



**APPROVALS**




 **ENGINEERING CODE**  
843BA02


 **APPROVED REFRIGERANT**  
R-290

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

 **STANDARD CONDITIONS**  
EN12900

 **APPLICATION**  
LBP

 **COOLING CAPACITY**  
700 W (LBP)

 **EFFICIENCY**  
1.18 W/W (LBP)

 **MOTOR TYPE**  
CSCR

 **STARTING TORQUE**  
HST

**DATA**

**General Data**

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Type                              | Hermetic reciprocating            |
| Technology Type                   | On-Off                            |
| Displacement                      | 27.8 cm <sup>3</sup>              |
| Compressor Cooling                | Fan/NotControlled/220             |
| Fan Air Flow                      | 520 m <sup>3</sup> /h             |
| Expansion Device                  | Capillary Tube or Expansion Valve |
| Horse Power                       | 1 1/4 hp                          |
| Max Condensing Pressure Operating | 18.07 bar                         |
| Max Condensing Pressure Peak      | 20.17 bar                         |
| Power Supply                      | 220-240 V 50 Hz                   |
| Evaporating Temperature Range     | -40 °C to -10 °C                  |

**Electrical Data**

|                          |                 |
|--------------------------|-----------------|
| Motor type               | CSCR            |
| Starting Torque          | HST             |
| Start Winding Resistance | 3.92 Ω at 25° C |
| Run Winding Resistance   | 1.72 Ω at 25° C |

## Mechanical Data

|  |                        |
|--|------------------------|
| Maximum Recommended Refrigerant Charge | 150 g                  |
| Oil Charge                             | 450 ml                 |
| Oil Type Configuration                 | ESTER                  |
| Oil Type Viscosity                     | ISO22                  |
| Pressurization                         | Without dry air charge |
| Weight                                 | 18.5 Kg                |
| Free Internal Volume                   | 3.3 L                  |

## Electrical Components

|                  | Description       |
|------------------|-------------------|
| Start Capacitor  | 88-108 Uf / 330 V |
| CSR / CSIR Box   | YES               |
| Run Capacitor    | 17.5              |
| Motor Protection | 15HM1962-247      |
| Starting Device  | RVA2E3C-547       |

## External Characteristics

| Base Plate  | Universal         |                 |
|-------------|-------------------|-----------------|
| Tray Holder | No                |                 |
| Height      | 234 mm            |                 |
| Connector   | Internal Diameter | Shape           |
| Suction     | 9.6 mm            | Vertical/Copper |
| Discharge   | 6.42 mm           | Vertical/Copper |
| Process     | 6.42 mm           | Vertical/Copper |

## PERFORMANCE

## Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 40.00°C                | -35.00°C                | 700 W            | 593 W             | 7.97 kg/h     | 1.18 W/W   |

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Evaporation -35.00°C, Condensing 40.00°C, Ambient 35°C, Liquid 40°C, Subcooling OK. Data are an indication of performance based simulation.

## Performance Curve Data

### Condensing Temperature 35°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -40                        | 571                | 514     | 6.24               | 1.11           |
| -35                        | 741                | 588     | 8.14               | 1.26           |
| -30                        | 952                | 664     | 10.48              | 1.43           |
| -25                        | 1204               | 742     | 13.30              | 1.62           |
| -20                        | 1501               | 823     | 16.64              | 1.82           |
| -15                        | 1844               | 907     | 20.54              | 2.03           |
| -10                        | 2236               | 995     | 25.04              | 2.25           |

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

### Condensing Temperature 45°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -35                        | 621                | 594     | 7.47               | 1.04           |
| -30                        | 804                | 684     | 9.70               | 1.17           |
| -25                        | 1024               | 778     | 12.41              | 1.32           |
| -20                        | 1285               | 875     | 15.64              | 1.47           |
| -15                        | 1587               | 976     | 19.42              | 1.63           |
| -10                        | 1935               | 1082    | 23.81              | 1.79           |

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

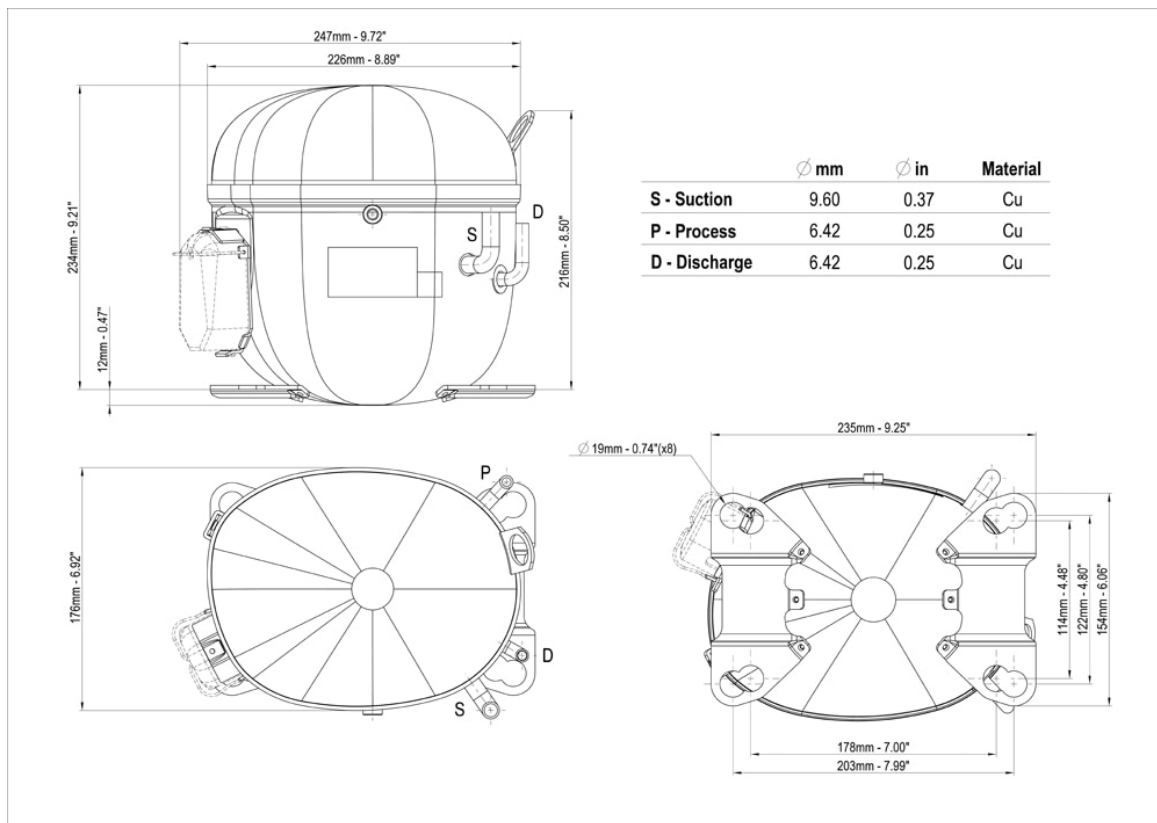
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -30                        | 654                | 703     | 8.79               | 0.93           |
| -25                        | 842                | 806     | 11.36              | 1.04           |
| -20                        | 1065               | 914     | 14.46              | 1.17           |
| -15                        | 1326               | 1028    | 18.11              | 1.29           |
| -10                        | 1628               | 1146    | 22.36              | 1.42           |

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

## Operating Envelope

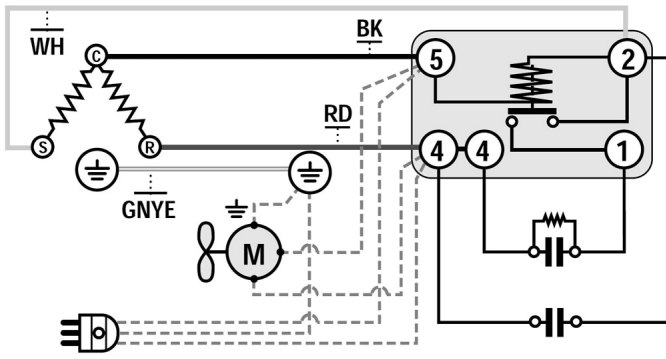


## External Dimensions



|                      | mm   | in   | Material |
|----------------------|------|------|----------|
| <b>S - Suction</b>   | 9.60 | 0.37 | Cu       |
| <b>P - Process</b>   | 6.42 | 0.25 | Cu       |
| <b>D - Discharge</b> | 6.42 | 0.25 | Cu       |

## Wiring Diagram



## Assembly Instructions

