

EMX6181U



ENGINEERING CODE
513301814

REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50-60 Hz

APPLICATION
MBP

MOTOR TYPE
CSIR

STANDARD
EN12900



COOLING CAPACITY
531 W

EFFICIENCY
2.11 W/W

DATA

GENERAL DATA

Model	EMX6181U
Type	Hermetic Reciprocating
Technology	ON/OFF
Compressor Application	MBP
Expansion Device	Capillary Tube or Expansion Valve
Compressor Cooling	Fan/220
HP	1/3
Starting Torque	HST
Plant	BRAZIL

ELECTRICAL DATA

Start Winding Resistance	17.7 Ω at 25°C
Run Winding Resistance	7.85 Ω at 25°C
Locked Rotor Amperage (LRA) 50Hz	13 A
Locked Rotor Amperage (LRA) 60Hz	13 A
Rated Load Amperage (LMBP) at 50 Hz	2.1 A
Rated Load Amperage (LMBP) at 60 Hz	1.8 A
Rated Load Amperage (HBP) at 50 Hz	2.5 A
Rated Load Amperage (HBP) at 60 Hz	2.2 A

MECHANICAL DATA

Displacement	6.92 cm ³
Oil Charge	150 ml
Oil Type	ALQUILB
Oil Viscosity	ISO22
Weight	8 Kg

ELECTRICAL COMPONENTS

Start Capacitor	53-64 µf/330 V
CSR CSIR BOX	No
Starting Device Type	RELAY
Starting Device Description	QL2-6.2*
Overload Protection	4TM319NFBYY-153 DRB30N61AYF

PERFORMANCE

TESTED CONDITIONS

Tested Refrigerant	R-290
Tested Application	MBP
Tested Standard	EN12900
Tested Cooling	Fan
Tested Voltage	220 V
Max Refrigerant Charge	150 g
Refrigerant Temperature	Dew

Performance on Compressor Speed: 3000 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
45	-10	531	2.11	252	1.74	6.54

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	412	2.07	199	1.58	4.57
-15	507	2.39	212	1.62	5.65
-10	616	2.74	225	1.66	6.90
-5	742	3.16	235	1.68	8.35
0	883	3.67	241	1.70	10.02
5	1042	4.32	241	1.72	11.93
10	1218	5.22	233	1.74	14.09

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	351	1.60	219	1.63	4.28
-15	434	1.85	235	1.69	5.32
-10	531	2.11	252	1.74	6.54
-5	642	2.39	269	1.78	7.95
0	767	2.71	283	1.82	9.59
5	908	3.10	293	1.86	11.46
10	1066	3.59	297	1.90	13.60

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-10	447	1.66	269	1.81	6.13
-5	542	1.86	291	1.87	7.50
0	651	2.09	311	1.93	9.10
5	774	2.35	329	2.00	10.93
10	911	2.65	343	2.06	13.02

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

Performance on Compressor Speed: 3600 RPM

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
45	-10	686	2.36	290	-	8.44

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

PERFORMANCE CURVE

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	564	2.54	222	-	6.25
-15	693	2.90	239	-	7.72
-10	851	3.31	257	-	9.53
-5	1036	3.80	273	-	11.68
0	1248	4.40	284	-	14.17
5	1484	5.17	287	-	17.00
10	1744	6.22	280	-	20.17

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

PERFORMANCE CURVE

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	460	1.85	249	-	5.60
-15	560	2.09	268	-	6.85
-10	686	2.36	290	-	8.44
-5	836	2.67	314	-	10.36
0	1011	3.01	335	-	12.63
5	1207	3.42	353	-	15.23
10	1425	3.93	363	-	18.18

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

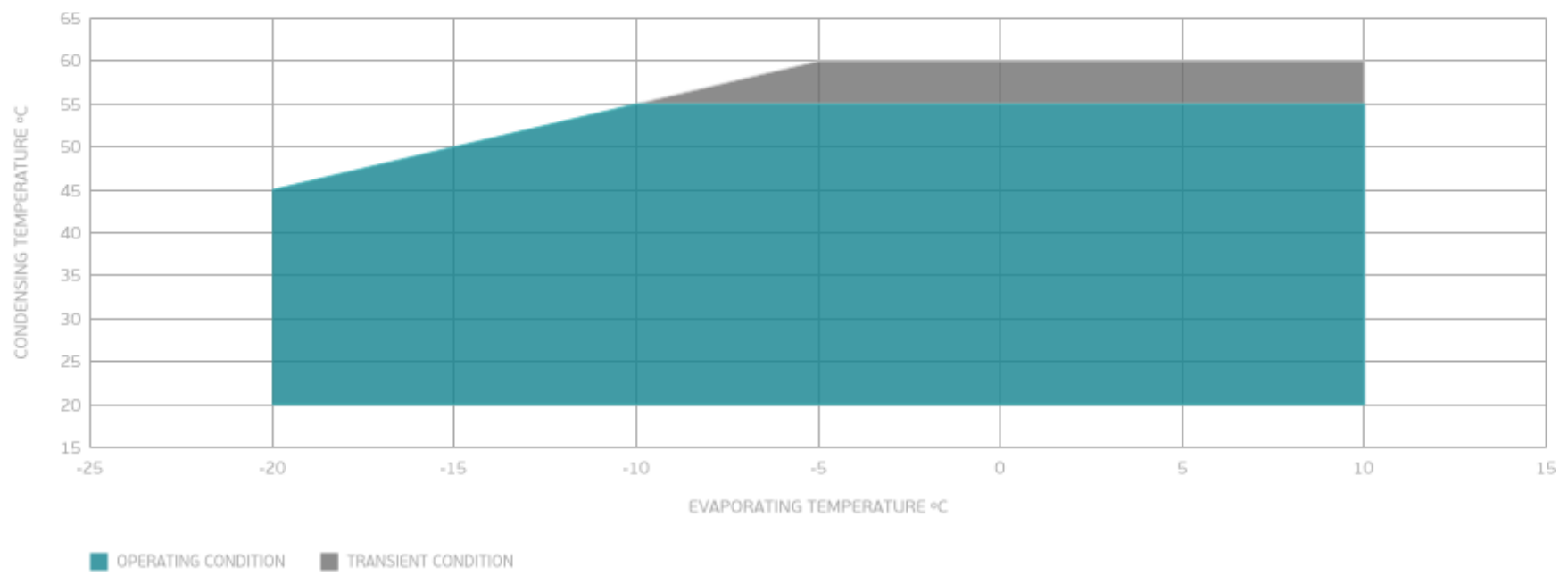
PERFORMANCE CURVE

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-10	524	1.68	312	-	7.20
-5	640	1.88	340	-	8.86
0	777	2.10	370	-	10.86
5	934	2.35	398	-	13.19
10	1109	2.63	422	-	15.85

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

ENVELOPE



External

EXTERNAL CHARACTERISTICS

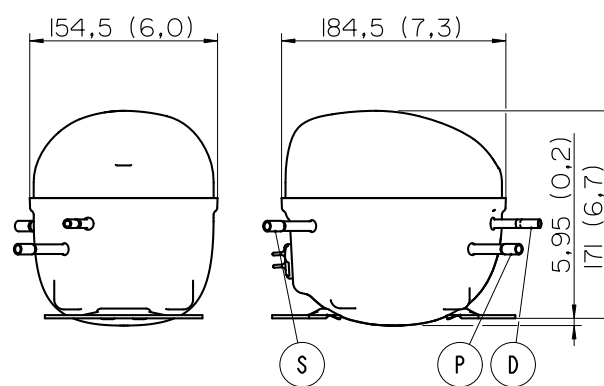
Base Plate SMALL

Tray Holder YES

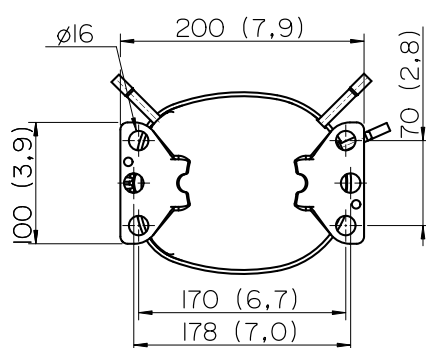
Connector	Internal Diameter	Shape	Material
Suction	6.1 mm	SLANTED 42° UP + 45° TO BACK	COPPER
Discharge	6.1 mm	SLANTED 0° UP + 45° TO BACK	COPPER
Process	6.1 mm	SLANTED 45° UP + 45° TO BACK	COPPER

EXTERNAL DIMENSIONS

SHELL



BASE



FENCE

