



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 <sup>3</sup>
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

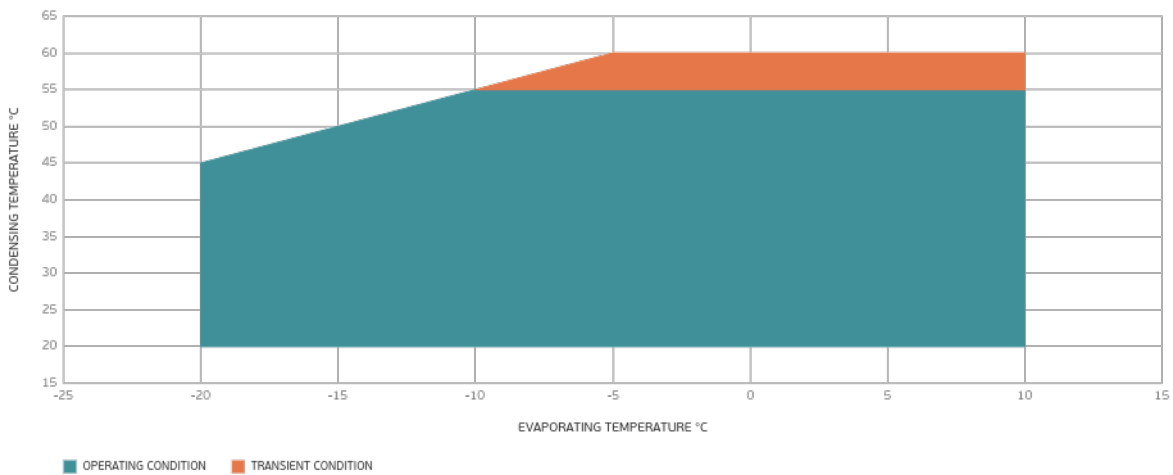
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

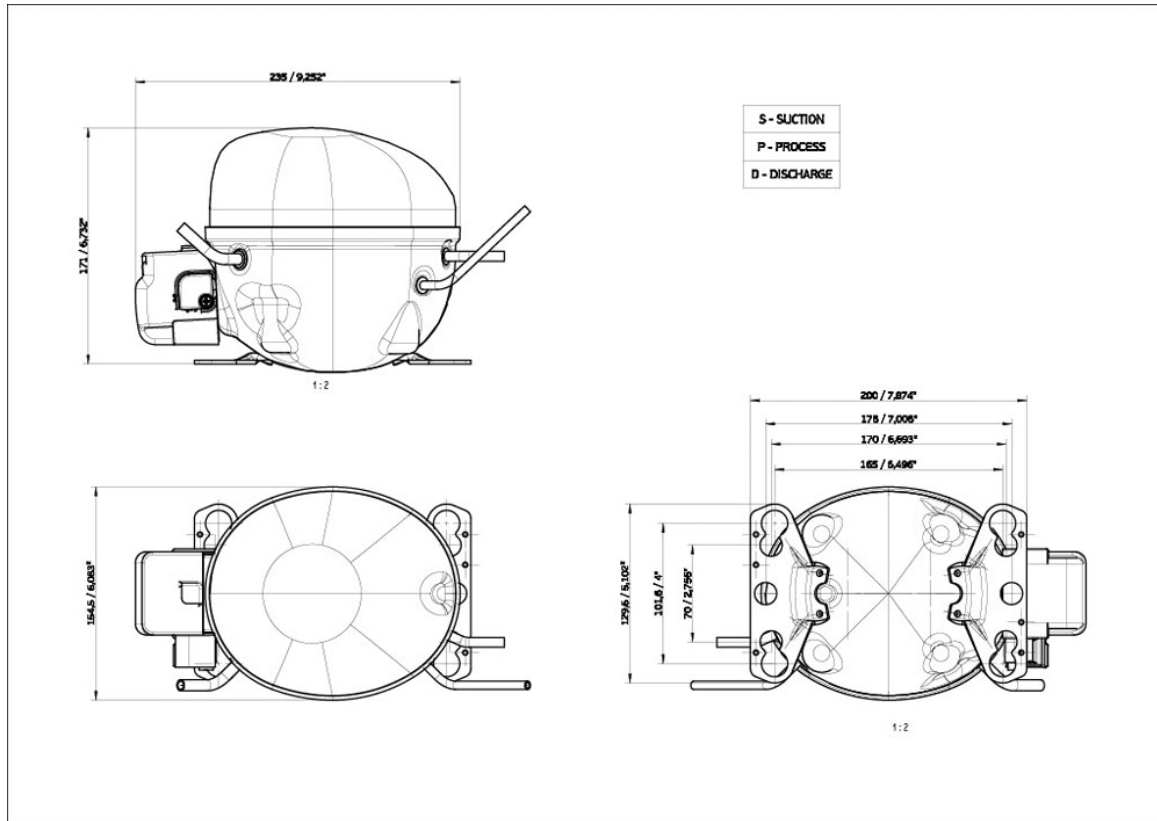
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	291	246	7.84	1.18
-15	354	272	9.60	1.3
-10	437	298	11.96	1.47
-5	540	325	14.89	1.66
0	660	353	18.40	1.87
5	795	381	22.47	2.09
10	945	409	27.10	2.31

Test Condition: ASHRAEMB46, 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

