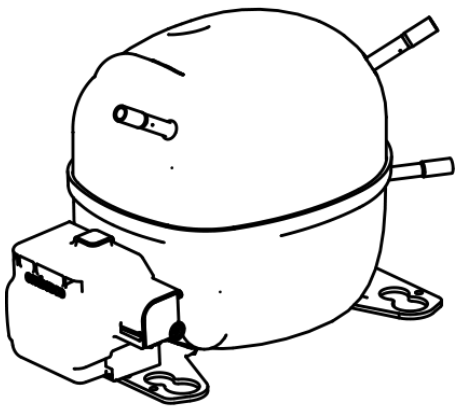
COMPRESSOR TECHNICAL DATA

EM50HNP



ENGINEERING CODE
513302630

REFRIGERANT
R-134a

POWER SUPPLY
220-240 V 50 Hz

APPLICATION
LBP

MOTOR TYPE
RSIR

STANDARD
ASHRAE

COOLING CAPACITY
118 W

EFFICIENCY
1.09 W/W

DATA

GENERAL DATA

Model	EM50HNP
Type	Hermetic Reciprocating
Technology	ON/OFF
Compressor Application	LBP
Expansion Device	Capillary Tube
Compressor Cooling	Static/220
HP	1/8
Starting Torque	LST
Plant	BRAZIL

ELECTRICAL DATA

Start Winding Resistance	24.5 Ω at 25°C
Run Winding Resistance	17.9 Ω at 25°C

MECHANICAL DATA

Displacement	4.99 cm^3
Oil Charge	160 ml
Oil Type	ESTER
Oil Viscosity	ISO10
Weight	7.6 Kg

ELECTRICAL COMPONENTS

CSR CSIR BOX	No
Starting Device Type	PTC
Starting Device Description	8EA17C1 8EA5B1 QPS2-A22MG1
Overload Protection	4TM189RHBYY-53

EXTERNAL CHARACTERISTICS

Base Plate	UNI V2
Tray Holder	NO

Connector	Internal Diameter	Shape	Material
Suction	6.5 mm	STRAIGHT	COPPER
Discharge	4.94 mm	SLANTED	COPPER
Process	6.5 mm	STRAIGHT	COPPER

PERFORMANCE

TESTED CONDITIONS

Tested Refrigerant	R-134a
Tested Application	LBP
Tested Standard	ASHRAE
Tested Cooling	Static
Tested Voltage	220 V
Tested Frequency	50 Hz
Max Refrigerant Charge	250 g
Refrigerant Temperature	Dew

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-23.3	118	1.09	109	0.84	2.3

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE

Condensing Temperature 45ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-35	54	0.70	77	0.76	1.04
-30	81	0.91	89	0.83	1.56
-25	116	1.14	102	0.85	2.25
-20	159	1.38	115	0.85	3.09
-15	210	1.63	129	0.86	4.10
-10	269	1.90	142	0.90	5.26

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE

Condensing Temperature 55ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-30	70	0.80	88	0.82	1.36
-25	104	1.01	103	0.83	2.02
-20	146	1.22	120	0.86	2.84
-15	195	1.43	137	0.91	3.81
-10	252	1.64	154	1.02	4.93

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

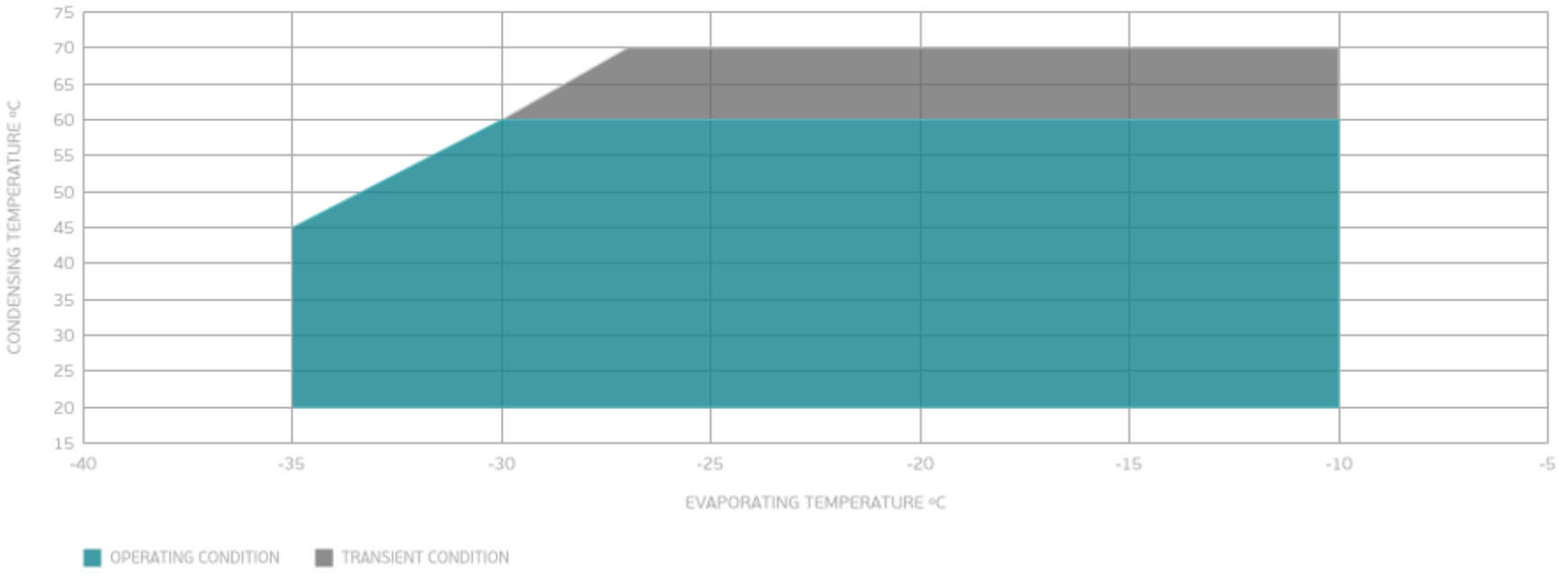
PERFORMANCE CURVE

Condensing Temperature 65ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-25	89	0.89	100	0.78	1.72
-20	129	1.08	119	0.83	2.51
-15	177	1.27	139	0.94	3.44
-10	231	1.45	160	1.13	4.53

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

ENVELOPE



EXTERNAL DIMENSIONS

