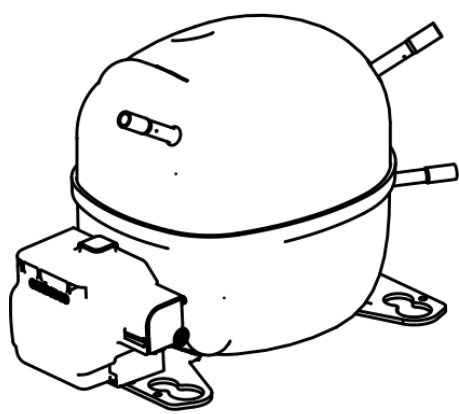


EM55HHR



**ENGINEERING CODE**  
513307530

**REFRIGERANT**  
R-134a

**POWER SUPPLY**  
220-240 V 50-60 Hz

**APPLICATION**  
HBP

**MOTOR TYPE**  
RSIR

**STANDARD**  
EN12900



**COOLING CAPACITY**  
416 W

**EFFICIENCY**  
2.2 W/W

DATA

GENERAL DATA

|                        |                        |
|------------------------|------------------------|
| Model                  | EM55HHR                |
| Type                   | Hermetic Reciprocating |
| Technology             | ON/OFF                 |
| Compressor Application | HBP                    |
| Expansion Device       | Capillary Tube         |
| Compressor Cooling     | Fan/220                |
| HP                     | 1/6                    |
| Starting Torque        | LST                    |
| Plant                  | BRAZIL                 |

ELECTRICAL DATA

|                                     |                 |
|-------------------------------------|-----------------|
| Start Winding Resistance            | 45.15 Ω at 25°C |
| Run Winding Resistance              | 15.25 Ω at 25°C |
| Locked Rotor Amperage (LRA) 50Hz    | 8.6 A           |
| Locked Rotor Amperage (LRA) 60Hz    | 8.4 A           |
| Rated Load Amperage (LMBP) at 50 Hz | 1.5 A           |
| Rated Load Amperage (LMBP) at 60 Hz | 1 A             |
| Rated Load Amperage (HBP) at 50 Hz  | 1.3 A           |
| Rated Load Amperage (HBP) at 60 Hz  | 1.2 A           |

## MECHANICAL DATA

|               |                     |
|---------------|---------------------|
| Displacement  | 4.6 cm <sup>3</sup> |
| Oil Charge    | 160 ml              |
| Oil Type      | ESTER               |
| Oil Viscosity | ISO22               |
| Weight        | 7.6 Kg              |

## ELECTRICAL COMPONENTS

|                             |                |
|-----------------------------|----------------|
| CSR CSIR BOX                | No             |
| Starting Device Type        | RELAY          |
| Starting Device Description | 213514130      |
| Overload Protection         | 4TM734KDBYY-53 |

## PERFORMANCE

### TESTED CONDITIONS

|                         |         |
|-------------------------|---------|
| Tested Refrigerant      | R-134a  |
| Tested Application      | HBP     |
| Tested Standard         | EN12900 |
| Tested Cooling          | Fan     |
| Tested Voltage          | 220 V   |
| Max Refrigerant Charge  | 250 g   |
| Refrigerant Temperature | Dew     |

## Performance on Compressor Speed: 3000 RPM

### RATED POINTS

| Condensing Temperature °C | Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---------------------------|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| 50                        | 5                          | 416                | 2.2            | 189                 | -         | 10.44              |

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

### 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 |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| -5                         | 301                | 1.96           | 154                 | -         | 7.06               |
| 0                          | 367                | 2.26           | 163                 | -         | 8.68               |
| 5                          | 447                | 2.52           | 177                 | -         | 10.63              |
| 10                         | 538                | 2.85           | 189                 | -         | 12.92              |
| 15                         | 640                | 3.35           | 191                 | -         | 15.57              |

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

### 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 |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| 0                          | 316                | 1.80           | 176                 | -         | 8.33               |
| 5                          | 384                | 1.98           | 194                 | -         | 10.19              |
| 10                         | 461                | 2.17           | 212                 | -         | 12.36              |
| 15                         | 547                | 2.45           | 223                 | -         | 14.86              |

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

### PERFORMANCE CURVE

Condensing Temperature 65°C

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| 5                          | 314                | 1.54           | 204                 | -         | 9.47               |
| 10                         | 378                | 1.68           | 225                 | -         | 11.53              |
| 15                         | 448                | 1.86           | 241                 | -         | 13.90              |

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

## Performance on Compressor Speed: 3600 RPM

### RATED POINTS

| Condensing Temperature °C | Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---------------------------|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| 50                        | 5                          | 494                | 2.33           | 212                 | -         | 12.42              |

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

### 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 |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| -5                         | 350                | 1.96           | 179                 | -         | 8.22               |
| 0                          | 437                | 2.12           | 206                 | -         | 10.29              |
| 5                          | 536                | 2.55           | 210                 | -         | 12.76              |
| 10                         | 647                | 3.05           | 212                 | -         | 15.59              |
| 15                         | 771                | 3.34           | 231                 | -         | 18.75              |

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

### 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 |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| 0                          | 372                | 1.68           | 222                 | -         | 9.76               |
| 5                          | 454                | 1.95           | 233                 | -         | 12.05              |
| 10                         | 546                | 2.24           | 244                 | -         | 14.69              |
| 15                         | 650                | 2.35           | 276                 | -         | 17.67              |

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

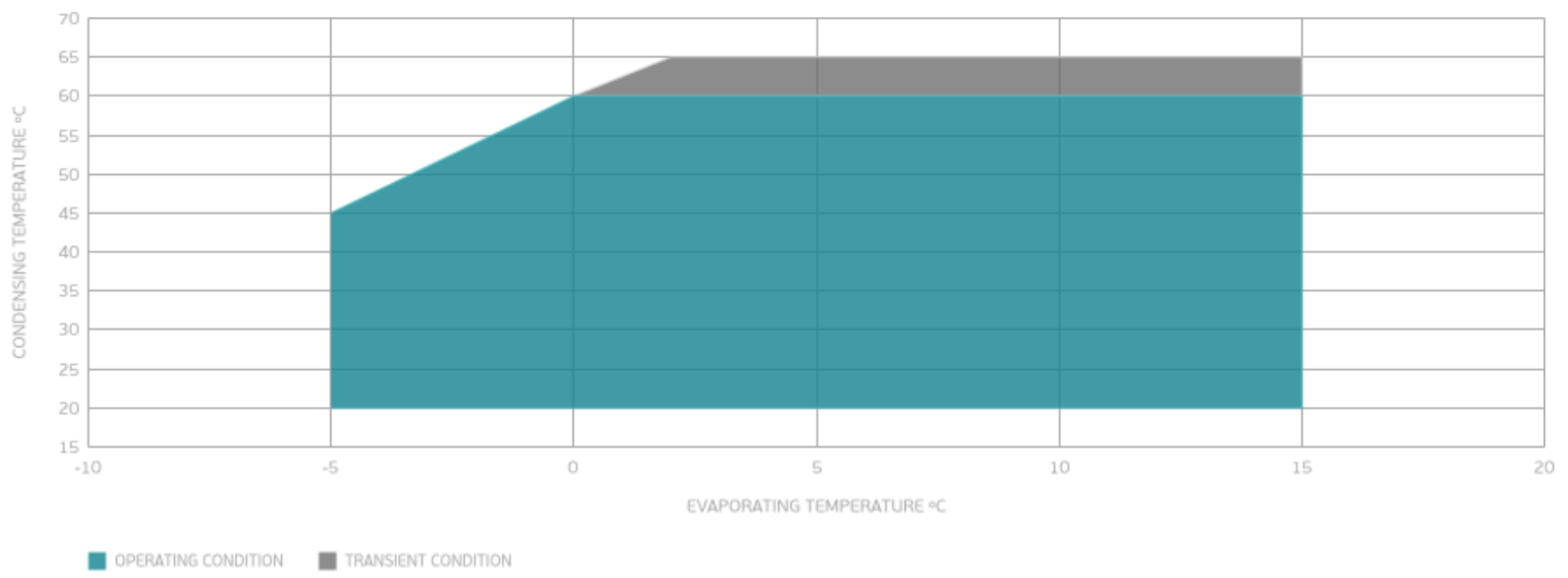
### PERFORMANCE CURVE

Condensing Temperature 65°C

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| 5                          | 371                | 1.49           | 249                 | -         | 11.20              |
| 10                         | 445                | 1.67           | 266                 | -         | 13.62              |
| 15                         | 528                | 1.72           | 307                 | -         | 16.37              |

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

## ENVELOPE



## External

### EXTERNAL CHARACTERISTICS

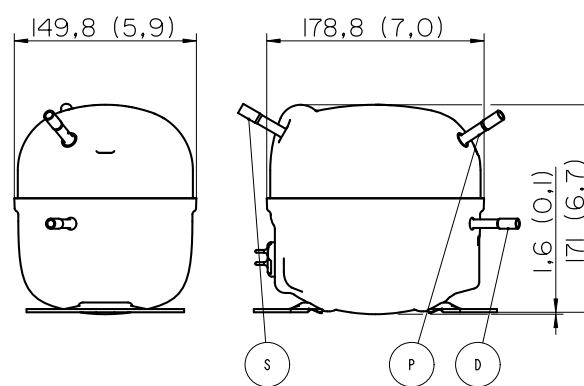
Base Plate UNI AMEM

Tray Holder NO

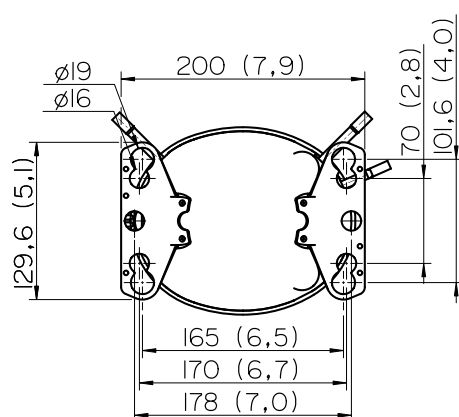
| Connector | Internal Diameter | Shape    | Material |
|-----------|-------------------|----------|----------|
| Suction   | 8.2 mm            | STRAIGHT | COPPER   |
| Discharge | 6.5 mm            | SLANTED  | COPPER   |
| Process   | 6.5 mm            | STRAIGHT | COPPER   |

### EXTERNAL DIMENSIONS

#### SHELL



#### BASE



#### FENCE

