

FFI12HBK



**ENGINEERING CODE**  
513200015

**REFRIGERANT**  
R-134a

**POWER SUPPLY**  
220-240 V 50 Hz

**APPLICATION**  
L/M/HBP

**MOTOR TYPE**  
RSIR/CSIR

**STANDARD**  
ASHRAE

**COOLING CAPACITY**  
1138 W

**EFFICIENCY**  
2.21 W/W



DATA

GENERAL DATA

Model	FFI12HBK
Type	Hermetic Reciprocating
Technology	ON/OFF
Compressor Application	L/M/HBP
Expansion Device	Capillary Tube
Compressor Cooling	Fan/220
HP	1/3+
Starting Torque	LST
Plant	BRAZIL

ELECTRICAL DATA

Start Winding Resistance	29.9 Ω at 25°C
Run Winding Resistance	5.7 Ω at 25°C
Locked Rotor Amperage (LRA) 50Hz	20 A
Rated Load Amperage (LMBP) at 50 Hz	2.5 A
Rated Load Amperage (HBP) at 50 Hz	3 A

## MECHANICAL DATA

Displacement	11.14 cm <sup>3</sup>
Oil Charge	280 ml
Oil Type	ESTER
Oil Viscosity	ISO22
Weight	10.9 Kg

## ELECTRICAL COMPONENTS

Start Capacitor	88-108 µf/220 V
CSR CSIR BOX	No
Starting Device Type	RELAY
Overload Protection	4TM757KFBYY-53 5TM 757KFBYY-53 CP4TMF210N52A2 DRB210N52A*F MRP40APN-5590 MRP40APN-5598

## EXTERNAL CHARACTERISTICS

Base Plate	UNI V2
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Connector	Internal Diameter	Shape	Material
Suction	8.2 mm	STRAIGHT	COPPER
Discharge	6.5 mm	STRAIGHT	COPPER
Process	6.5 mm	STRAIGHT	COPPER

## PERFORMANCE

### TESTED CONDITIONS

Tested Refrigerant	R-134a
Tested Application	HBP
Tested Standard	ASHRAE
Tested Cooling	Fan
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	7.2	1138	2.21	515	-	25.19

Test Condition: Subcooling 8.3 K, Return Gas 35 °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
-35	164	0.84	196	-	3.24
-30	220	1.02	214	-	4.36
-25	295	1.23	239	-	5.87
-20	392	1.45	269	-	7.79
-15	509	1.68	303	-	10.14
-10	647	1.91	338	-	12.93
-5	806	2.16	374	-	16.17
0	986	2.42	408	-	19.90
5	1187	2.70	439	-	24.11
10	1409	3.02	466	-	28.82
15	1652	3.40	486	-	34.06

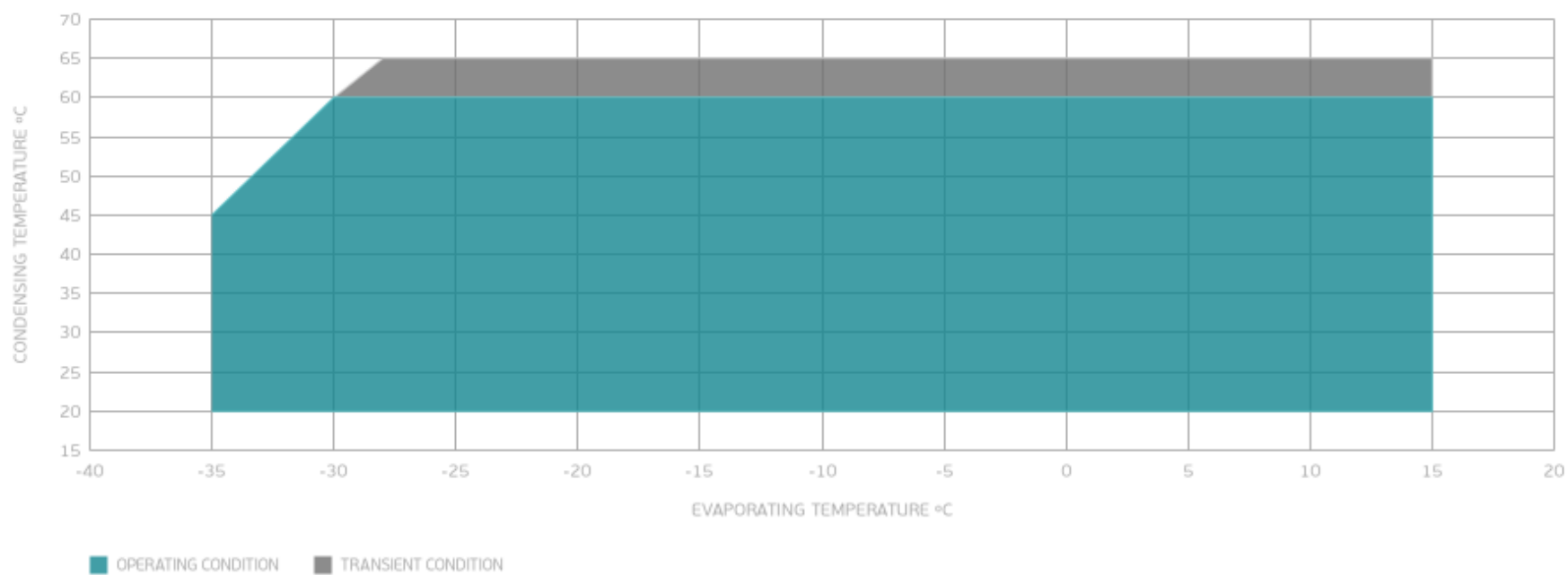
Test Condition: Subcooling 8.3 K, Return Gas 35 °C. Data are an indication of performance based simulation.

**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
-30	184	0.86	215	-	3.99
-25	252	1.04	243	-	5.47
-20	339	1.22	278	-	7.34
-15	443	1.39	318	-	9.62
-10	566	1.56	362	-	12.33
-5	707	1.73	408	-	15.48
0	866	1.91	454	-	19.09
5	1044	2.09	499	-	23.17
10	1241	2.29	541	-	27.74
15	1456	2.51	579	-	32.81

Test Condition: Subcooling 8.3 K, Return Gas 35 °C. Data are an indication of performance based simulation.

## ENVELOPE



## EXTERNAL DIMENSIONS

