

Compressor Technical Data

Model: FFI12HBK

Code: 513200004

Description

Refrigerant:	R-134a	Displacement (cm ³):	11,14
Voltage:	220-240 V 50 Hz 1 ~	Lubricant Type:	ISO22
Frequency (Hz):	50	Lubricant Charge (ml):	280
Application:	M/HBP	Motor Type:	RSIR-CSIR
HP:	1/3+	Starting Torque:	LST
Efficiency:	8,91	Type of Test:	ASHRAE32
Capacity:	4492,00		

Approval

CCC

IRAM

UL

VDE

Data

External Features

	Shape	Material	Diameter (mm)
Suction Connector	Straight	Copper plated steel	8,20
Discharge Connector	Straight	Copper plated steel	6,50
Process Connector	Straight	Copper plated steel	6,50

Oil Cooler:	
Base Plate:	Universal EG/F/AMEM version 2
Tray Holder:	No
Weight (kg):	10,90

Application

Maximum ambient temperature (°C):	43
Expansion device:	Capillary
Cooling:	Fan Cooling
Air flow rate:	

Mechanical Data

Bill of materials:	513200004
Starting torque:	Low Starting Torque
Bore (mm):	26,00
Stroke (mm):	10,50
Weight (kg):	10,90

Performance

Motor type:	RSIR-CSIR
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Winding Resistance (25°C) - Start:	5,70
Winding Resistance (25°C) - Run:	29,90

Check Point - Condensing Temperature 54,4 °C

Evaporating Temperature	Cooling Capacity			Power Consumption +/- 5%	Current Consumption +/-5%	Efficiency +/-7%		
	(°C)	(kcal/h)	(W)			(Btu/h)	(W)	(A)
7,2	1.086	1.263	4.308	500	2,82	2,17	2,52	8,61

Condensing Temperature 45 °C

Evaporating Temperature	Cooling Capacity			Power Consumption +/- 5%	Current Consumption +/-5%	Gas Flow Rate +/- 5%	Efficiency +/-7%		
	(°C)	(kcal/h)	(W)				(Btu/h)	(W)	(A)
-10	577	671	2.289	336	2,23	13,10	1,72	2,00	6,81
-5	719	836	2.853	370	2,35	16,41	1,94	2,26	7,71
0	881	1.024	3.495	406	2,47	20,21	2,17	2,53	8,62
5	1.063	1.236	4.217	442	2,60	24,54	2,40	2,80	9,54
10	1.265	1.471	5.019	480	2,75	29,41	2,64	3,07	10,47
15	1.488	1.730	5.905	518	2,90	34,86	2,87	3,34	11,40

Condensing Temperature 55 °C

Evaporating Temperature	Cooling Capacity			Power Consumption +/- 5%	Current Consumption +/-5%	Gas Flow Rate +/- 5%	Efficiency +/-7%		
	(°C)	(kcal/h)	(W)				(Btu/h)	(W)	(A)
-10	543	631	2.155	357	2,30	12,33	1,52	1,77	6,03
-5	677	788	2.687	398	2,44	15,44	1,70	1,98	6,75
0	830	965	3.292	440	2,59	19,03	1,89	2,19	7,48
5	1.001	1.164	3.972	483	2,75	23,11	2,07	2,41	8,22
10	1.192	1.386	4.729	528	2,93	27,71	2,26	2,62	8,95
15	1.402	1.631	5.565	575	3,12	32,85	2,44	2,84	9,69

Condensing Temperature 65 °C

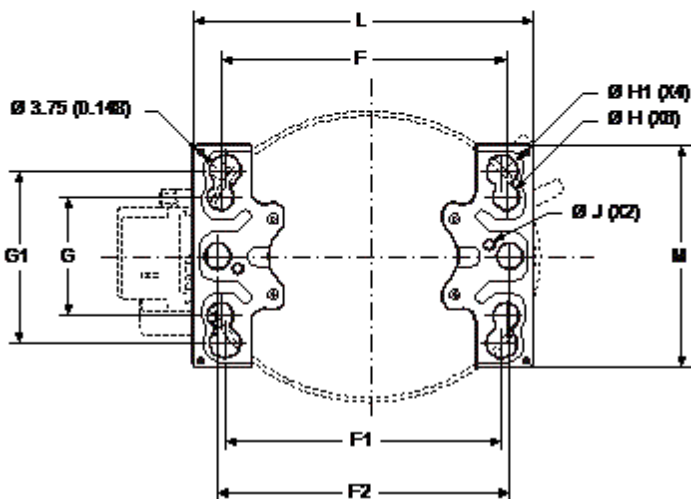
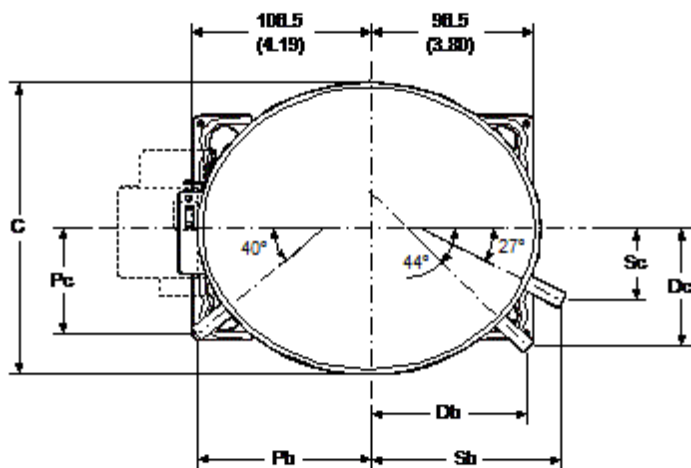
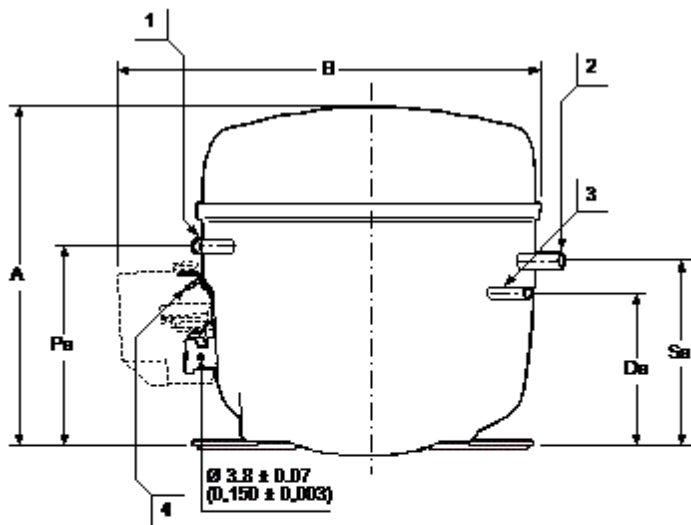
Evaporating Temperature	Cooling Capacity			Power Consumption +/- 5%	Current Consumption +/-5%	Gas Flow Rate +/- 5%	Efficiency +/-7%		
	(°C)	(kcal/h)	(W)				(Btu/h)	(W)	(A)
-10	520	605	2.065	377	2,37	11,82	1,38	1,60	5,47
-5	653	759	2.590	424	2,53	14,89	1,54	1,79	6,10
0	802	933	3.183	474	2,71	18,40	1,69	1,97	6,72
5	970	1.128	3.847	525	2,91	22,38	1,85	2,15	7,33

10	1.155	1.34 3	4.583	578	3,13	26,85	2,00	2,32	7,93
15	1.359	1.58 1	5.394	633	3,36	31,84	2,15	2,50	8,52

Dimensions

Compressor Housing

	mm	inch		mm	inch		mm	inch		mm	inch
A	201,00	7,91	Rb	---	---	Sa	1.093,00	43,03	Rc	---	---
B	251,00	9,88	F	170,00	6,69	Pa	118,00	4,65	G1	1.016,00	40,00
C	173,00	6,81	G	70,00	2,76	Da	90,00	3,54	F2	174,00	6,85
E	---	---	F1	165,00	6,50	Ra	---	---	N	---	---
Sb	113,00	4,45	T	---	---	Sc	427,00	16,81	L	203,00	7,99
Pb	104,00	4,09	M	1.315,00	51,77	Pc	63,00	2,48	H	16,00	0,63
Db	925,00	36,42	J	7,00	0,28	Dc	70,00	2,76	H1	19,00	0,75

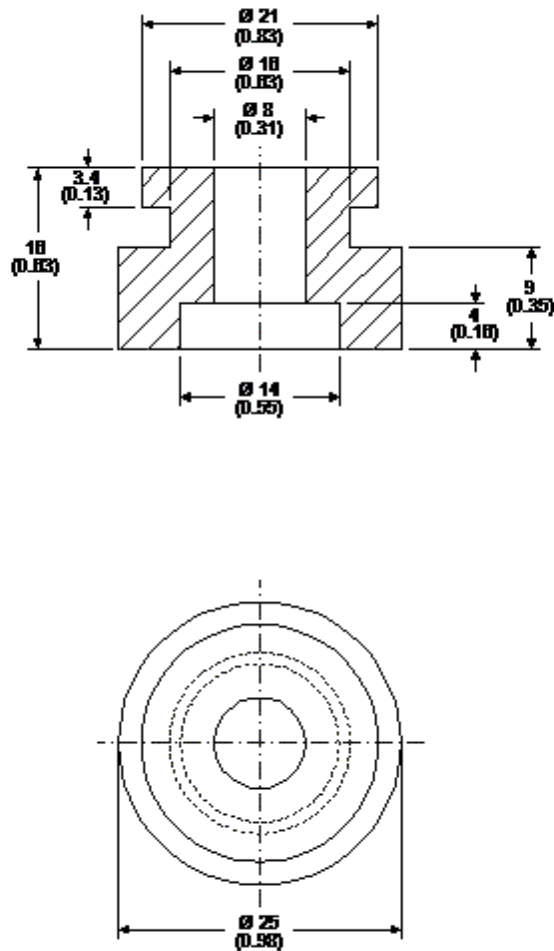


1 - Process Connector 2 - Suction Connector 3 - Discharge Connector 4 - Earthing Terminal 6 - Tray Hold

Rubber Grommet

Engineering Code	13146411
Dimensions	mm (Inch)

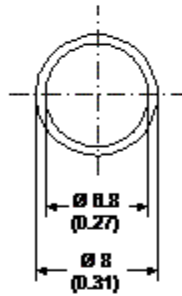
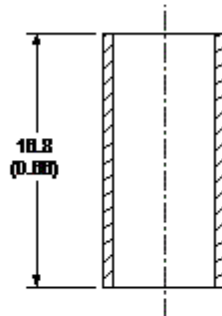
The grommets are made of special rubber and used in the nut and bolt type or in the snap on type assembly. The rummer grommet, the dimensions of which are shown in the figure below, was developed for installation in compressors with 16 and 19 mm diameters holes in the base plate.



Metal Bushing

Engineering Code	13126755
Dimensions	mm (Inch)

As an optional assembly accessory, Embraco can supply metal bushings, the purpose of which is to limit tightening of the screws upon attachment of the compressor assembly to the refrigeration system. This bushing is made of steel in the dimensions shown in the figure below, and comes with an anti-rust coating of chromated zinc.



Accessories