

McEnergy Inverter

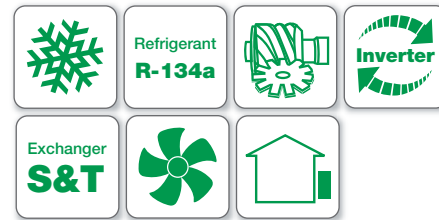
AIR COOLED CHILLER WITH INVERTER DRIVEN SCREW COMPRESSORS

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Cooling capacity: 329 kW ÷ 515 kW



GENERAL CHARACTERISTICS

- Stepless capacity control
- Independent circuit for each compressor
- Inverter driven single-screw compressors; Start is Inverter type
- 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; colour Ivory White (Musell code 5Y7.5/1)(±RAL 7044)

VERSIONS

EFFICIENCY

SSE Standard seasonal efficiency **EER up to 2,74**
ESEER up to 4,70
XSE High seasonal efficiency **EER up to 2,79**
ESEER up to 5,01

SOUND LEVELS

ST Standard sound **83,0 ÷ 83,5 dB(A)**
LN Low sound **77,0 ÷ 77,5 dB(A)**
XN Extra low sound **73,0 ÷ 73,5 dB(A)**
 (XSE version only)

STANDARD OPTIONS

- Double set-point
- Fans circuit breaker with thermal overload relays
- Phase monitor
- Inverter compressor starter
- Evaporator Victaulic kit
- Fan silent mode
- Fan speed regulation
- 10mm evaporator insulation
- Evaporator electric heater
- Electronic expansion valve
- Discharge line shut off valve
- Suction line shut off valve
- Low pressure side manometers
- Hour run meter
- General fault
- Main switch interlock door

OPTIONS ON REQUEST

- Total heat recovery
- Total heat recovery 1 circuit
- Partial heat recovery
- Brine version
- Under/Overvoltage control
- Energy Meter
- Current limit
- 20mm evaporator insulation
- Condenser coil guards
- Cu-Cu/Cu-Cu-Sn condenser coils
- Alucoat fins coils
- Evaporator flow switch
- High pressure side manometers
- Rubber/Spring type anti vibration mounts
- Water circulation pump (low or high lifting)
- Two water circulation pumps (low or high lifting)
- Inertial tank with cabinet (500 l or 1000 l)
- Set-point reset, demand limit and alarm from external device
- Double pressure relief valve with diverter

TECHNICAL DATA McEnergy Inverter SSE ST/LN - cooling only

| McEnergy Inverter SSE ST/LN | | 094.2 | 102.2 | 113.2 | 122.2 | 131.2 | 139.2 | 147.2 |
|--------------------------------|---------|---|--------|--------|--------|--------|--------|--------|
| Cooling Capacity ¹ | kW | 329 | 358 | 395 | 423 | 459 | 488 | 515 |
| Unit power input ¹ | kW | 120 | 136 | 147 | 159 | 168 | 181 | 193 |
| EER | -- | 2,74 | 2,63 | 2,69 | 2,66 | 2,73 | 2,70 | 2,67 |
| ESEER | -- | 4,59 | 4,60 | 4,55 | 4,59 | 4,57 | 4,70 | 4,60 |
| Sound Pressure ST ² | dB(A) | 83,0 | 83,0 | 83,0 | 83,0 | 83,5 | 83,5 | 83,5 |
| Sound Pressure LN ² | dB(A) | 77,0 | 77,0 | 77,0 | 77,0 | 77,5 | 77,5 | 77,5 |
| Compressor | Type | Semi-hermetic single screw compressor Inverter driven | | | | | | |
| Quantity | No. | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Minimum capacity | % | 13,5 | 13,5 | 13,5 | 13,5 | 13,5 | 13,5 | 13,5 |
| Refrigerant | Type | R-134a | R-134a | R-134a | R-134a | R-134a | R-134a | R-134a |
| N. of circuits | No. | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Air heat exchanger | Type | High efficiency fin and tube type with integral subcooler | | | | | | |
| Fan | Type | Direct propeller | | | | | | |
| Quantity | No. | 8 | 8 | 10 | 10 | 12 | 12 | 12 |
| Motor input | kW | 1,13 | 1,13 | 1,13 | 1,13 | 1,13 | 1,13 | 1,13 |
| Speed | rpm | 700 | 700 | 700 | 700 | 700 | 700 | 700 |
| Diameter | mm | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| Water heat exchanger | Type | Shell and Tube - Direct Expansion | | | | | | |
| Water volume | l | 271 | 264 | 264 | 256 | 256 | 248 | 248 |
| Nominal Water pressure drop | kPa | 60 | 61 | 72 | 67 | 78 | 69 | 76 |
| Piping connections | " | 6,6 | 6,6 | 6,6 | 6,6 | 6,6 | 6,6 | 6,6 |
| Standard voltage | V/ph/Hz | 400V / 3ph / 50Hz | | | | | | |

NOTES:

- (1) 12/7°C evaporator water temperature; 35°C ambient temperature
- (2) At 1 m, according to ISO 3744, at free field semispherical conditions

| Weight and dimensions | | 094.2 | 102.2 | 113.2 | 122.2 | 131.2 | 139.2 | 147.2 |
|-----------------------|----|-------|-------|-------|-------|-------|-------|-------|
| Shipping weight (ST) | kg | 4190 | 4190 | 4590 | 4590 | 4990 | 4990 | 4990 |
| Operating weight (ST) | kg | 4440 | 4440 | 4840 | 4840 | 5240 | 5240 | 5240 |
| Shipping weight (LN) | kg | 4340 | 4340 | 4740 | 4740 | 5140 | 5140 | 5140 |
| Operating weight (LN) | kg | 4590 | 4590 | 4990 | 4990 | 5390 | 5390 | 5390 |
| (A) Length | mm | 4381 | 4381 | 5281 | 5281 | 6181 | 6181 | 6181 |
| (B) Width | mm | 2224 | 2224 | 2224 | 2224 | 2224 | 2224 | 2224 |
| (C) Height | mm | 2355 | 2355 | 2355 | 2355 | 2355 | 2355 | 2355 |

