


MODEL


EMT6165GK
embraco
Nidec
**APPROVALS**
 **ENGINEERING CODE**
912GA67


 **APPROVED REFRIGERANT**
R-404A

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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
MBP

 **COOLING CAPACITY**
512 W (MBP)

 **EFFICIENCY**
1.62 W/W (MBP)

 **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 | -20 °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 |
|------------------|------------------|
| Motor Protection | T0571/G6 |
| Start Capacitor | 53-64 Uf / 330 V |
| Starting Device | Relay MTRP-38* |

External Characteristics

| Tray Holder | Yes | |
|-------------|-------------------|--------------------|
| Connector | Internal Diameter | Shape |
| Suction | 6.1 mm | Slanted 42°/Copper |
| Discharge | 4.86 mm | Straight/Copper |
| Process | 6.1 mm | Slanted 42°/Copper |

PERFORMANCE

Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 54.40°C | -6.70°C | 512 W | 315 W | 14.01 kg/h | 1.62 W/W |

Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Evaporation -6.70°C, Condensing 54.40°C, Ambient 35°C, Liquid 46.1°C, Subcooling 8.3K. 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 |
|----------------------------|--------------------|---------|--------------------|----------------|
| -20 | 523 | 219 | 11.36 | 2.39 |
| -15 | 644 | 236 | 14.06 | 2.73 |
| -10 | 791 | 253 | 17.38 | 3.12 |
| -5 | 962 | 270 | 21.30 | 3.56 |
| 0 | 1156 | 288 | 25.82 | 4.02 |
| 5 | 1371 | 305 | 30.94 | 4.5 |
| 10 | 1605 | 321 | 36.64 | 4.99 |

Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. 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 |
|----------------------------|--------------------|---------|--------------------|----------------|
| -20 | 405 | 229 | 9.71 | 1.77 |
| -15 | 497 | 252 | 11.99 | 1.97 |
| -10 | 612 | 275 | 14.87 | 2.23 |
| -5 | 749 | 298 | 18.35 | 2.51 |
| 0 | 906 | 322 | 22.42 | 2.82 |
| 5 | 1082 | 346 | 27.06 | 3.13 |
| 10 | 1273 | 370 | 32.28 | 3.44 |

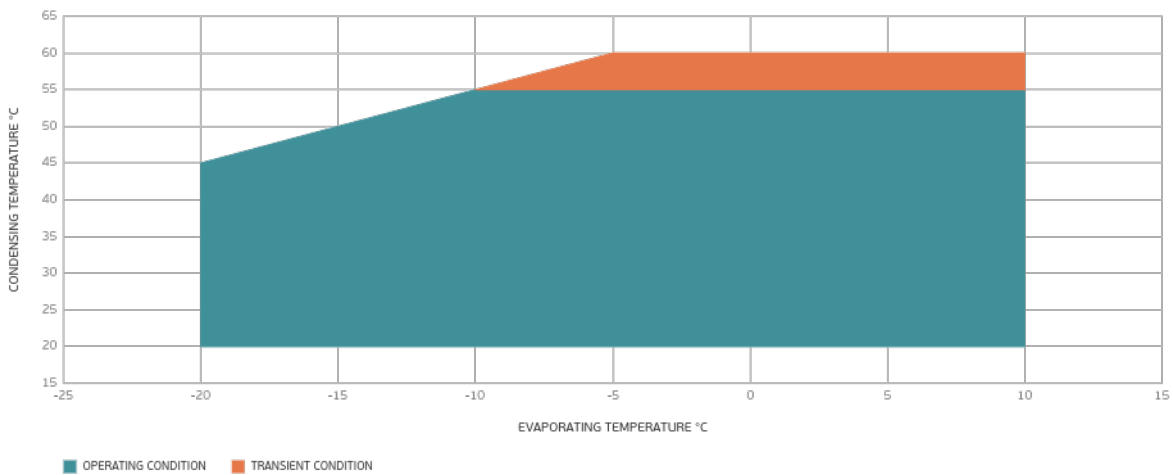
Test Condition: ASHRAEMBPA46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

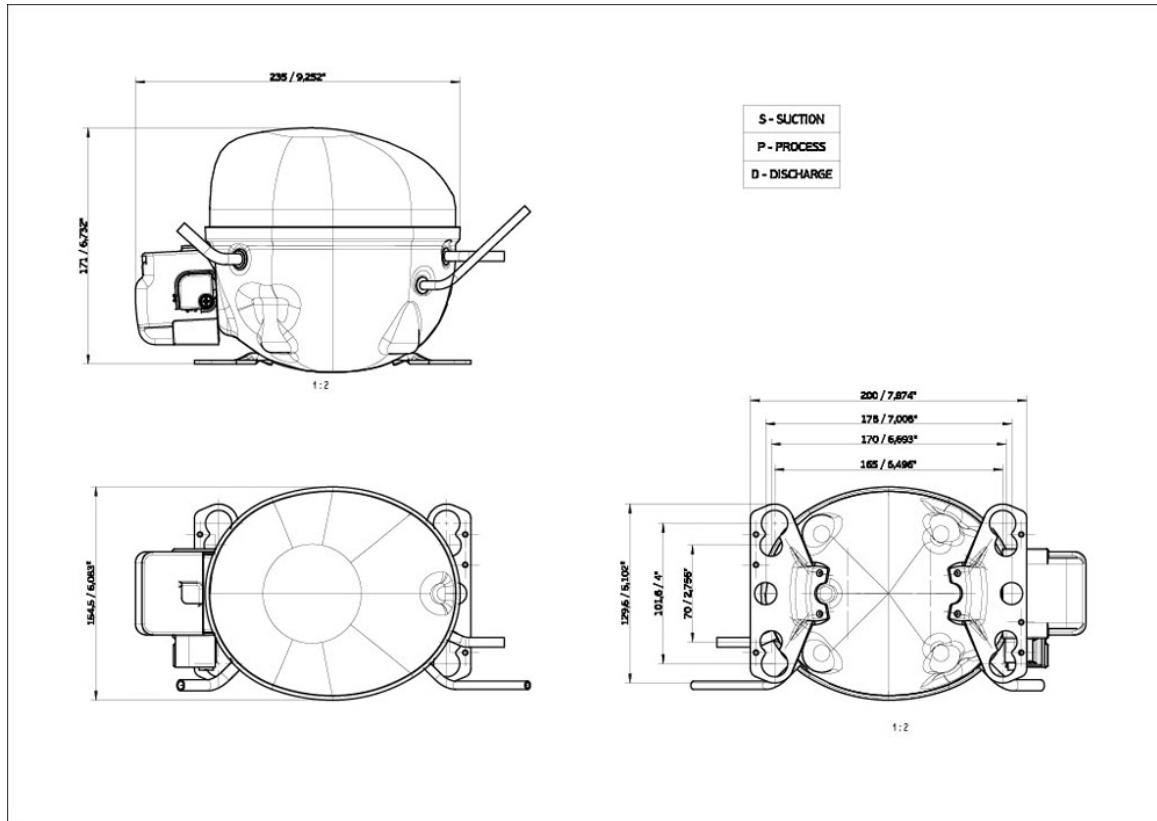
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -20 | 291 | 246 | 7.84 | 1.18 |
| -15 | 354 | 272 | 9.60 | 1.3 |
| -10 | 437 | 298 | 11.96 | 1.47 |
| -5 | 540 | 325 | 14.89 | 1.66 |
| 0 | 660 | 353 | 18.40 | 1.87 |
| 5 | 795 | 381 | 22.47 | 2.09 |
| 10 | 945 | 409 | 27.10 | 2.31 |

Test Condition: ASHRAEMBPA46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

Operating Envelope



External Dimensions



Wiring Diagram

SM28-4

