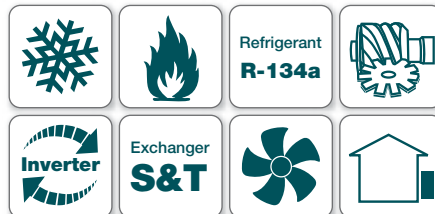


McEnergy HPI

AIR TO WATER HEAT PUMP WITH INVERTER DRIVEN SCREW COMPRESSORS



Cooling capacity: 249 kW ÷ 385 kW
Heating capacity: 274 kW ÷ 412 kW



GENERAL CHARACTERISTICS

- Stepless capacity control
- Independent circuit or each compressor
- Inverter driven Frame 3100 single-screw compressors; star-Delta standard start
- Direct expansion evaporator (shell and tubes); electrical heater to prevent freezing; insulation made of closed cells material; Victaulic water connections
- R134a refrigerant
- Condensed coils with copper tubes mechanically expanded in aluminium fins; sub-cooler circuits
- Axial fans
- Micro Tech II C plus controller compatible with BMS
- Cabinet and structure made of galvanized steel sheet and painted to provide high resistance to corrosion; RAL 7032

VERSIONS

EFFICIENCY

SE Standard efficiency

EER up to 2,84
ESEER up to 4,12
COP up to 3,09

NOISE LEVELS

ST Standard noise

LN Low noise

80,0 ÷ 80,3 dB(A)
⁽¹⁾ **73,7 ÷ 74,1 dB(A)**
⁽²⁾ **76,1 ÷ 76,3 dB(A)**

⁽¹⁾ Cooling mode
⁽²⁾ Heating mode

STANDARD OPTIONS

- Inverter compressor starter
- Double set-point
- Fans thermal relays
- Phase monitor
- Evaporator electric heater
- Victaulic water connections
- Hour run meter
- General fault relay
- Electronic expansion device
- Low pressure manometers
- Suction line shut off valve
- Discharge line shut off valves

OPTIONS ON REQUEST

- Partial heat recovery
- Brine version
- Under/overvoltage control
- Current limit - display
- Low ambient temperature kit
- Condenser coils guards
- Cu-Cu condenser coils
- Cu-Cu-Sn condenser coils
- Alucoat condenser coils
- 20 mm evaporator insulation
- Flow switch
- High pressure manometers
- Rubber anti vibration mounts
- Spring anti vibration mounts
- 1 pump hydronic kit
- 2 pumps hydronic kit

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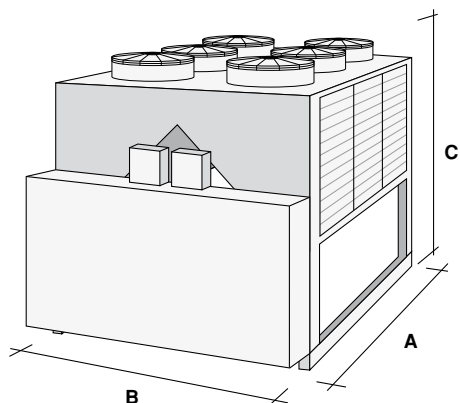
TECHNICAL DATA McEnergy HPI ST - heat pump

McEnergy HPI ST		067.2	075.2	080.2	086.2	090.2	101.2	104.2
Cooling Capacity ¹	kW	256	276	298	321	343	369	385
Unit Power Input ¹	kW	89,8	99,3	108	116	123	132	142
EER	--	2,84	2,77	2,76	2,77	2,79	2,79	2,71
ESEER	--	4,12	4,08	3,99	3,98	4,00	4,08	3,81
Heating Capacity ²	kW	274	306	330	341	361	397	412
Unit Power Input ²	kW	89,5	99,1	108	117	123	131	139
COP	--	3,06	3,09	3,06	2,91	2,93	3,03	2,96
Sound Pressure Level ³	dB(A)	80,0	80,0	80,0	80,3	80,3	80,3	80,3
Compressor	Type	McQuay Single Screw						
Quantity	Nr	2	2	2	2	2	2	2
Minimum Capacity	%	15,5	15,5	15,5	15,5	15,5	15,5	15,5
Refrigerant	Type	R-134a						
Circuits Number	Nr	2	2	2	2	2	2	2
Condenser Coil	Type	Lanced Fins - Internally Spiral Wound Tubes						
Fan	Type	Axial						
Quantity	Nr	6	6	6	8	8	8	8
Power Input	kW	1,73	1,73	1,73	1,73	1,73	1,73	1,73
Speed	RPM	890	890	890	890	890	890	890
Diameter	mm	800	800	800	800	800	800	800
Evaporator	Type	Shell and Tube - Direct Expansion						
Quantity	Nr	1	1	1	1	1	1	1
Water Volume	l	138	138	138	133	133	128	128
Pressure Drop	kPa	60 (69)	65 (79)	74 (90)	50 (56)	53 (58)	60 (69)	65 (74)
Water Connections Size	--	5"	5"	5"	5"	5"	5"	5"
Standard Voltage	V/ph/Hz	400V / 3ph / 50Hz						

NOTES:

- (1) 12/7°C entering/leaving evaporator water temperature; 35°C ambient temperature
 - (2) 40/45°C entering/leaving condenser water temperature; 7°C ambient temperature, 90% R.H.
 - (3) At 1m, according to ISO 3744, at free field semispherical conditions
- () Data referred to heating mode

Weight and dimensions		067.2	075.2	080.2	086.2	090.2	101.2	104.2
Shipping weight	kg	3370	3370	3370	4020	4020	4020	4020
Operating weight	kg	3500	3500	3500	4150	4150	4150	4150
(A) Length	mm	3547	3547	3547	4783	4783	4783	4783
(B) Width	mm	2254	2254	2254	2254	2254	2254	2254
(C) Height	mm	2335	2335	2335	2335	2335	2335	2335



McEnergy HPI

AIR TO WATER HEAT PUMP WITH INVERTER DRIVEN SCREW COMPRESSORS

TECHNICAL DATA McEnergy HPI LN - heat pump

McEnergy HPI LN		067.2	075.2	080.2	086.2	090.2	101.2	104.2
Cooling Capacity ¹	kW	249	269	289	310	331	356	373
Unit Power Input ¹	kW	88,6	99,9	111	114	121	133	143
EER	--	2,81	2,69	2,60	2,72	2,74	2,68	2,61
ESEER	--	4,06	4,05	3,99	3,93	3,96	4,06	3,78
Heating Capacity ²	kW	274	306	330	341	361	397	412
Unit Power Input ²	kW	89,5	99,1	107,7	117,0	123,0	131,4	139,2
COP	--	3,06	3,09	3,06	2,91	2,93	3,03	2,96
Sound Pressure Level ³	dB(A)	73,7 (76,1)	73,7 (76,1)	73,7 (76,1)	74,1 (76,3)	74,1 (76,3)	74,1 (76,3)	74,1 (76,3)
Compressor	Type	McQuay Single Screw						
Quantity	Nr	2	2	2	2	2	2	2
Minimum Capacity	%	15,5	15,5	15,5	15,5	15,5	15,5	15,5
Refrigerant	Type	R-134a						
Circuits Number	Nr	2	2	2	2	2	2	2
Condenser Coil	Type	Lanced Fins - Internally Spiral Wound Tubes						
Fan	Type	Axial						
Quantity	Nr	6	6	8	8	8	8	8
Power Input	kW	1,73	1,73	1,73	1,73	1,73	1,73	1,73
Speed	RPM	705 (890)	705 (890)	705 (890)	705 (890)	705 (890)	705 (890)	705 (890)
Diameter	mm	800	800	800	800	800	800	800
Evaporator	Type	Shell and Tube - Direct Expansion						
Quantity	Nr	1	1	1	1	1	1	1
Water Volume	l	138	138	138	133	133	128	128
Pressure Drop	kPa	58 (69)	63 (79)	71 (90)	47 (56)	50 (58)	56 (69)	62 (74)
Water Connections Size	--	5"	5"	5"	5"	5"	5"	5"
Standard Voltage	V/ph/Hz	400V / 3ph / 50Hz						

NOTES:

- (1) 12/7°C entering/leaving evaporator water temperature; 35°C ambient temperature
 - (2) 40/45°C entering/leaving condenser water temperature; 7°C ambient temperature, 90% R.H.
 - (3) At 1m, according to ISO 3744, at free field semispherical conditions
- () Data referred heating mode

Weight and dimensions		067.2	075.2	080.2	086.2	090.2	101.2	104.2
Shipping weight	kg	3700	3700	3700	4350	4350	4350	4350
Operating weight	kg	3830	3830	3830	4480	4480	4480	4480
(A) Length	mm	3547	3547	3547	4783	4783	4783	4783
(B) Width	mm	2254	2254	2254	2254	2254	2254	2254
(C) Height	mm	2235	2235	2235	2235	2235	2235	2235

