MODEL
EMX6181U



APPROVALS

ENGINEERING CODE
721BI80

APPROVED REFRIGERANT
R-290

POWER SUPPLY
220-240 V 60 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
MBP

COOLING CAPACITY
628 W (MBP)

EFFICIENCY
2.18 W/W (MBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	6.92 cm³
Compressor Cooling	Fan/NotControled/220
Fan Air Flow	270 m³/h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/3 hp
Max Condensing Pressure Operating	18.07 bar
Max Condensing Pressure Peak	20.17 bar
Power Supply	220-240 V 50 Hz / 220-240 V 60 Hz
Evaporating Temperature Range	-20 °C to 10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	17.7 Ω at 25° C
Run Winding Resistance	7.85 Ω at 25° C
Locked Rotor Amperage (LRA)	13 A

Mechanical Data

Maximum Recommended Refrigerant Charge	150 g
Oil Charge	150 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO10
Pressurization	Light vacuum
Weight	8 Kg
Free Internal Volume	1.5 L

Electrical Components

	Description
Start Capacitor	53-64 Uf/330 V
Starting Device	Relay | MTRPH-0027-65*
Motor Protection	4TM319NFBYY-153

External Characteristics

Base Plate	European
Tray Holder	Yes
Height	171 mm

Connector	Internal Diameter	Shape
Suction	6.1 mm	Slanted 42?/Copper
Discharge	6.1 mm	Straight/Copper
Process	6.1 mm	Slanted 46?/Copper

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
45.00°C	-10.00°C	628 W	289 W	7.73 kg/h	2.18 W/W

Test Condition: EN12900MBP, Fan/NotControled/220, Return Gas 20°C, Evaporation -10.00°C, Condensing 45.00°C, Ambient 35°C , Liquid 45°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
-20	481	223	5.32	2.15
-15	592	242	6.60	2.45
-10	725	258	8.13	2.81
-5	882	272	9.93	3.24
0	1062	282	12.05	3.76
5	1267	290	14.51	4.38
10	1499	294	17.34	5.1

Test Condition: EN12900MBP, Fan/NotControled/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
-20	419	243	5.09	1.72
-15	513	267	6.28	1.92
-10	628	289	7.73	2.18
-5	764	309	9.46	2.47
0	921	327	11.51	2.81
5	1102	344	13.90	3.2
10	1307	358	16.67	3.65

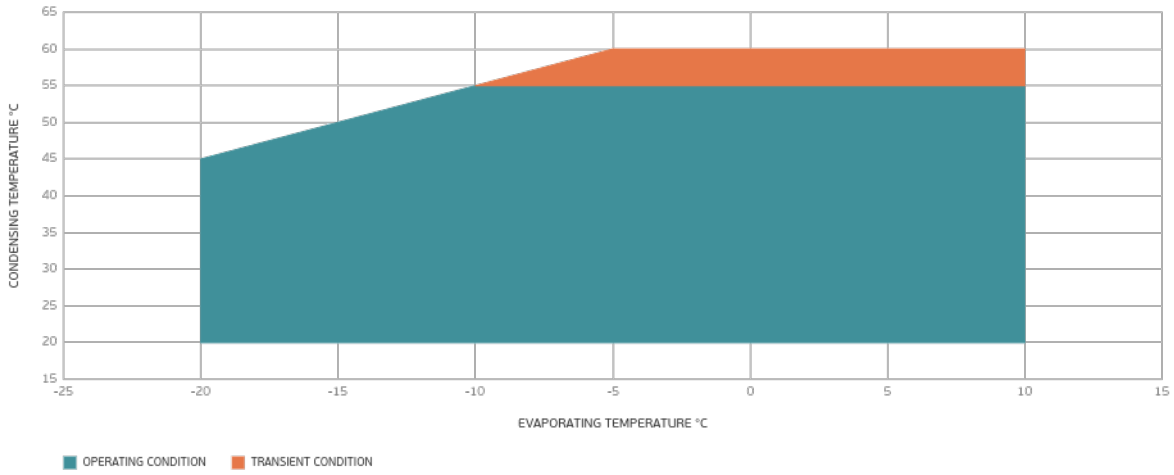
Test Condition: EN12900MBP, Fan/NotControled/220, Return Gas 20°C, Ambient 35°C , Subcooling 0K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

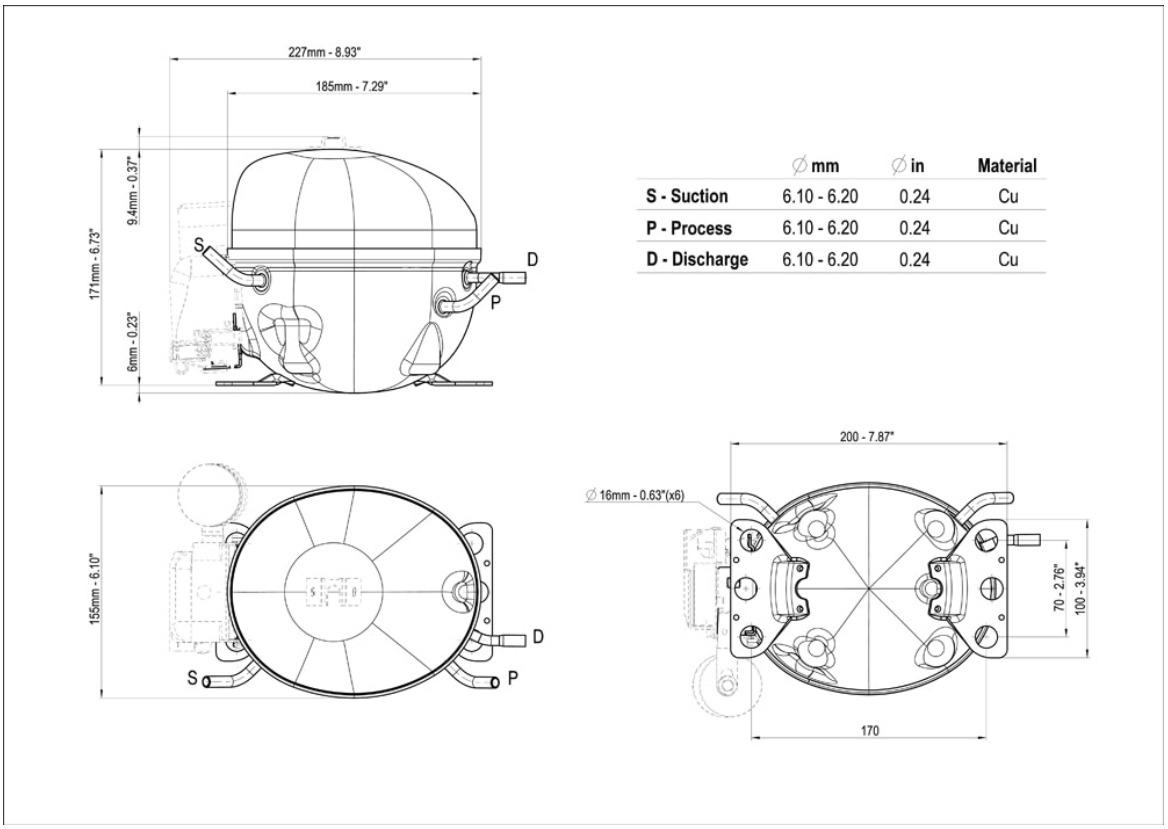
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	362	268	4.91	1.35
-15	439	295	5.99	1.49
-10	534	321	7.33	1.67
-5	648	346	8.97	1.87
0	781	371	10.92	2.1
5	936	396	13.22	2.37
10	1113	419	15.90	2.65

Test Condition: EN12900MBP, Fan/NotControled/220, Return Gas 20°C, Ambient 35°C , Subcooling 0K. Data are an indication of performance based simulation.

Operating Envelope

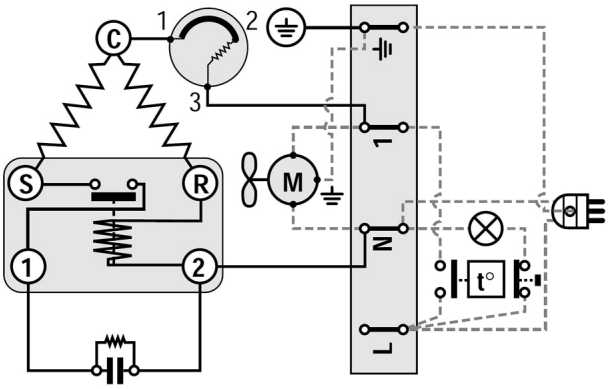


External Dimensions



	∅ mm	∅ in	Material
S - Suction	6.10 - 6.20	0.24	Cu
P - Process	6.10 - 6.20	0.24	Cu
D - Discharge	6.10 - 6.20	0.24	Cu

Wiring Diagram



Assembly Instructions

