

**220-240V 50 1~****GENERAL DATA**

**Application:** MBP  
**Refrigerant:** R290  
**Evaporating Temperature Range:** -20°C to 10°C  
**Compressor Cooling:** Fan  
**Fan air flow:** 520 m<sup>3</sup>/h  
**Type:** Hermetic reciprocating  
**Technology Type:** On-Off  
**Expansion Device:** Capillary Tube or Expansion Valve  
**Packing Quantity:** Multi - 36 pcs  
**Displacement:** 20.4 cm<sup>3</sup>  
**Horse power:** 1 hp

Approvals:   

**MECHANICAL DATA**

**Bore:** 36.99 mm  
**Stroke:** 19.03 mm  
**Oil Charge:** 450ml +/-15ml  
**Free Internal Volume:** 3.3 cm<sup>3</sup>  
**Maximum Recommended Refrigerant Charge:** 150 g  
**Oil Type Configuration:** Polyolester  
**Oil Type Viscosity:** ISO22  
**Compressor pressurization:** Without dry air charge  
**Weight:** 17.1 kg

**ELECTRICAL DATA**

**Motor Type:** CSR  
**Starting Torque:** HST  
**Voltage working range at 50 Hz:** 198-254 V  
**Maximum Motor Temperature:** 130 °C  
**Start Winding Resistance:** 9 Ω (± 10%) at 25°C  
**Run Winding Resistance:** 2.3 Ω (± 10%) at 25°C  
**Locked Rotor Amperage (LRA):** 30 A

**MOUNTING ACCESSORIES**

|                                    | Description | Code    |
|------------------------------------|-------------|---------|
| <b>Terminal Board:</b>             | no          | -       |
| <b>Anchorage:</b>                  | no          | -       |
| <b>Capacitor Bracket:</b>          | no          | -       |
| <b>Grommets:</b>                   | yes         | 2221004 |
| <b>Sleeves:</b>                    | yes         | 2222016 |
| <b>Washer:</b>                     | no          | -       |
| <b>Pin:</b>                        | no          | -       |
| <b>Clip:</b>                       | no          | -       |
| <b>Rotolock valve:</b>             | no          | -       |
| <b>Overload Protector Bracket:</b> | yes         | 2075299 |
| <b>Cover:</b>                      | yes         | 2075278 |

**ELECTRICAL COMPONENTS**

|                          | Component type  | Description  | Code    |
|--------------------------|-----------------|--------------|---------|
| <b>Run Capacitor:</b>    | 15 MFD          |              | 2253310 |
| <b>Starting Device:</b>  | Potential relay | RVA4AL3C-649 | 1253015 |
| <b>Motor Protection:</b> | External 3/4"   | T0485/G9     | 2321134 |
| <b>Start Capacitor:</b>  | 43-53 MFD 330V  |              | 2252268 |
| <b>CSR / CSIR Box:</b>   | yes             |              | 1272005 |

**EXTERNAL CHARACTERISTICS**

**Base Plate:** Universal  
**Tray Holder:** No  
**Height:** 220 mm

|                            | Internal Diameter (mm) | Material | Shape    |
|----------------------------|------------------------|----------|----------|
| <b>Suction Connector</b>   | 9.6                    | Copper   | Vertical |
| <b>Discharge Connector</b> | 6.42                   | Copper   | Vertical |
| <b>Process Connector</b>   | 6.42                   | Copper   | Vertical |

**RATED POINT DATA**

| Cooling Capacity (W) | Power Consumption (W) | Current Consumption (A) | Gas Flow Rate (kg/h) | Efficiency (W/W) |
|----------------------|-----------------------|-------------------------|----------------------|------------------|
| ±5%                  | ±5%                   | ±5%                     | ±5%                  | ±7%              |
| 2 658                | 971                   | 4.91                    | 30.22                | 2.74             |

Test condition: ASHRAE, Fan, Return Gas 35°C, Subcooling 8.3K, Evaporating: 7.2°C, Condensing: 54°C, Ambient: 35°C

**PERFORMANCE CURVE DATA****220V 50Hz**

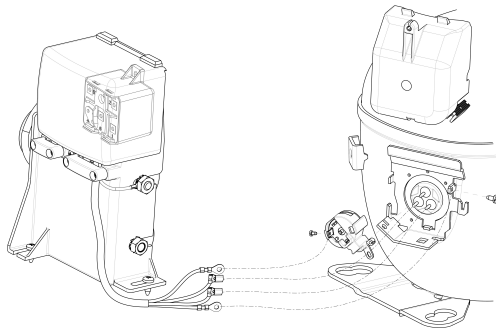
| Condensing Temperature (°C) | Evaporating Temperature (°C) | Cooling Capacity (W) | Power Consumption (W) | Current Consumption (A) | Gas Flow Rate (kg/h) | Efficiency (W/W) |
|-----------------------------|------------------------------|----------------------|-----------------------|-------------------------|----------------------|------------------|
|                             |                              | ±5%                  | ±5%                   | ±5%                     | ±5%                  | ±7%              |
| <b>35°C</b>                 | 10                           | 3 663                | 758                   | 4.07                    | 36.76                | 4.83             |
|                             | 5                            | 3 117                | 753                   | 4.05                    | 29.87                | 4.14             |
|                             | 0                            | 2 621                | 740                   | 3.99                    | 25.62                | 3.54             |
|                             | -5                           | 2 177                | 718                   | 3.90                    | 22.31                | 3.03             |
|                             | -10                          | 1 784                | 684                   | 3.77                    | 18.24                | 2.61             |
|                             | -15                          | 1 445                | 638                   | 3.59                    | 11.71                | 2.26             |
|                             | -20                          | 1 159                | 579                   | 3.39                    | 1.02                 | 2.00             |

| Condensing Temperature (°C) | Evaporating Temperature (°C) | Cooling Capacity (W) | Power Consumption (W) | Current Consumption (A) | Gas Flow Rate (kg/h) | Efficiency (W/W) |
|-----------------------------|------------------------------|----------------------|-----------------------|-------------------------|----------------------|------------------|
|                             |                              | ±5%                  | ±5%                   | ±5%                     | ±5%                  | ±7%              |
| <b>45°C</b>                 | 10                           | 3 253                | 882                   | 4.53                    | 35.60                | 3.69             |
|                             | 5                            | 2 755                | 858                   | 4.44                    | 28.51                | 3.21             |
|                             | 0                            | 2 303                | 827                   | 4.32                    | 24.20                | 2.79             |
|                             | -5                           | 1 899                | 787                   | 4.16                    | 20.95                | 2.41             |
|                             | -10                          | 1 543                | 736                   | 3.97                    | 17.08                | 2.10             |
|                             | -15                          | 1 236                | 675                   | 3.74                    | 10.88                | 1.83             |
|                             | -20                          | 979                  | 600                   | 3.47                    | 0.66                 | 1.63             |

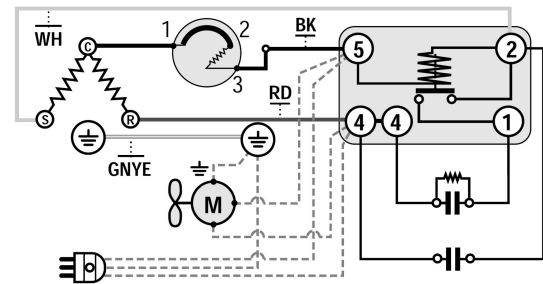
| Condensing Temperature (°C) | Evaporating Temperature (°C) | Cooling Capacity (W) | Power Consumption (W) | Current Consumption (A) | Gas Flow Rate (kg/h) | Efficiency (W/W) |
|-----------------------------|------------------------------|----------------------|-----------------------|-------------------------|----------------------|------------------|
|                             |                              | ±5%                  | ±5%                   | ±5%                     | ±5%                  | ±7%              |
| <b>55°C</b>                 | 10                           | 2 888                | 1 007                 | 5.06                    | 34.67                | 2.87             |
|                             | 5                            | 2 428                | 961                   | 4.88                    | 27.37                | 2.53             |
|                             | 0                            | 2 012                | 909                   | 4.67                    | 22.98                | 2.21             |
|                             | -5                           | 1 639                | 849                   | 4.43                    | 19.80                | 1.93             |
|                             | -10                          | 1 311                | 779                   | 4.16                    | 16.12                | 1.68             |

Test condition: ASHRAE, Fan, Return Gas 35°C, Subcooling 8.3K, Ambient: 35°C

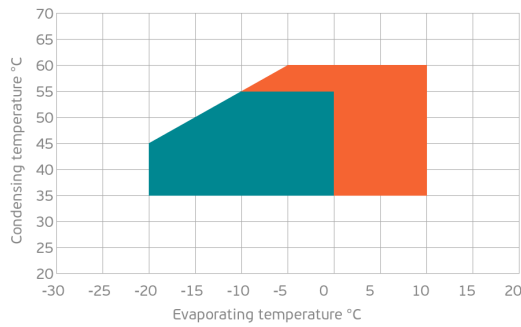
## ASSEMBLY INSTRUCTION



## WIRING DIAGRAM



## OPERATING ENVELOPE



- Operating Condition
- Transient Condition
- Superheating

**NOTE:** usage of compressors outside of intended working range cannot make use of the warranty, or should be consulted with Technical support.

