MODEL
EMT6144GK

APPROVALS

ENGINEERING CODE
513306214

APPROVED REFRIGERANT
R-404A

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
MBP

COOLING CAPACITY
403 W (MBP)

EFFICIENCY
1.76 W/W (MBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	3.97 cm³
Compressor Cooling	Fan/NotControled/220
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/4 hp
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-20 °C to 10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	21.1 Ω at 25° C
Run Winding Resistance	14.4 Ω at 25° C
Rated Load Amperage (RLA) at 50 Hz	1.35 A

Mechanical Data

Oil Charge	180 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Weight	7.6 Kg

Electrical Components

	Description
Starting Device	Relay | MTRP-0015*
Start Capacitor	43-53 Uf / 330 V
Motor Protection	T0043/G6

External Characteristics

Tray Holder	Yes

Connector	Internal Diameter	Shape
Suction	6.1 mm	Slanted 42? up + 45? to Back/Copper
Discharge	4.94 mm	Slanted parallet BP+24?to Back/Copper
Process	6.1 mm	Slanted 45? up + 45? to Back/Copper

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
54.40°C	-6.70°C	404 W	229 W	11.03 kg/h	1.76 W/W

Test Condition: ASHRAEMBP46, Fan/NotControled/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	405	157	8.80	2.58
-15	498	169	10.88	2.96
-10	613	180	13.46	3.41
-5	746	191	16.53	3.91
0	898	202	20.07	4.45
5	1066	211	24.08	5.05
10	1250	219	28.54	5.7

Test Condition: ASHRAEMBP46, Fan/NotControled/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	317	166	7.61	1.92
-15	388	182	9.37	2.13
-10	478	199	11.62	2.4
-5	585	215	14.34	2.72
0	708	231	17.51	3.06
5	845	246	21.14	3.43
10	995	259	25.21	3.84

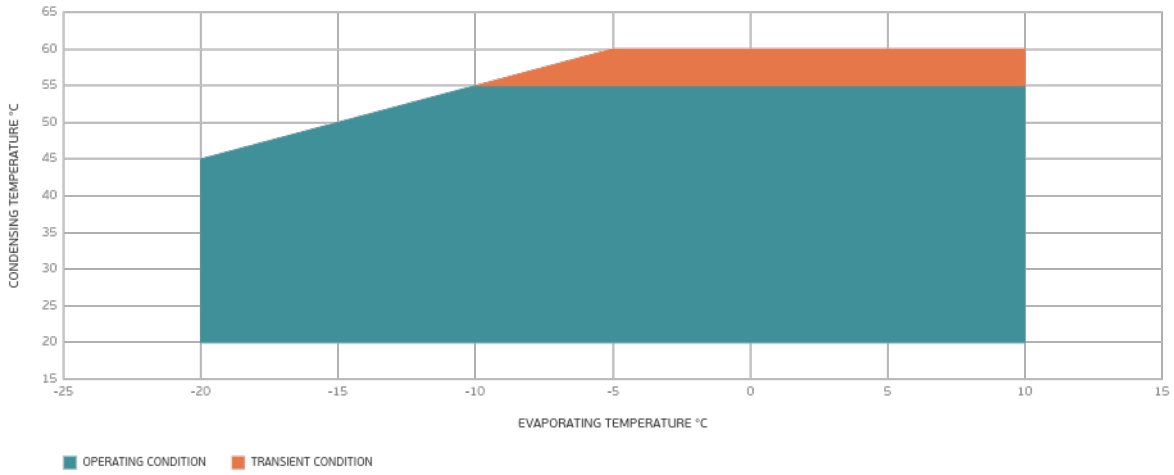
Test Condition: ASHRAEMBP46, Fan/NotControled/220, Return Gas 35°C, Ambient 35°C , Subcooling 8.3K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

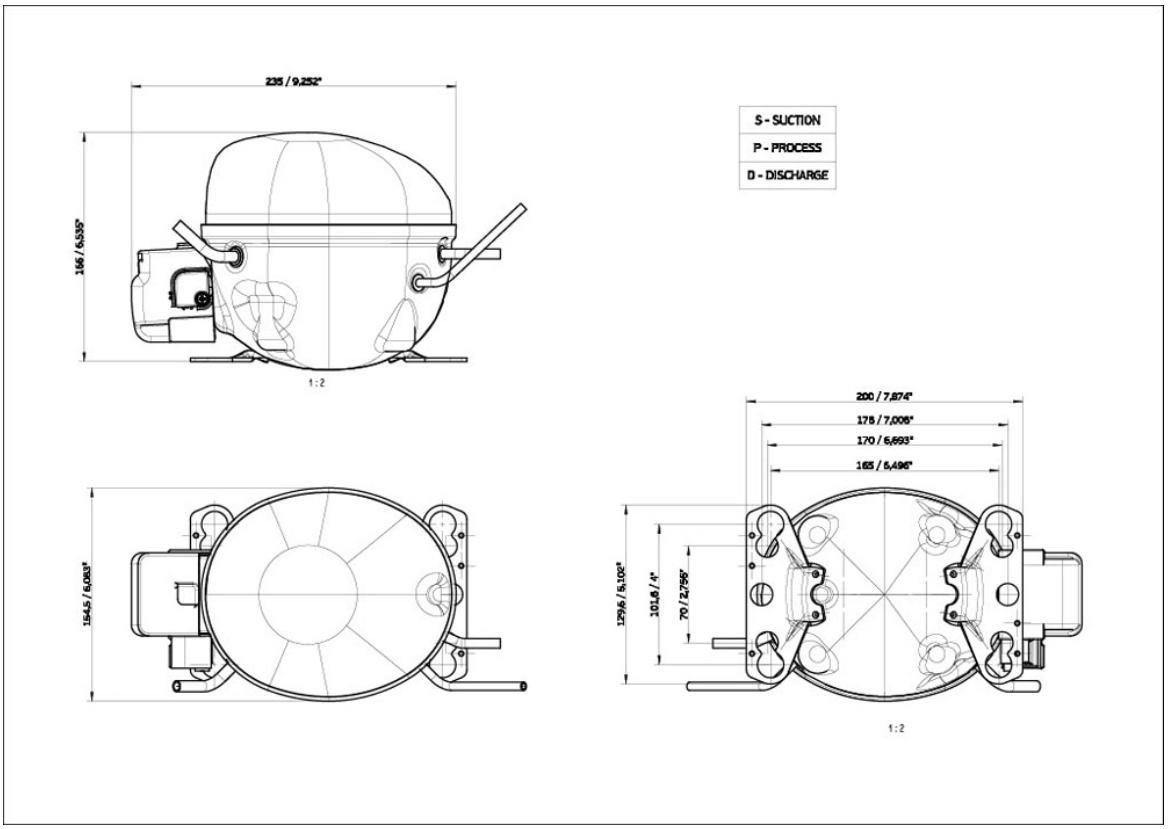
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	231	176	6.23	1.31
-15	280	196	7.60	1.43
-10	345	217	9.44	1.59
-5	425	237	11.73	1.8
0	519	256	14.47	2.03
5	625	274	17.64	2.28
10	741	290	21.25	2.55

Test Condition: ASHRAEMBP46, Fan/NotControled/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