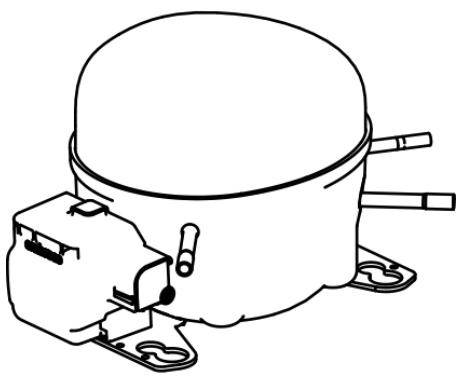
# COMPRESSOR TECHNICAL DATA

## EMT6144U



**ENGINEERING CODE**
513306232

**REFRIGERANT**
R-290

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

**APPLICATION**
MBP

**MOTOR TYPE**
CSIR

**STANDARD**
EN12900

**COOLING CAPACITY**
336 W

**EFFICIENCY**
1.95 W/W

## DATA

### GENERAL DATA

| | |
|---|---|
| **Model** | EMT6144U |
| **Type** | Hermetic Reciprocating |
| **Technology** | ON/OFF |
| **Compressor Application** | MBP |
| **Expansion Device** | Capillary Tube or Expansion Valve |
| **Compressor Cooling** | Static/220 |
| **HP** | 1/4- |
| **Starting Torque** | HST |
| **Plant** | BRAZIL |

### ELECTRICAL DATA

| | |
|---|---|
| **Start Winding Resistance** | 21.1 Ω at 25°C |
| **Run Winding Resistance** | 14.4 Ω at 25°C |
| **Locked Rotor Amperage (LRA) 50Hz** | 7.7 A |

## MECHANICAL DATA

| | |
|---|---|
| **Displacement** | 4.5 $cm^3$ |
| **Oil Charge** | 180 ml |
| **Oil Type** | ESTER |
| **Oil Viscosity** | ISO22 |
| **Weight** | 7.8 Kg |

## ELECTRICAL COMPONENTS

| | |
|---|---|
| **Start Capacitor** | 43-53 µf/330 V |
| **CSR CSIR BOX** | No |
| **Starting Device Type** | RELAY |
| **Overload Protection** | T0765/G6 |

## 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-290 |
| **Tested Application** | MBP |
| **Tested Standard** | EN12900 |
| **Tested Cooling** | Static |
| **Tested Voltage** | 220 V |
| **Tested Frequency** | 50 Hz |
| **Max Refrigerant Charge** | 150 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 |
|---|---|---|---|---|---|---|
| 45 | -10 | 336 | 1.95 | 172 | - | 4.13 |

Test Condition: Subcooling 0 K, Return Gas 20 ºC. Data are an indication of performance based simulation.

## PERFORMANCE CURVE

### Condensing Temperature 35ºC

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---|---|---|---|---|---|
| -20 | 258 | 1.89 | 136 | - | 2.86 |
| -15 | 318 | 2.20 | 145 | - | 3.54 |
| -10 | 388 | 2.54 | 153 | - | 4.35 |
| -5 | 471 | 2.93 | 161 | - | 5.30 |
| 0 | 565 | 3.40 | 166 | - | 6.42 |
| 5 | 673 | 4.01 | 168 | - | 7.70 |
| 10 | 794 | 4.81 | 165 | - | 9.18 |

Test Condition: Subcooling 0 K, Return Gas 20 ºC. Data are an indication of performance based simulation.

## PERFORMANCE CURVE

### Condensing Temperature 45ºC

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---|---|---|---|---|---|
| -20 | 223 | 1.47 | 151 | - | 2.71 |
| -15 | 274 | 1.71 | 161 | - | 3.36 |
| -10 | 336 | 1.95 | 172 | - | 4.13 |
| -5 | 408 | 2.22 | 184 | - | 5.05 |
| 0 | 491 | 2.52 | 195 | - | 6.13 |
| 5 | 585 | 2.88 | 204 | - | 7.39 |
| 10 | 692 | 3.31 | 209 | - | 8.83 |

Test Condition: Subcooling 0 K, Return Gas 20 ºC. Data are an indication of performance based simulation.

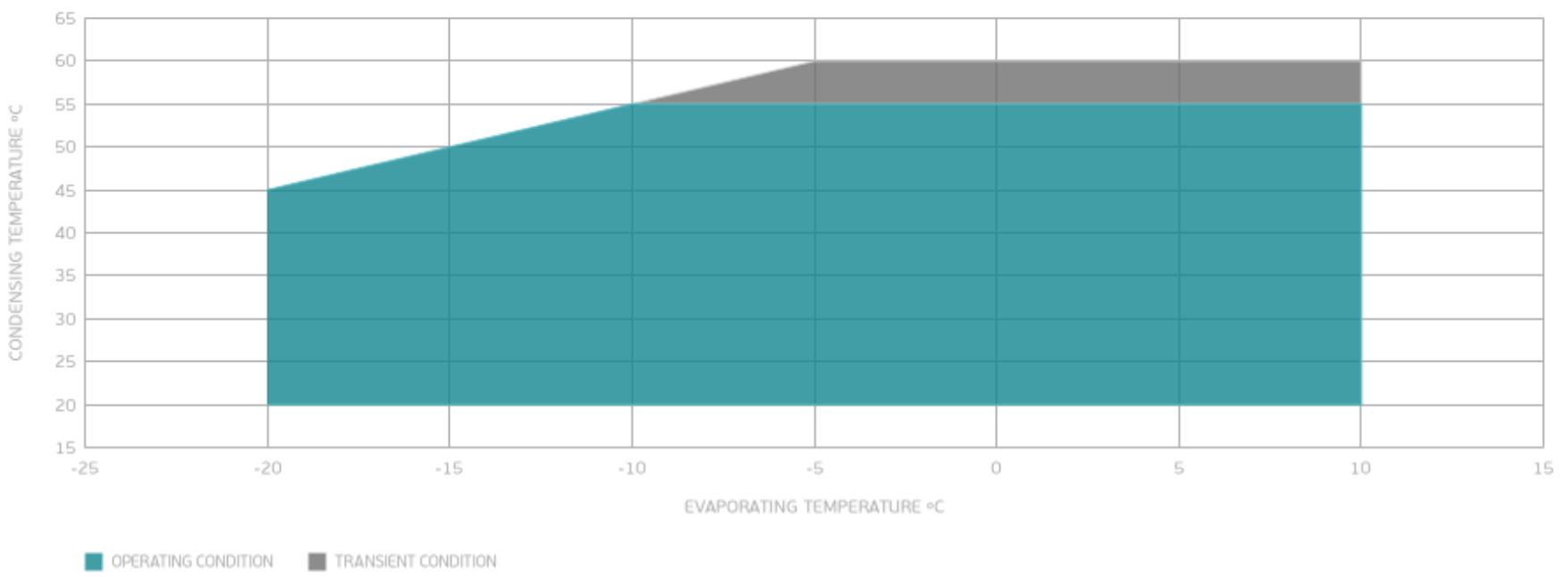
## PERFORMANCE CURVE

### Condensing Temperature 55ºC

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---|---|---|---|---|---|
| -10 | 284 | 1.54 | 184 | - | 3.90 |
| -5 | 345 | 1.74 | 198 | - | 4.77 |
| 0 | 416 | 1.95 | 213 | - | 5.81 |
| 5 | 497 | 2.18 | 228 | - | 7.02 |
| 10 | 590 | 2.45 | 241 | - | 8.43 |

Test Condition: Subcooling 0 K, Return Gas 20 ºC. Data are an indication of performance based simulation.

## ENVELOPE




## EXTERNAL DIMENSIONS