



MODEL

EMT2121GK**embraco**
Nidec**APPROVALS**


 **ENGINEERING CODE**
912CA67


 **APPROVED REFRIGERANT**
R-404A

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

 **STANDARD CONDITIONS**
EN12900

 **APPLICATION**
LBP

 **COOLING CAPACITY**
173 W (LBP)

 **EFFICIENCY**
1.15 W/W (LBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA**General Data**

| | |
|-------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 5.19 cm ³ |
| Compressor Cooling | Fan/NotControlled/220 |
| Expansion Device | Capillary Tube or Expansion Valve |
| Horse Power | 1/3 hp |
| Power Supply | 220-240 V 50 Hz |
| Evaporating Temperature Range | -40 °C to -10 °C |

Electrical Data

| | |
|-----------------|------|
| Motor type | CSIR |
| Starting Torque | HST |

Mechanical Data

| | |
|------------------------|--------|
| Oil Charge | 180 ml |
| Oil Type Configuration | ESTER |
| Oil Type Viscosity | ISO22 |
| Weight | 7.8 Kg |

Electrical Components

| | Description |
|------------------|------------------|
| Start Capacitor | 43-53 Uf / 330 V |
| Starting Device | Relay MTRP-34* |
| Motor Protection | T0827/G6 |

External Characteristics

| Tray Holder | No | |
|-------------|-------------------|------------------------|
| Connector | Internal Diameter | Shape |
| Suction | 6.1 mm | Slanted 42°/Copper |
| Discharge | 4.94 mm | Straight/Copper |
| Process | 6 mm | Slanted 42°/Copper(OD) |

PERFORMANCE

Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 40.00°C | -35.00°C | 173 W | 151 W | 4.64 kg/h | 1.15 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 | 142 | 135 | 3.60 | 1.05 |
| -35 | 184 | 152 | 4.70 | 1.21 |
| -30 | 237 | 170 | 6.07 | 1.39 |
| -25 | 300 | 188 | 7.74 | 1.59 |
| -20 | 375 | 207 | 9.74 | 1.81 |
| -15 | 462 | 226 | 12.08 | 2.04 |
| -10 | 561 | 244 | 14.80 | 2.3 |

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling 0K. 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 |
|----------------------------|--------------------|---------|--------------------|----------------|
| -40 | 118 | 139 | 3.40 | 0.85 |
| -35 | 153 | 157 | 4.42 | 0.97 |
| -30 | 197 | 178 | 5.71 | 1.1 |
| -25 | 250 | 201 | 7.31 | 1.25 |
| -20 | 314 | 224 | 9.24 | 1.4 |
| -15 | 387 | 248 | 11.52 | 1.56 |
| -10 | 472 | 272 | 14.18 | 1.74 |

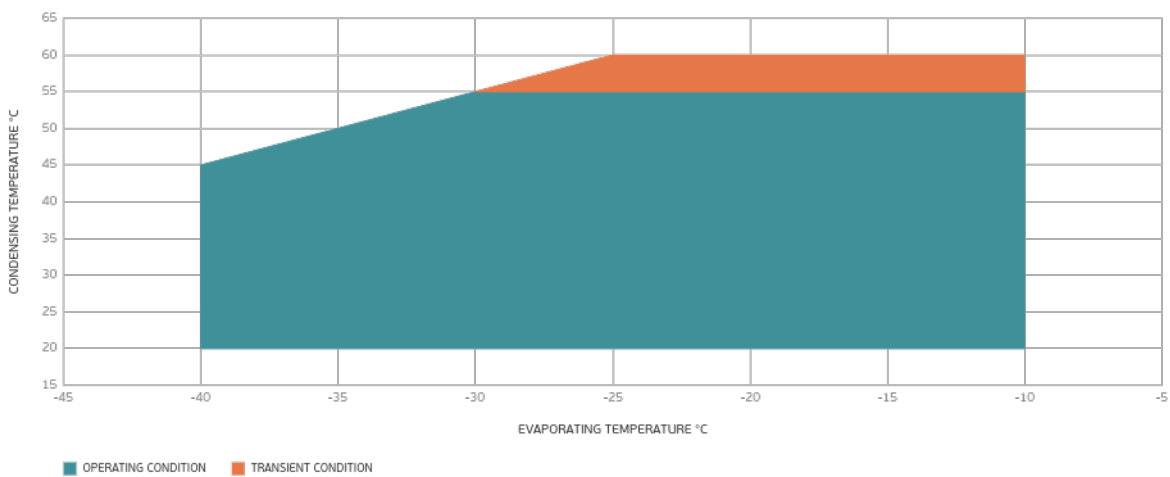
Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

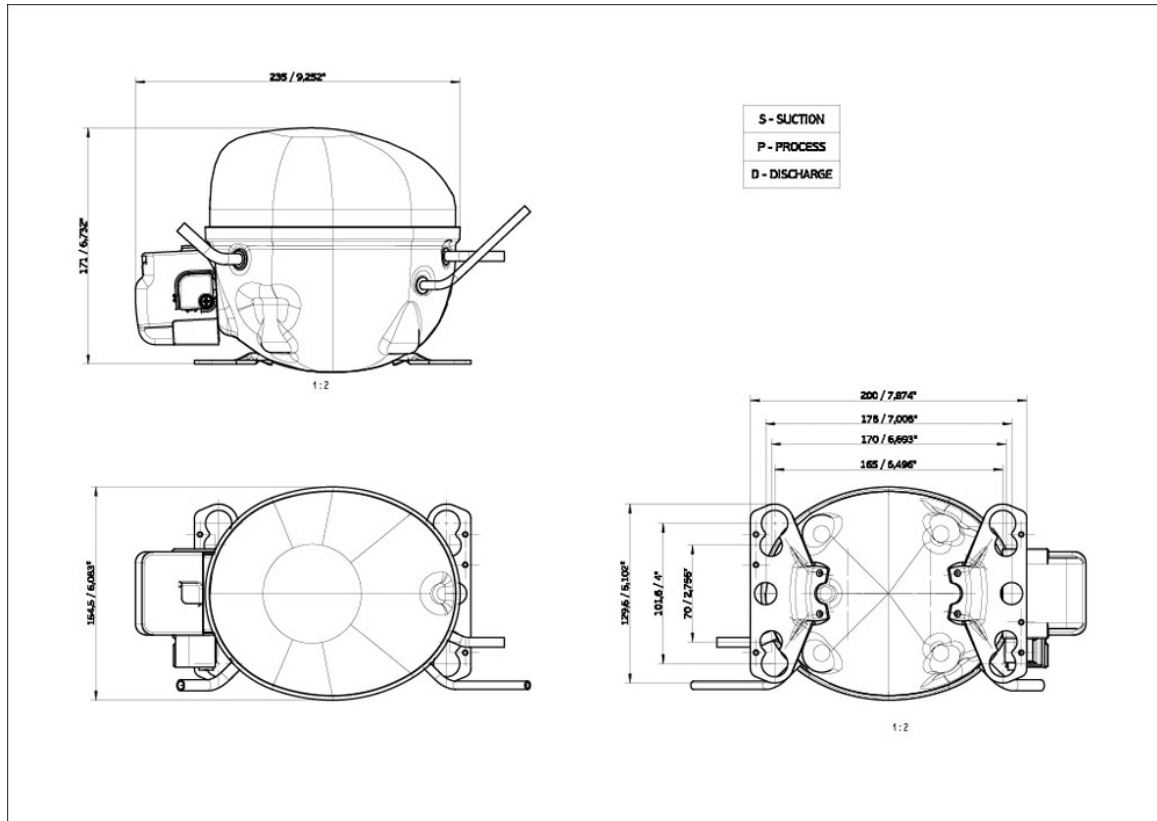
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -40 | 95 | 142 | 3.22 | 0.67 |
| -35 | 122 | 161 | 4.13 | 0.75 |
| -30 | 156 | 184 | 5.33 | 0.85 |
| -25 | 199 | 209 | 6.84 | 0.95 |
| -20 | 250 | 236 | 8.68 | 1.06 |
| -15 | 310 | 265 | 10.88 | 1.17 |
| -10 | 380 | 294 | 13.46 | 1.29 |

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



Wiring Diagram

SM28-4

