIENT SWIMMING POOL HEAT PUMPS

ENERFLOW EP-MT swimming pool heat pumps recover heat contained in the ambient air and transfer it to the water.

ENERFLOW EP-MT heat pumps are extremely energy efficient as they consume only a fraction (in the form of electrical power) of the energy transferred to the water.

ENERFLOW EP-MT heat pumps are ideally suited for the following applications:

- swimming pools
- spas
- crocodile farms
- fish farms

MODELS

Model EP

Operation for above zero temperatures down to approximately +3 °C. Defrosting of the air heat exchanger is done by stopping the compressor whilst maintaining air flow through the coil. This model can be used in areas where the ambient temperature seldom drops below 3 °C.

Model EPR-MT

Can be used at below zero temperatures down to -10 °C. Defrost is accomplished by reversal of the heat pump cycle. This model must be used in areas where the ambient temperature drops below +3 °C for an appreciable portion of the total running time. Both these models incorporate the latest technical innovations and run very quietly.

ADVANTAGES

- Reliable heating even when the sun is not shining.
- Temperature of the pool can be controlled at a certain level.
- Easy installation.
- Low running cost.
- Heat pumps are usually sized for an average running time of 8 hours/day. It

can however, run for 24 hours per day which means that the system has a large buffer heating capacity. If more heating is required the heat pump simply runs for longer periods.

- Low maintenance costs.

THE HEAT PUMP CONCEPT: FREE ENERGY FROM AIR

Heat pumps are recognized as one of the most economical methods for heating water. Two types of energy sources are utilized to produce the required heat output. The superheat EP-MT heat pumps obtain up to 75% of the required energy from the air as free energy. The other source is electrical power, the only component paid for.

EASY INSTALLATION

The **ENERFLOW EP-MT** heat pump is installed in the pool circulation system, after the filter. Installation is a simple matter of water pipe connections and power supply. **ENERFLOW EP-MT** heat pumps are designed for outdoor as well as indoor applications. The only requirement is access to external air.

NO MAINTENANCE

ENERFLOW EP-MT heat pumps do not require regular maintenance. The units are sealed and designed for trouble free operation. Models EP25 - EP80 are equipped with automatic fault finding light indicators and in the unlikely event of a malfunction the problem will show clearly enabling even an unskilled person to rectify the problem.

QUIET OPERATION

Advanced fans with airfoil blades and a very low noise level, are used on **ENERFLOW** heat pumps. The fan motors are also protected against moisture and dust.

FREE COLD AIR

The by-product of **ENERFLOW EP-MT** heat pumps is cold air which can be used for air conditioning purposes. The cold air can be ducted to any area of choice.

OPERATING COST

The energy efficiency of **ENERFLOW** heat pumps is expressed as the coefficient of performance (COP) defined by

$$\text{COP} = \frac{\text{heat transfer to the pool water}}{\text{electrical power input}}$$

The COP of **ENERFLOW** heat pump varies typically between 4,0 and 6,0 depending on the ambient wet-bulb temperature and the temperature of the pool water. (See the performance curves). **ENERFLOW** heat pumps are usually sized to run an average of 8 hours per day to maintain a temperature of 28 °C for nine months of the year when the pool is covered with a solar type heat retention cover. Under these conditions the different **ENERFLOW EP-MT** models are suitable for the following pool sizes:

ENERFLOW EP MODEL (APPROXIMATE)	POOL SIZE
EP6MT	15 - 40 m ²
EP8MT	30 - 55 m ²
EP12MT	50 - 85 m ²
EP16MT	70 - 120 m ²
EP20MT	100 - 165 m ²

Table I Heat pump size as function of pool size (depending on the geographical location, shading, degree of wind protection and climatological conditions)

M-Tech Industrial has developed a comprehensive computer program that more accurately predicts the daily running hours and operating expenses given the size of the pool, the geographical location, the pool temperature and the **ENERFLOW EP-MT** model number.

The annual operating costs, based on the above conditions, an average ambient wet-bulb temperature of 15 °C and an electricity tariff of R0,15 per kW.h are shown in Table II.

ENERFLOW EP-MT MODEL	YEARLY ELECTRICITY COST (APPROXIMATE)
EP6MT	R300
EP8MT	R375
EP12MT	R490
EP16MT	R675
EP20MT	R1260

NOTES

If a heat pump is oversized the average daily running hours will decrease. As a result the operating cost will decrease to the level it would have been if the heat pump was appropriately sized. The capital cost will, however, be higher.

- If pool heating is required for less than 9 months of the year, the operating cost will decrease.
- Operating costs will increase if the pool temperature is increased and visa versa.

OPERATING LIMITS

ENERFLOW EP-MT heat pumps can heat water up to a temperature of 45 °C. **ENERFLOW** heat pumps can operate at ambient temperatures down to 3 °C without reverse cycle defrost and down to -10 °C with reverse cycle defrost.

CONTROL

ENERFLOW EP-MT heat pumps are controlled by means of the pool pump time switch and a thermostat. The heat pump can only run when the pool pump is running. If the pool pump is running the heat pump will only run if the pool water is below a set temperature. A big advantage of **ENERFLOW EP-MT** heat pumps compared to solar heating is that the temperature of the pool can be controlled at a certain level.

HIGH EFFICIENCY, CORROSION RESISTANT HEAT EXCHANGER

Swimming pool water, with all its chemicals, is highly corrosive - even corroding stainless steels. With this in mind, the water heat exchanger has been manufactured from advanced materials resistant to pool water corrosion. This heat exchanger, which is patented, also has very good heat transfer capabilities. In areas where hard water scale (i.e. calcium) builds-up and insulate the inside of heat exchangers and produce such loss of efficiency, M-Tech Industrial can install a water softener system. The system, once installed on the hot water heat exchanger, operates silently, automatically and permanently never needing power, salt or chemicals. The system will dissolve any scale and will also neutralize any acid water.

TECHNOLOGY

The **ENERFLOW EP-MT** series heat pumps are the end product of a fine engineering effort piloted by M-Tech Industrial in collaboration with other engineering research institutes. Computer aided design verified by experimental testing supported the project throughout its development and manufacturing phases.

WARRANTY

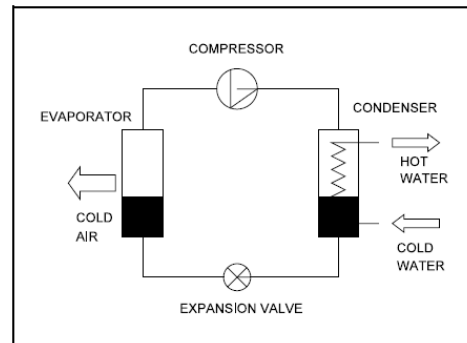
M-Tech Industrial warrants this equipment to be free from defects in material and workmanship for a period of 12 months from date of shipment provided the correct installation and water treatment procedures were followed. Any units or parts proving defective within the period will be repaired or replaced at our option when returned to our factory transportation charges pre-paid. M-

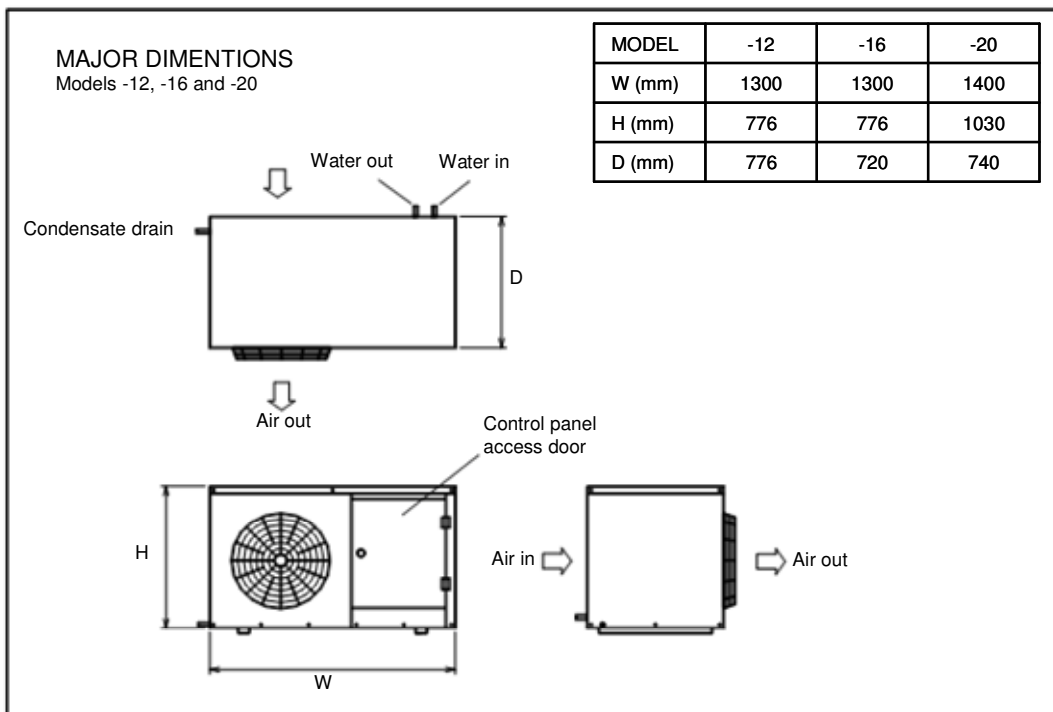
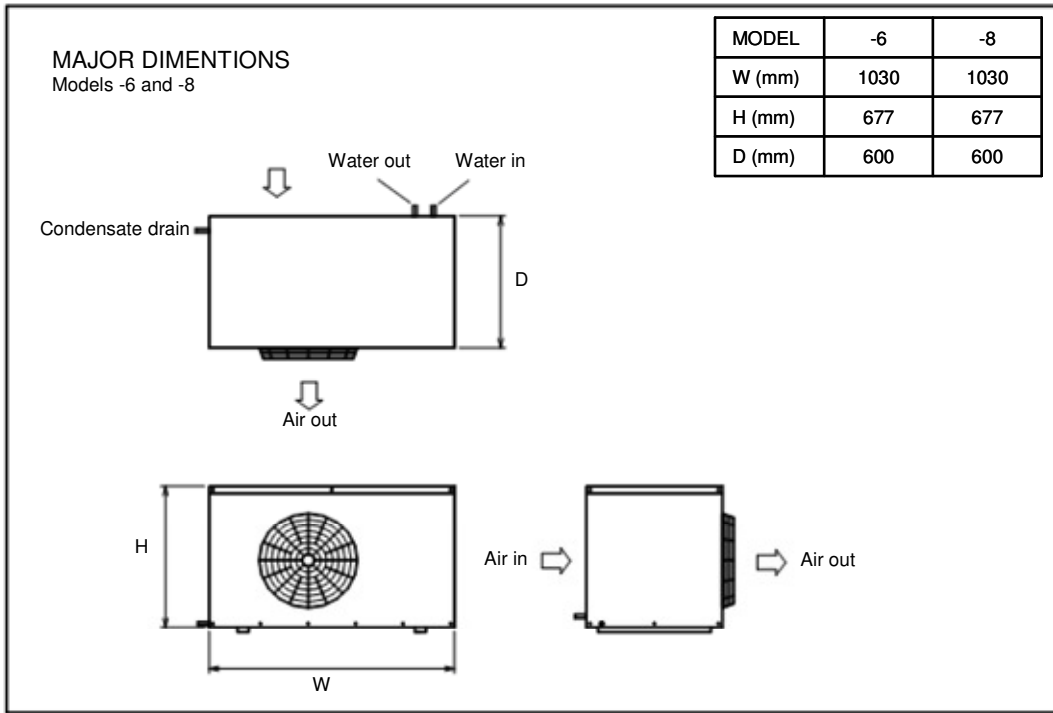
Tech Industrial will not be responsible for any installation or removal costs.

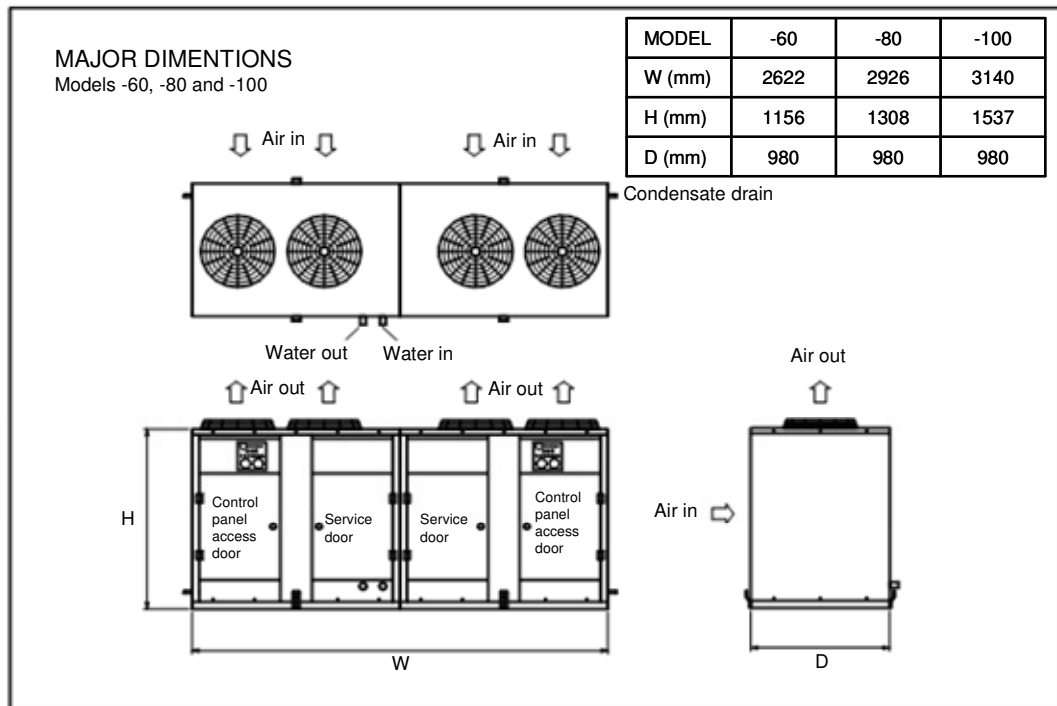
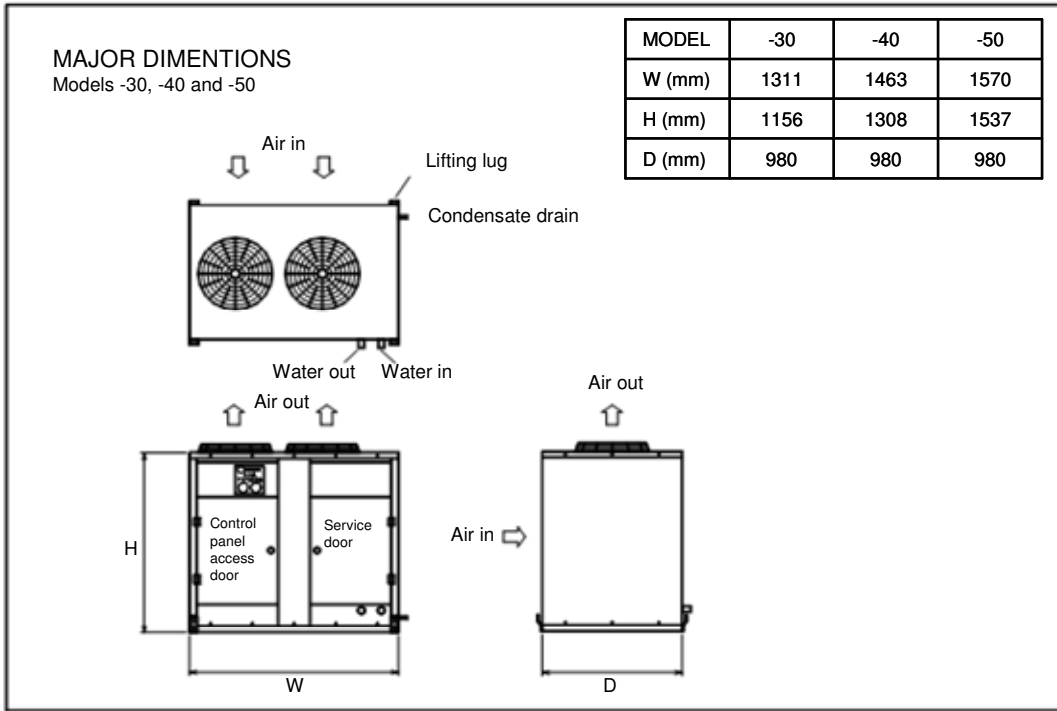
PRINCIPLE OF OPERATION

ENERFLOW heat pumps are based on the well-known vapour-compression refrigeration cycle, described and illustrated below:

- The refrigerant enters the compressor as vapour at low pressure and temperature.
- It enters the water heat exchanger as vapour at a high pressure and temperature.
- The refrigerant is condensed as a result of the heat that is transferred to the water.
- The pressure of the liquid decreases through the expansion valve causing the temperature to drop sharply.
- The liquid at low pressure vaporized in the air heat exchanger as a result of heat transfer from the air.
- The cycle is completed as vapour re-enters the compressor.







SPECIFICATIONS: ENERFLOW EP-MT/EPR-MT SWIMMING POOL HEAT PUMPS

MODEL		EP6MT	EP8MT	EP12MT	EP16MT	EP20MT
RATING		(20°C in, 25°C out, air 15°C WB)				
Heating	kW	6.6	8.3	11.3	16.7	21.9
Water flow	l/min	18.9	23.8	32.4	47.9	62.8
COP		5.3	5.3	5.2	5.3	5.3
ELECTRICAL (50 Hz)						
Phases		1	1	1	3	3
Voltage	Volt	240	240	240	380	380
Power (M ax cont.)	kW	1.9	2.4	3.5	5	6.4
Current (M ax cont.)	Amps	8.6	10.3	16.7	10.3	10.9
CAPACITY STEPS		100 – 0	100 – 0	100 – 0	100 – 0	100 – 0
CASING		Aluminum				
Dimension HxWxD	mm	677 x 1030 x 600	677 x 1030 x 600	776 x 1300 x 720	776 x 1300 x 720	1030 x 1400 x 740
COMPRESSOR		Rotary	Hermetically sealed reciprocating			
No. of cylinders			2	2	4	4
Displacement 50 Hz	m ³ /h	5.7	7	10	13.6	17.7
Speed	rpm	2900	2900	2900	2900	2900
Oil charge	Fl oz	24	36	55	70	70
Oil type		Caltex Capella WF32				
HEAT EXCHANGER (POOL WATER)		Enerflow Patent, Coil-in -shell				
HEAT EXCHANGER (AIR)						
(Rows x Columns) x No.		3 x 24 x 1	3 x 24 x 1	3 x 28 x 1	4 x 28 x 1	4 x 36 x 1
Number of circuits		3	3	4	6	8
Fin patch	mm	2.5	2.5	2.5	2.5	2.5
Face area	m ²	0.28	0.35	0.51	0.51	0.66
FAN		Axial flow				
Fan speed	rpm	1250	1250	900	1100	1350
Fan diameter	mm	350	350	500	500	500
Air flow	m ³ /min	40	44	79	80	122
Face velocity	m/s	2.4	2.1	2.6	2.6	3.1
Power input	kW	0.2	0.2	0.32	0.5	0.7
Noise level	dB 3m	56	56	73	79	83
REFRIGERANT		R22				
Control		Thermostatic expansion valve				
No. of circuits		1	1	1	1	1
Charge	kg	2	3	4	5	6
DEFROSTING METHOD		Reverse cycle (Optional)				
PIPE CONNECTION						
Water inlet/outlet	mm	19.1	19.1	19.1	25.4	25.4
Drain	mm	12.7	12.7	12.7	19.1	19.1
MACHINE WEIGHT	kg	120	150	200	250	300

SPECIFICATIONS: ENERFLOW EP-MT/EPR-MT SWIMMING POOL HEAT PUMPS

MODEL		EP30MT	EP40MT	EP50MT	EP60MT	EP80MT	EP100MT	
RATING		(20°C in, 25°C out, air 15°C WB)						
Heating	kW	34.5	44.0	55.2	69.0	87.9	110.5	
Water flow	l/min	98.9	126.2	158.4	197.9	252.2	316.9	
COP		5.2	5.1	4.9	5.2	5.1	4.9	
ELECTRICAL								
Phases		3	3	3	3	3	3	
Voltage	Volt	380	380	380	380	380	380	
Power (M ax cont.)	kW	9.9	12.5	16.4	19.8	25	32.8	
Current (M ax cont.)	Amps	20	24.2	35	40	48.4	70	
CAPACITY STEPS		100 – 0	100 – 0	100 – 0	100 – 50 – 0	100 – 50 – 0	100 – 50 – 0	
CASING		Stainless Steel						
Dimension HxWxD	mm	1156 x 1311 x 980	1308 x 1463 x 980	1537 x 1570 x 980	1156 x 2622 x 980	1308 x 2926 x 980	1537 x 3140 x 980	
COMPRESSOR		Hermetically sealed reciprocating						
No. of cylinders		4	4	4	4x2	4x2	4x2	
Displacement 50 Hz	m³/h	30.9	38.6	46.3	30.9 x 2	38.6 x 2	46.3 x 2	
Speed	rpm	2900	2900	2900	2900	2900	2900	
Oil charge	Fl oz	128	128	128	128 x 2	128 x 2	128 x 2	
Oil type		Caltex Capella WF32						
HEAT EXCHANGER (POOL WATER)		Enerflow Patent, Coil-in-shell						
HEAT EXCHANGER (AIR)								
(Rows x Columns) x No.		4 x 39 x 1	4 x 45 x 1	4 x 54 x 1	4 x 39 x 2	4 x 45 x 2	4 x 54 x 2	
Number of circuits		13	15	18	13 x 2	15 x 2	18 x 2	
Fin patch	mm	2.5	2.5	2.5	2.5	2.5	2.5	
Face area	m²	0.98	1.31	1.72	0.98 x 2	1.31 x 2	1.72 x 2	
FAN		Axial flow						
Fan speed	rpm	1100	1350	1350	1100	1350	1350	
Fan diameter	mm	500 x 2	500 x 2	500 x 2	500 x 4	500 x 4	500 x 4	
Air flow	m³/min	156	241	267	312	482	534	
Face velocity	m/s	2.7	3.1	2.6	2.7	3.1	2.6	
Power input	kW	0.5 x 2	0.7 x 2	0.7 x 2	0.5 x 4	0.7 x 4	0.7 x 4	
Noise level	dB 3m	79	83	83	79	83	83	
REFRIGERANT		R22						
Control		Thermostatic expansion valve						
No. of circuits		1	1	1	2	2	2	
Charge	kg	7	8	9	7 x 2	8 x 2	9 x 2	
DEFROSTING METHOD		Reverse cycle (Optional)						
PIPE CONNECTION								
Water inlet/outlet	mm	31.8	38.1	38.1	38.1	50.8	50.8	
Drain	mm	19.1	19.1	19.1	19.1	19.1	19.1	
MACHINE WEIGHT		kg	350	400	450	700	800	900

HEATING CAPACITY (EP6MT - EP20MT)

Q = Heat output (kW)

P = Power input, including fan, excluding pump (kW)

COP = Coefficient of performance (Q/P)

Twat = Hot water outlet temperature (°C)

Twb = Ambient air wet-bulb temperature (°C)

Warm water outlet temperature is 5°C higher than inlet temperature

UNIT	Twat→		25.0			30.0			35.0			40.0			45.0		
	Twb	Q	P	COP	Q	P	COP	Q	P	COP	Q	P	COP	Q	P	COP	
EP6MT	-5.0	3.3	1.1	3.1	3.2	1.1	2.9	3.0	1.2	2.6	2.9	1.2	2.4	2.8	1.2	2.3	
	0.0	4.0	1.1	3.6	3.9	1.2	3.3	3.7	1.2	3.0	3.6	1.3	2.8	3.5	1.3	2.6	
	5.0	4.8	1.2	4.1	4.6	1.2	3.7	4.5	1.3	3.4	4.3	1.4	3.2	4.2	1.4	2.9	
	10.0	5.6	1.2	4.6	5.5	1.3	4.2	5.3	1.4	3.9	5.1	1.4	3.6	5.0	1.5	3.3	
	15.0	6.6	1.3	5.3	6.4	1.4	4.8	6.2	1.4	4.3	6.0	1.5	4.0	5.8	1.6	3.6	
	20.0	7.8	1.3	6.0	7.5	1.4	5.4	7.3	1.5	4.9	7.1	1.6	4.4	6.8	1.7	4.1	
EP8MT	-5.0	4.0	1.3	3.0	3.9	1.4	2.8	3.7	1.5	2.6	3.6	1.5	2.4	3.4	1.5	2.2	
	0.0	5.0	1.4	3.5	4.8	1.5	3.2	4.7	1.6	3.0	4.5	1.6	2.8	4.3	1.7	2.6	
	5.0	5.9	1.5	4.1	5.8	1.6	3.7	5.6	1.7	3.4	5.4	1.7	3.1	5.3	1.8	2.9	
	10.0	7.1	1.5	4.6	6.9	1.6	4.2	6.7	1.7	3.9	6.5	1.8	3.5	6.3	1.9	3.3	
	15.0	8.3	1.6	5.3	8.1	1.7	4.8	7.9	1.8	4.3	7.7	1.9	4.0	7.4	2.0	3.6	
	20.0	9.8	1.6	6.0	9.5	1.8	5.4	9.3	1.9	4.9	9.0	2.0	4.5	8.7	2.1	4.1	
EP12MT	-5.0	5.6	1.8	3.1	5.4	1.9	2.8	5.2	2.0	2.6	5.0	2.1	2.4	4.8	2.1	2.2	
	0.0	6.8	1.9	3.5	6.6	2.0	3.2	6.4	2.1	3.0	6.2	2.2	2.8	6.0	2.3	2.6	
	5.0	8.1	2.0	4.0	7.9	2.1	3.7	7.7	2.3	3.4	7.5	2.4	3.2	7.3	2.5	2.9	
	10.0	9.6	2.1	4.6	9.4	2.2	4.2	9.1	2.4	3.8	8.9	2.5	3.5	8.7	2.6	3.3	
	15.0	11.3	2.2	5.2	11.1	2.3	4.7	10.8	2.5	4.3	10.5	2.7	4.0	10.3	2.8	3.7	
	20.0	13.3	2.3	5.9	13.0	2.4	5.3	12.7	2.6	4.8	12.4	2.8	4.4	12.1	3.0	4.1	
EP16MT	-5.0	8.3	2.4	3.5	8.0	2.5	3.2	7.6	2.6	3.0	7.1	2.6	2.7	6.6	2.7	2.5	
	0.0	10.1	2.6	3.9	9.8	2.7	3.6	9.4	2.8	3.3	9.0	2.9	3.1	8.5	3.0	2.8	
	5.0	12.0	2.8	4.4	11.7	2.9	4.0	11.3	3.1	3.7	10.8	3.2	3.4	10.4	3.3	3.1	
	10.0	14.2	3.0	4.8	13.8	3.1	4.4	13.4	3.3	4.1	12.9	3.5	3.7	12.5	3.6	3.4	
	15.0	16.7	3.1	5.3	16.2	3.3	4.9	15.8	3.5	4.5	15.3	3.7	4.1	14.7	3.9	3.8	
	20.0	19.5	3.3	5.9	19.0	3.5	5.4	18.4	3.8	4.9	17.9	4.0	4.5	17.3	4.2	4.1	
EP20MT	-5.0	11.1	3.2	3.5	10.7	3.3	3.2	10.2	3.4	3.0	9.6	3.5	2.8	9.0	3.5	2.6	
	0.0	13.4	3.4	3.9	13.0	3.6	3.6	12.5	3.8	3.3	12.0	3.9	3.1	11.4	4.0	2.9	
	5.0	15.9	3.7	4.3	15.4	3.9	4.0	14.9	4.1	3.7	14.4	4.2	3.4	13.8	4.4	3.2	
	10.0	18.7	3.9	4.8	18.2	4.1	4.4	17.7	4.4	4.1	17.1	4.6	3.8	16.5	4.7	3.5	
	15.0	21.9	4.1	5.3	21.3	4.4	4.8	20.7	4.6	4.5	20.1	4.9	4.1	19.4	5.1	3.8	
	20.0	25.5	4.4	5.8	24.8	4.6	5.3	24.2	4.9	4.9	23.5	5.2	4.5	22.7	5.5	4.1	

HEATING CAPACITY (EP30MT - EP100MT)

Q = Heat output (kW)

P = Power input, including fan, excluding pump (kW)

COP = Coefficient of performance (Q/P)

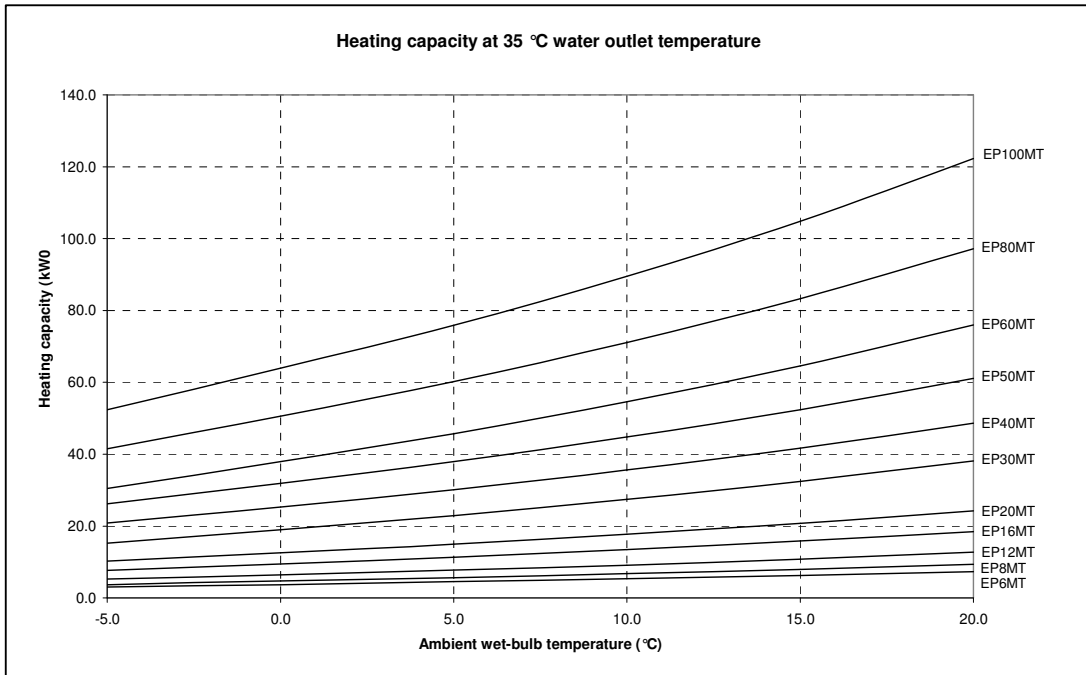
Twat = Hot water outlet temperature (°C)

Twb = Ambient air wet-bulb temperature (°C)

Hot water outlet temperature is 5°C higher than inlet temperature

UNIT	Twat→		25.0			30.0			35.0			40.0			45.0		
	Twb	Q	P	COP	Q	P	COP	Q	P	COP	Q	P	COP	Q	P	COP	
EP30MT	-5.0	16.7	4.8	3.5	16.0	5.0	3.2	15.2	5.1	3.0	14.4	5.2	2.7	13.4	5.3	2.5	
	0.0	20.5	5.3	3.9	19.8	5.5	3.6	19.0	5.7	3.3	18.1	5.9	3.1	17.2	6.0	2.9	
	5.0	24.6	5.7	4.3	23.8	6.0	4.0	22.9	6.2	3.7	21.9	6.4	3.4	21.0	6.6	3.2	
	10.0	29.2	6.2	4.8	28.3	6.5	4.4	27.4	6.8	4.0	26.3	7.0	3.7	25.2	7.3	3.5	
	15.0	34.5	6.6	5.2	33.5	7.0	4.8	32.4	7.3	4.4	31.2	7.6	4.1	30.0	7.9	3.8	
	20.0	40.7	7.1	5.7	39.4	7.5	5.3	38.1	7.9	4.8	36.7	8.3	4.5	35.3	8.6	4.1	
EP40MT	-5.0	22.4	6.3	3.5	21.6	6.6	3.3	20.8	6.8	3.0	19.8	7.0	2.8	18.7	7.1	2.6	
	0.0	27.1	6.9	3.9	26.2	7.2	3.6	25.3	7.5	3.4	24.4	7.7	3.1	23.3	7.9	2.9	
	5.0	32.0	7.4	4.3	31.1	7.8	4.0	30.1	8.1	3.7	29.1	8.4	3.5	28.0	8.7	3.2	
	10.0	37.6	8.0	4.7	36.6	8.4	4.4	35.6	8.8	4.1	34.4	9.1	3.8	33.3	9.5	3.5	
	15.0	44.0	8.5	5.1	42.8	9.0	4.8	41.7	9.4	4.4	40.4	9.8	4.1	39.1	10.2	3.8	
	20.0	51.2	9.2	5.6	50.0	9.6	5.2	48.6	10.1	4.8	47.1	10.6	4.5	45.6	11.0	4.1	
EP50MT	-5.0	28.1	8.3	3.4	27.2	8.6	3.2	26.2	8.9	2.9	25.1	9.1	2.8	23.8	9.3	2.6	
	0.0	34.0	9.1	3.8	33.0	9.4	3.5	31.9	9.8	3.3	30.8	10.1	3.0	29.5	10.4	2.8	
	5.0	40.1	9.8	4.1	39.1	10.2	3.8	37.9	10.7	3.6	36.7	11.0	3.3	35.4	11.4	3.1	
	10.0	47.2	10.5	4.5	46.0	11.1	4.2	44.8	11.5	3.9	43.4	12.0	3.6	41.9	12.4	3.4	
	15.0	55.2	11.3	4.9	53.8	11.9	4.5	52.4	12.4	4.2	50.8	12.9	3.9	49.1	13.4	3.7	
	20.0	64.4	12.2	5.3	62.8	12.8	4.9	61.1	13.4	4.6	59.3	14.0	4.2	57.3	14.6	3.9	
EP60MT	-5.0	33.4	9.6	3.5	32.0	10.0	3.2	30.4	10.3	3.0	28.7	10.5	2.7	26.7	10.5	2.5	
	0.0	41.0	10.6	3.9	39.5	11.0	3.6	37.9	11.4	3.3	36.1	11.7	3.1	34.2	12.0	2.9	
	5.0	49.1	11.4	4.3	47.5	12.0	4.0	45.7	12.5	3.7	43.8	12.9	3.4	41.9	13.3	3.1	
	10.0	58.4	12.4	4.7	56.6	13.0	4.4	54.6	13.6	4.0	52.5	14.1	3.7	50.4	14.6	3.4	
	15.0	69.0	13.3	5.2	66.9	14.0	4.8	64.6	14.7	4.4	62.2	15.3	4.1	59.8	15.9	3.8	
	20.0	81.2	14.3	5.7	78.6	15.0	5.2	76.0	15.8	4.8	73.3	16.6	4.4	70.5	17.3	4.1	
EP80MT	-5.0	44.9	12.7	3.5	43.3	13.2	3.3	41.5	13.6	3.0	39.6	14.0	2.8	37.3	14.2	2.6	
	0.0	54.2	13.8	3.9	52.5	14.4	3.6	50.6	15.0	3.4	48.7	15.5	3.1	46.6	15.9	2.9	
	5.0	63.9	14.9	4.3	62.1	15.6	4.0	60.2	16.2	3.7	58.2	16.8	3.5	56.0	17.4	3.2	
	10.0	75.1	15.9	4.7	73.2	16.8	4.4	71.1	17.5	4.1	68.9	18.2	3.8	66.5	18.9	3.5	
	15.0	87.9	17.1	5.1	85.7	18.0	4.8	83.3	18.8	4.4	80.7	19.7	4.1	78.1	20.5	3.8	
	20.0	102.5	18.3	5.6	99.9	19.2	5.2	97.2	20.2	4.8	94.3	21.1	4.5	91.2	22.0	4.1	
EP100MT	-5.0	56.3	16.6	3.4	54.4	17.2	3.2	52.4	17.8	2.9	50.1	18.2	2.8	47.5	18.5	2.6	
	0.0	68.0	18.1	3.8	66.0	18.9	3.5	63.9	19.6	3.3	61.6	20.2	3.0	59.1	20.7	2.8	
	5.0	80.3	19.6	4.1	78.2	20.5	3.8	75.9	21.3	3.6	73.4	22.1	3.3	70.7	22.8	3.1	
	10.0	94.4	21.1	4.5	92.1	22.1	4.2	89.5	23.1	3.9	86.7	24.0	3.6	83.8	24.8	3.4	
	15.0	110.5	22.7	4.9	107.6	23.8	4.5	104.8	24.8	4.2	101.6	25.9	3.9	98.3	26.9	3.7	
	20.0	128.8	24.4	5.3	125.6	25.6	4.9	122.3	26.8	4.6	118.6	28.0	4.2	114.6	29.1	3.9	

EP-MT Series



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