

## Compressor Technical Data

**Model:** FFU130HAX

**Code:** 513200765

### Description

Refrigerant:	R-134a	Displacement (cm <sup>3</sup> ):	10,61
Voltage:	220-240 V 50 Hz 1 ~	Lubricant Type:	ISO10
Frequency (Hz):	50	Lubricant Charge (ml):	280
Application:	L/MBP	Motor Type:	CSIR
HP:	1/3+	Starting Torque:	LST/HST
Efficiency:	4,72	Type of Test:	ASHRAE32
Capacity:	1055,00		

### Approval

**CCC**

**IRAM**

**VDE**

### Data

#### External Features

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

Oil Cooler:	
Base Plate:	Universal EG/F/AMEM version 2
Tray Holder:	No
Weight (kg):	11,25

#### Application

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

#### Mechanical Data

Bill of materials:	513200765
Starting torque:	Low/high starting torque
Bore (mm):	26,00
Stroke (mm):	10,00
Weight (kg):	11,25

#### Electrical Data

Motor type:	CSIR
Winding Resistance (25°C) - Start:	7,50
Winding Resistance (25°C) - Run:	16,50



**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)
-23,3	266	309	1.055	223	1,88	1,19	1,38	4,72

**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)
-35	140	163	556	155	1,70	3,14	0,91	1,05	3,60
-30	200	232	792	180	1,79	4,49	1,11	1,29	4,39
-25	266	310	1.057	206	1,85	6,00	1,29	1,50	5,12
-20	345	401	1.367	233	1,89	7,78	1,48	1,72	5,86
-15	439	510	1.741	261	1,94	9,94	1,68	1,95	6,66
-10	553	643	2.196	292	2,01	12,58	1,90	2,21	7,53
-5	693	806	2.749	325	2,11	15,81	2,13	2,48	8,47

**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)
-35	112	130	444	152	1,72	2,51	0,74	0,86	2,93
-30	173	201	685	182	1,80	3,88	0,95	1,10	3,76
-25	239	278	950	213	1,86	5,39	1,12	1,31	4,46
-20	317	368	1.256	245	1,92	7,15	1,29	1,50	5,12
-15	408	475	1.621	279	1,99	9,25	1,46	1,70	5,80
-10	520	604	2.062	316	2,08	11,81	1,65	1,91	6,53
-5	654	761	2.597	355	2,21	14,94	1,84	2,15	7,32

**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)
-35	88	103	350	146	1,72	1,98	0,61	0,70	2,40
-30	149	173	592	182	1,80	3,35	0,82	0,95	3,26
-25	215	250	852	218	1,87	4,84	0,98	1,14	3,90
-20	289	337	1.148	257	1,95	6,53	1,13	1,31	4,47
-15	378	439	1.499	297	2,04	8,56	1,27	1,48	5,04



-10	484	563	1.922	340	2,16	11,01	1,42	1,65	5,65
-5	613	713	2.434	387	2,32	14,00	1,59	1,84	6,29



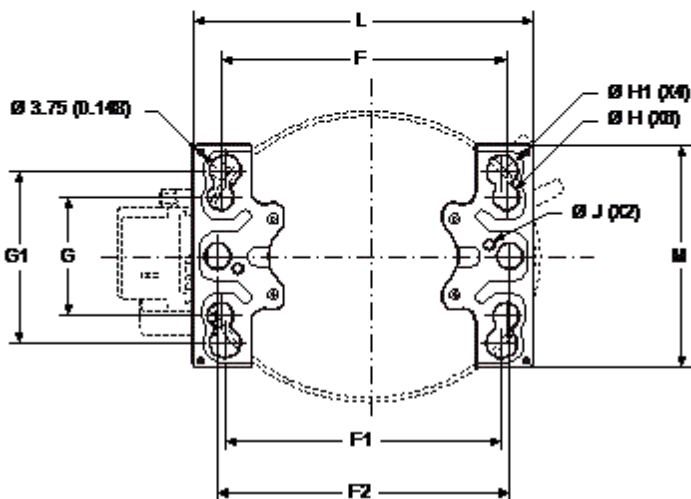
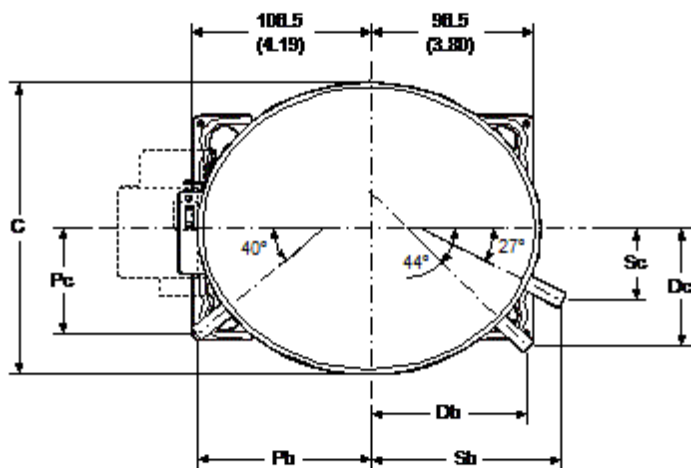
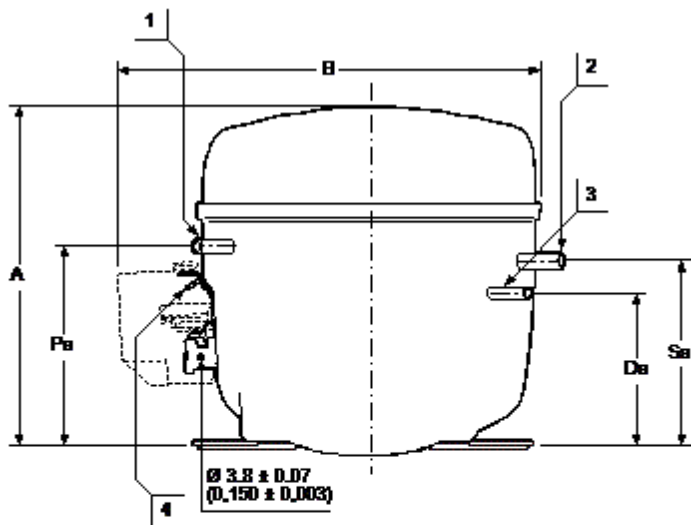
## Dimensions

### 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	1.154,00	45,43	T	---	---	Sc	44,00	1,73	L	203,00	7,99
Pb	106,00	4,17	M	1.315,00	51,77	Pc	65,00	2,56	H	16,00	0,63
Db	95,00	3,74	J	7,00	0,28	Dc	72,00	2,83	H1	19,00	0,75







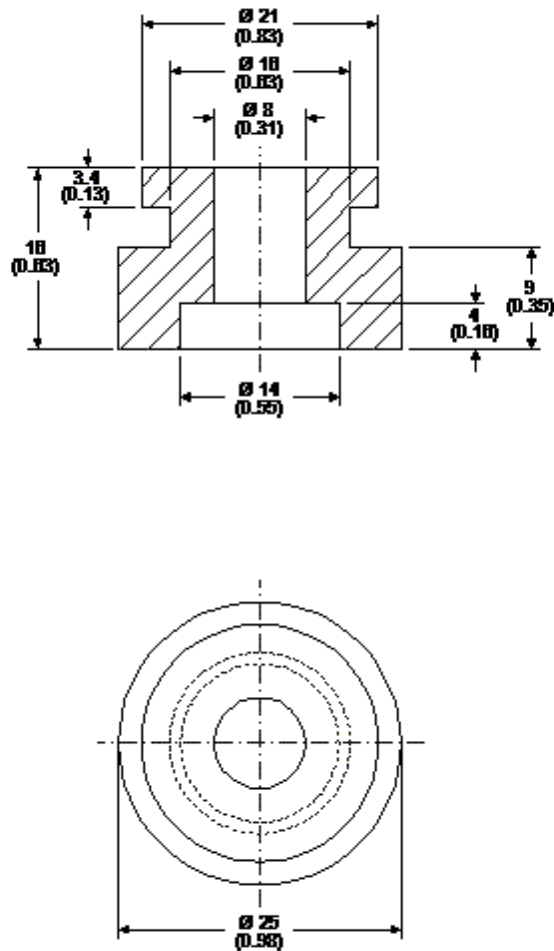
1 - Process Connector 2 - Suction Connector 3 - Discharge Connector 4 - Earthing Terminal 6 - Tray Hold



**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.

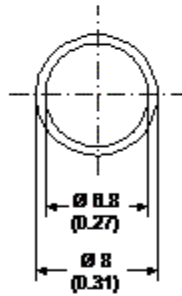
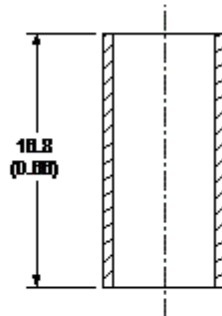




### Metal Bushing

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.



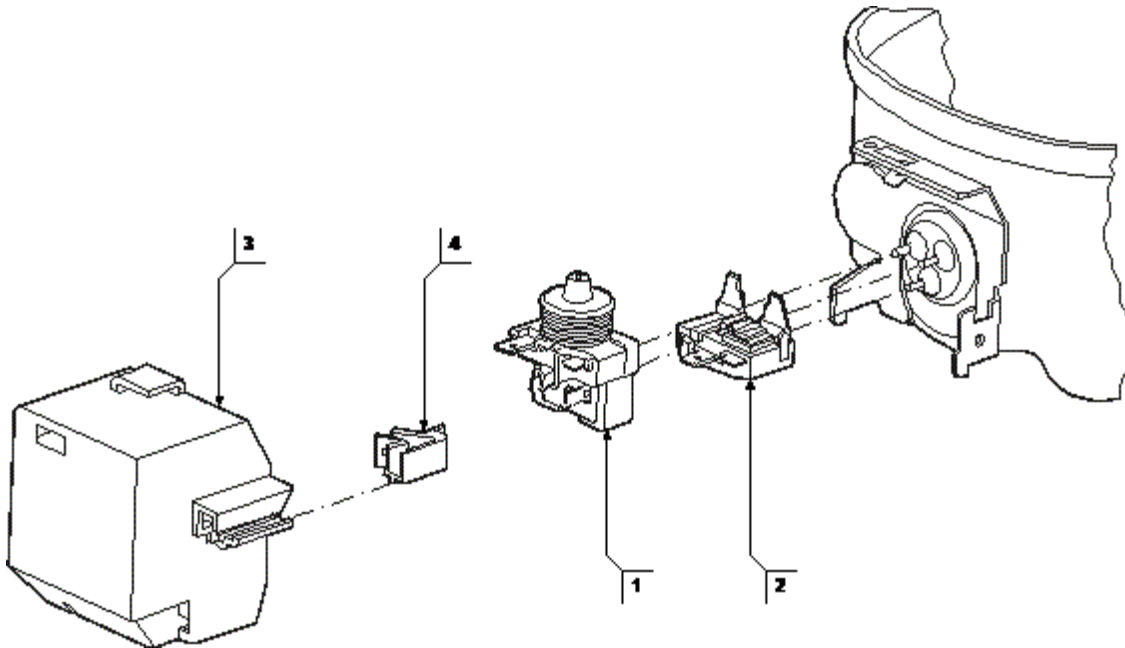


## Accessories

### Starting Device

Assembly Engineering Code	513506391
Starting Device - Relay	Starting Device - Relay
Overload Protector	13634079
Electrical Components Cover	13555036

Note: 1 - Starting device - Relay 2 - Overload protector 3 - Electrical components cover 4 - Cord relief



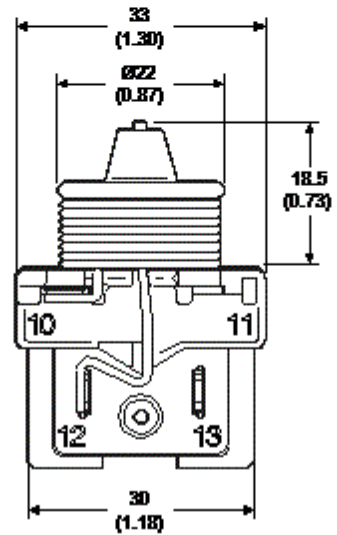
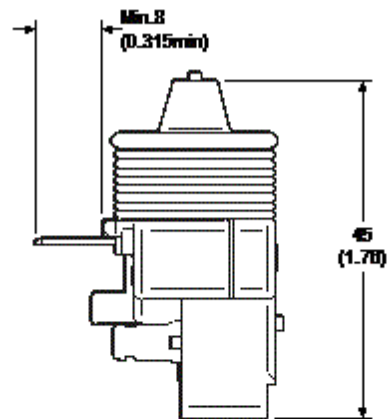
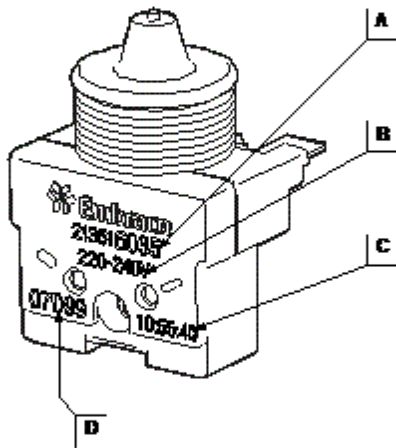




**Starting Device - Relay**

Engineering Code	213516345
Pick Up Current (A)	7,6
Drop-Out Current (A)	5,8
Terminal Size "E"	6.3 x 0.8 (0.250 x 0.03)
Dimensions	mm (Inch)

Notes: A - Subassembly cod

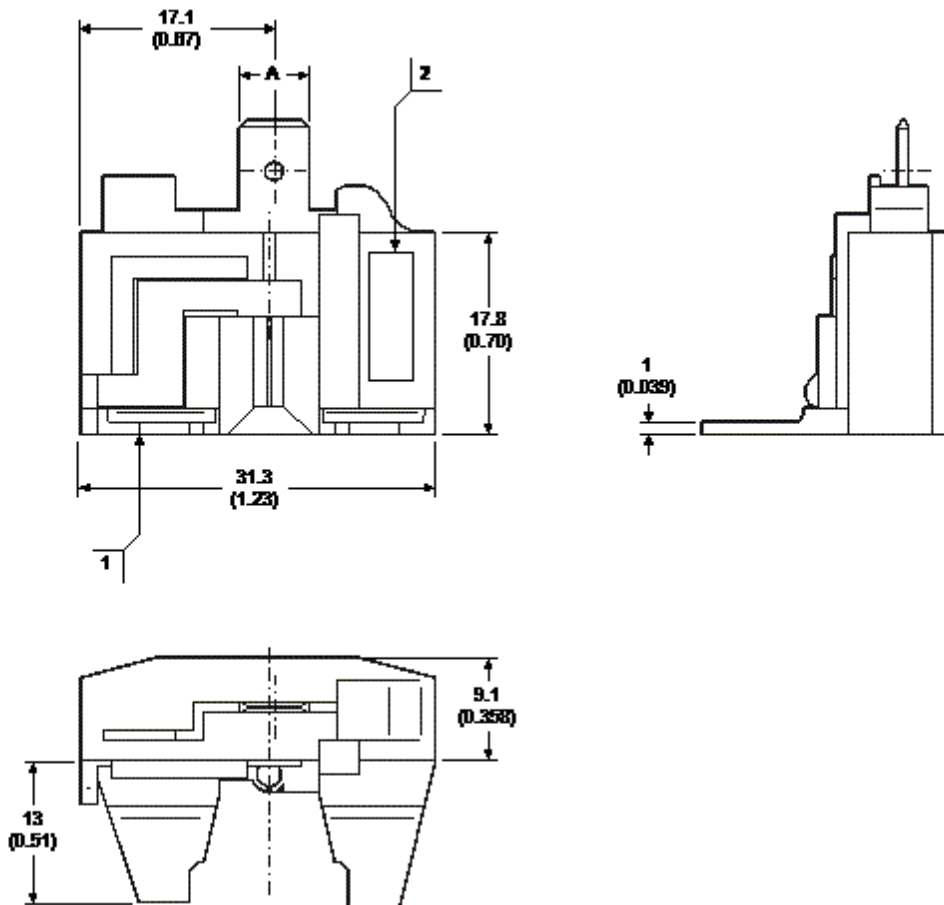




**Overload Protector**

Engineering Code	13634079
Vendor Code	5TM 757KFBYY-53
Opening Temperature	105°C (221°F)
Closing Temperature	61°C (141,8°F)
Triping Current at 25°C (77°F)	9,8 A
Reaction Time	5.0s - 15.0s
Terminal Size "A"	6.3 x 0.8 (0.250 x 0.03)
Dimensions	

The overload protectors are identified by the suppliers. Each thermal protector has its own distinct characteristics of opening temperature, closing temperature and trip current. 1 - Vendor number 2 - Overload protector model



**Electrical Components Cover**

Engineering Code	013555036
Material	Noryl NH7010
Material Class	5VA
Thickness	2 (0.008)
Dimensions	mm (inch)

