

APPROVALS



 **ENGINEERING CODE**
842AA04

 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
EN12900

 **APPLICATION**
LBP

 **COOLING CAPACITY**
408 W (LBP)

 **EFFICIENCY**
1.14 W/W (LBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

| | |
|-----------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 17.39 cm ³ |
| Compressor Cooling | Fan/NotControlled/220 |
| Fan Air Flow | 520 m ³ /h |
| Expansion Device | Capillary Tube or Expansion Valve |
| Horse Power | 3/4 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 | CSIR |
| Starting Torque | HST |
| Start Winding Resistance | 13.8 Ω at 25° C |
| Run Winding Resistance | 2.7 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 | 17.2 Kg |
| Free Internal Volume | 3.3 L |

Electrical Components

| | Description |
|------------------|-------------------|
| Start Capacitor | 64-77 Uf / 330 V |
| Starting Device | Relay MTRPH-55* |
| Motor Protection | T0819/G6 |

External Characteristics

| Base Plate | Universal | |
|-------------|-------------------|-----------------|
| Tray Holder | No | |
| Height | 220 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 | 408 W | 359 W | 4.63 kg/h | 1.14 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 0K. 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 | 325 | 309 | 3.55 | 1.05 |
| -35 | 430 | 359 | 4.72 | 1.2 |
| -30 | 564 | 407 | 6.20 | 1.39 |
| -25 | 726 | 453 | 8.01 | 1.6 |
| -20 | 916 | 499 | 10.15 | 1.84 |
| -15 | 1134 | 543 | 12.63 | 2.09 |
| -10 | 1381 | 587 | 15.47 | 2.35 |

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 | 359 | 365 | 4.32 | 0.98 |
| -30 | 475 | 422 | 5.74 | 1.13 |
| -25 | 615 | 479 | 7.46 | 1.29 |
| -20 | 780 | 536 | 9.50 | 1.45 |
| -15 | 969 | 594 | 11.85 | 1.63 |
| -10 | 1182 | 653 | 14.54 | 1.81 |

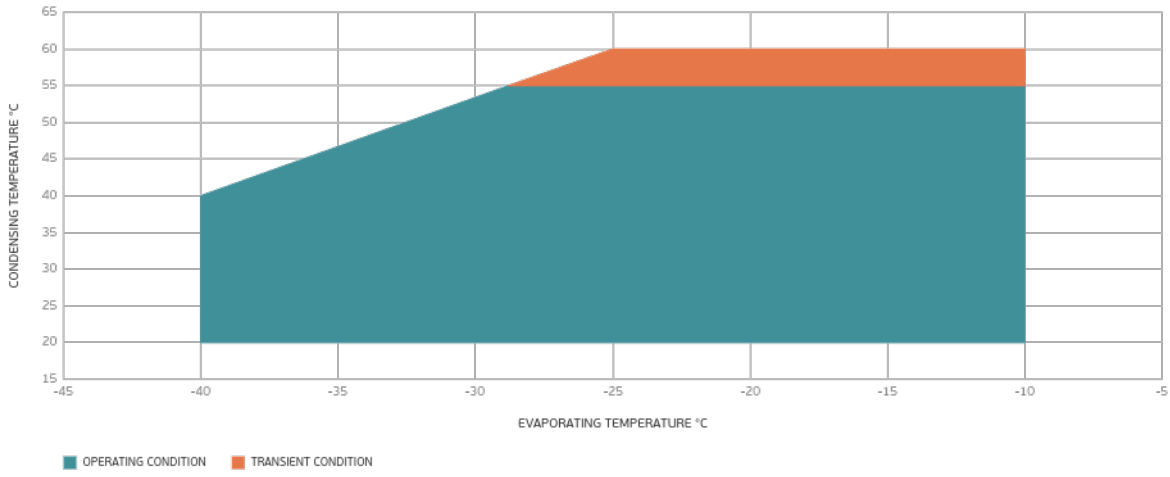
Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

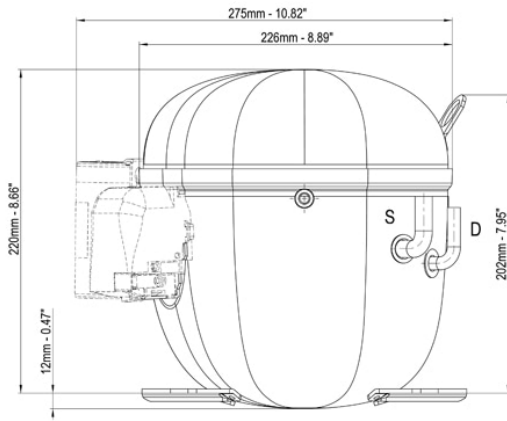
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -30 | 377 | 432 | 5.06 | 0.87 |
| -25 | 497 | 498 | 6.70 | 1 |
| -20 | 637 | 566 | 8.64 | 1.13 |
| -15 | 797 | 636 | 10.87 | 1.25 |
| -10 | 977 | 708 | 13.42 | 1.38 |

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

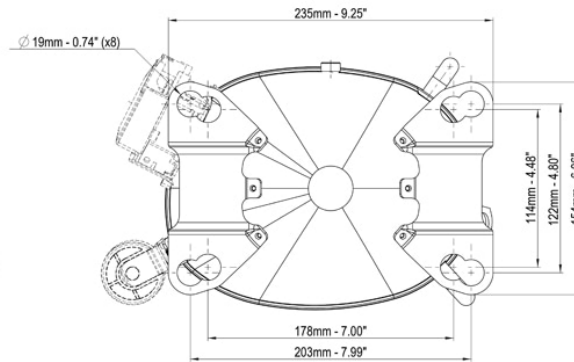
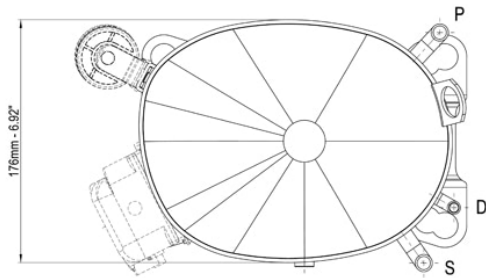
Operating Envelope



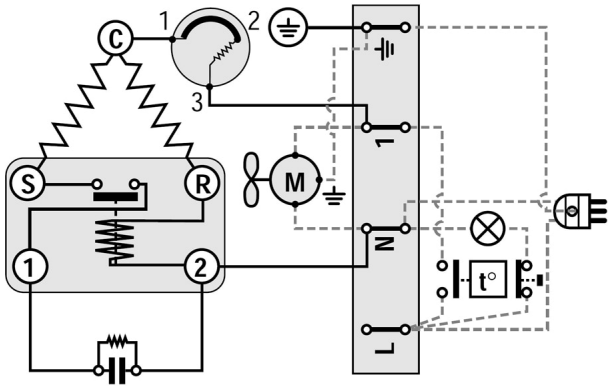
External Dimensions



| | ∅ mm | ∅ in | Material |
|----------------------|------|------|----------|
| S - Suction | 9.60 | 0.37 | Cu |
| P - Process | 6.42 | 0.25 | Cu |
| D - Discharge | 6.42 | 0.25 | Cu |



Wiring Diagram



Assembly Instructions

