

EMT6144Z



**ENGINEERING CODE**  
513306218

**REFRIGERANT**  
R-134a

**POWER SUPPLY**  
220-240 V 50 Hz

**APPLICATION**  
HBP

**MOTOR TYPE**  
CSIR

**STANDARD**  
ASHRAE

**COOLING CAPACITY**  
581 W

**EFFICIENCY**  
2.61 W/W



DATA

GENERAL DATA

|                        |                                   |
|------------------------|-----------------------------------|
| Model                  | EMT6144Z                          |
| Type                   | Hermetic Reciprocating            |
| Technology             | ON/OFF                            |
| Compressor Application | HBP                               |
| Expansion Device       | Capillary Tube or Expansion Valve |
| Compressor Cooling     | Fan/220                           |
| HP                     | 1/5                               |
| Starting Torque        | HST                               |
| Plant                  | BRAZIL                            |

ELECTRICAL DATA

|                                     |                 |
|-------------------------------------|-----------------|
| Start Winding Resistance            | 21.3 Ω at 25°C  |
| Run Winding Resistance              | 12.95 Ω at 25°C |
| Locked Rotor Amperage (LRA) 50Hz    | 8.5 A           |
| Rated Load Amperage (LMBP) at 50 Hz | 2.1 A           |
| Rated Load Amperage (HBP) at 50 Hz  | 2.3 A           |

## MECHANICAL DATA

|               |                      |
|---------------|----------------------|
| Displacement  | 5.19 cm <sup>3</sup> |
| Oil Charge    | 180 ml               |
| Oil Type      | ESTER                |
| Oil Viscosity | ISO22                |
| Weight        | 7.7 Kg               |

## ELECTRICAL COMPONENTS

|                      |                |
|----------------------|----------------|
| Start Capacitor      | 43-53 µf/330 V |
| CSR CSIR BOX         | No             |
| Starting Device Type | RELAY          |
| Overload Protection  | DRB180K52AXF   |

## EXTERNAL CHARACTERISTICS

|             |            |
|-------------|------------|
| Base Plate  | SMALL EUEM |
| Tray Holder | YES        |

| Connector | Internal Diameter | Shape                          | Material |
|-----------|-------------------|--------------------------------|----------|
| Suction   | 6.1 mm            | SLANTED 42° UP + 45° TO BACK   | COPPER   |
| Discharge | 4.94 mm           | SLANTED PARALLET BP+24°TO BACK | COPPER   |
| Process   | 6.1 mm            | SLANTED 45° UP + 45° TO BACK   | COPPER   |

## PERFORMANCE

### TESTED CONDITIONS

|                         |        |
|-------------------------|--------|
| Tested Refrigerant      | R-134a |
| Tested Application      | HBP    |
| Tested Standard         | ASHRAE |
| Tested Cooling          | Fan    |
| Tested Voltage          | 220 V  |
| Tested Frequency        | 50 Hz  |
| Max Refrigerant Charge  | 250 g  |
| Refrigerant Temperature | Dew    |

**RATED POINTS**

| Condensing Temperature °C | Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---------------------------|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| 54.4                      | 7.2                        | 581                | 2.61           | 222                 | 1.38      | 12.86              |

Test Condition: Subcooling 8.3 K, Return Gas 35 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

**PERFORMANCE CURVE****Condensing Temperature 35°C**

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| -15                        | 338                | 2.63           | 128                 | 1.08      | 6.23               |
| -10                        | 425                | 3.01           | 141                 | 1.11      | 7.88               |
| -5                         | 530                | 3.43           | 155                 | 1.14      | 9.86               |
| 0                          | 652                | 3.91           | 167                 | 1.17      | 12.17              |
| 5                          | 789                | 4.53           | 174                 | 1.21      | 14.80              |
| 10                         | 940                | 5.38           | 175                 | 1.24      | 17.75              |

Test Condition: Subcooling 8.3 K, Return Gas 35 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

**PERFORMANCE CURVE****Condensing Temperature 45°C**

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| -15                        | 276                | 1.96           | 141                 | 1.10      | 5.51               |
| -10                        | 348                | 2.27           | 153                 | 1.14      | 6.96               |
| -5                         | 436                | 2.57           | 169                 | 1.18      | 8.75               |
| 0                          | 539                | 2.89           | 187                 | 1.22      | 10.88              |
| 5                          | 657                | 3.25           | 202                 | 1.27      | 13.34              |
| 10                         | 789                | 3.68           | 214                 | 1.31      | 16.13              |

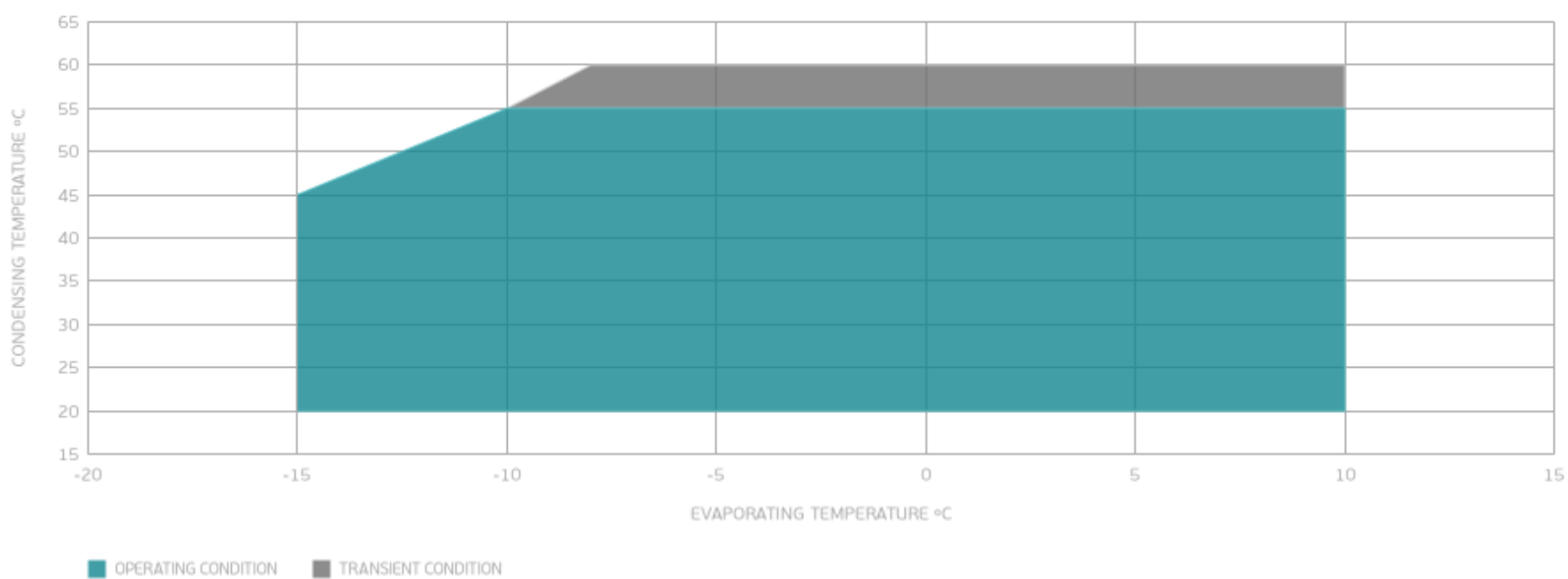
Test Condition: Subcooling 8.3 K, Return Gas 35 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

**PERFORMANCE CURVE****Condensing Temperature 55°C**

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| -10                        | 274                | 1.71           | 160                 | 1.18      | 5.98               |
| -5                         | 343                | 1.96           | 175                 | 1.24      | 7.52               |
| 0                          | 427                | 2.21           | 194                 | 1.30      | 9.42               |
| 5                          | 525                | 2.46           | 214                 | 1.36      | 11.65              |
| 10                         | 636                | 2.73           | 233                 | 1.43      | 14.22              |

Test Condition: Subcooling 8.3 K, Return Gas 35 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

## ENVELOPE



## EXTERNAL DIMENSIONS

