Compressor Technical Data

Model: EMI30HER

Code: 513307239

Description

Refrigerant:	R-134a	Displacement (cm³):	3
Voltage:	220-240 V 50-60 Hz 1 ~	Lubricant Type:	ISO10
Frequency (Hz):	50	Lubricant Charge (ml):	160
Application:	LBP	Motor Type:	RSIR-CSIR
HP:	1/10	Starting Torque:	LST
Efficiency:	3,84	Type of Test:	ASHRAE32
Capacity:	245,00		

Approval

IRAM

TUV

VDE

Data

External Features

	Shape	Material	Diameter (mm)
Suction Connector	Straight	Copper	6,50
Discharge Connector	Straight	Copper	4,94
Process Connector	Straight	Copper	6,50

Oil Cooler:	
Base Plate:	European Standard EG/F/AMEM Version 2
Tray Holder:	No
Weight (kg):	7,15

Application

Maximum ambient temperature (ºC):	43
Expansion device:	Capillary
Cooling:	Static
Air flow rate:	

Mechanical Data

Bill of materials:	513307239
Starting torque:	Low Starting Torque
Bore (mm):	19,00
Stroke (mm):	5,30
Weight (kg):	7,15

Electrical Data

Motor type:	RSIR-CSIR
Winding Resistance (25ºC) - Start:	27,80
Winding Resistance (25ºC) - Run:	41,20

Check Point - Condensing Temperature 54,4 ºC

Evaporating Temperature	Cooling Capacity			Power Consumption +/- 5%	Current Consumption +/-5%	Efficiency +/-7%		
(ºC)	(kcal/h)	(W)	(Btu/h)	(W)	(A)	(kcal/Wh)	(W/W)	(Btu/Wh)
-23,3	61	71	242	63	0,57	0,96	1,12	3,81

Condensing Temperature 45 ºC

Evaporating Temperature	Cooling Capacity			Power Consumption +/- 5%	Current Consumption +/-5%	Gas Flow Rate +/- 5%	Efficiency +/-7%		
(ºC)	(kcal/h)	(W)	(Btu/h)	(W)	(A)	(kg/h)	(kcal/Wh)	(W/W)	(Btu/Wh)
-35	28	32	109	45	0,52	0,62	0,62	0,72	2,44
-30	41	48	164	53	0,54	0,93	0,78	0,90	3,09
-25	62	72	245	61	0,56	1,39	1,02	1,18	4,03
-20	87	102	346	68	0,57	1,97	1,29	1,50	5,11
-15	117	136	464	75	0,59	2,65	1,56	1,82	6,21
-10	149	174	593	82	0,61	3,40	1,82	2,12	7,23

Condensing Temperature 55 ºC

Evaporating Temperature	Cooling Capacity			Power Consumption +/- 5%	Current Consumption +/-5%	Gas Flow Rate +/- 5%	Efficiency +/-7%		
(ºC)	(kcal/h)	(W)	(Btu/h)	(W)	(A)	(kg/h)	(kcal/Wh)	(W/W)	(Btu/Wh)
-35	19	22	76	42	0,52	0,43	0,45	0,52	1,79
-30	33	38	130	52	0,54	0,74	0,63	0,74	2,51
-25	52	61	208	61	0,56	1,18	0,87	1,01	3,44
-20	77	90	306	69	0,58	1,74	1,12	1,30	4,43
-15	105	122	417	78	0,60	2,38	1,36	1,58	5,38
-10	136	158	539	87	0,63	3,09	1,57	1,82	6,21

Condensing Temperature 65 ºC

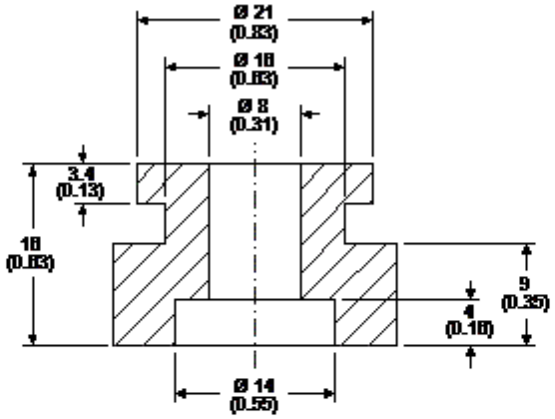
Evaporating Temperature	Cooling Capacity			Power Consumption +/- 5%	Current Consumption +/-5%	Gas Flow Rate +/- 5%	Efficiency +/-7%		
(ºC)	(kcal/h)	(W)	(Btu/h)	(W)	(A)	(kg/h)	(kcal/Wh)	(W/W)	(Btu/Wh)
-35	9	10	34	40	0,52	0,19	0,22	0,25	0,86
-30	22	26	88	50	0,54	0,50	0,45	0,52	1,77
-25	42	48	165	59	0,56	0,94	0,70	0,81	2,78
-20	65	76	259	69	0,58	1,47	0,95	1,10	3,76
-15	92	107	366	79	0,60	2,09	1,17	1,36	4,64
-10	121	141	480	90	0,63	2,75	1,35	1,57	5,37

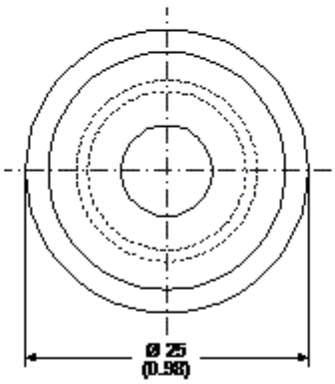
Dimensions

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.

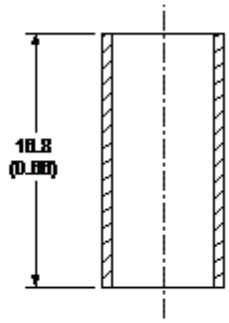


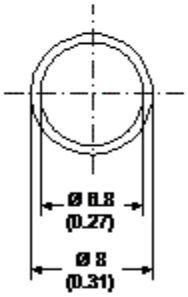


Metal Bushing

Engineering Code	13126755
Dimensions	mm (Inch)

As an optional assembly accessory, Embraco can supply metal bushings, the purpose os 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 chromatized zinc.



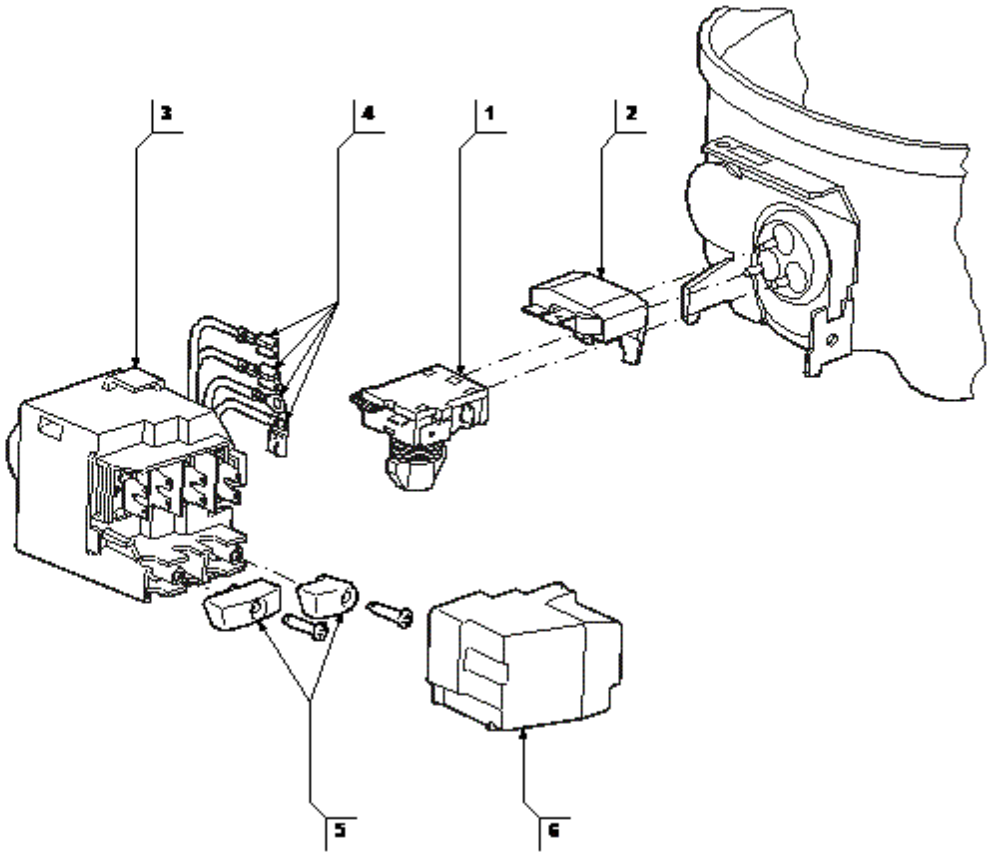


Accessories

Starting Device

Assembly Engineering Code	519109067
Starting Device - Relay	Starting Device - Relay
Overload Protector	13634505
Electrical Components Cover	

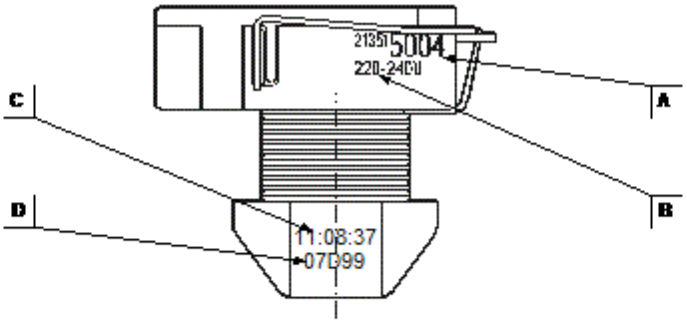
Note: 1 - Starting device - Relay 2 - Overload protector 3 - Terminal board 4 - Internal wiring 5 - Cord anchorages 6 - Terminals cover

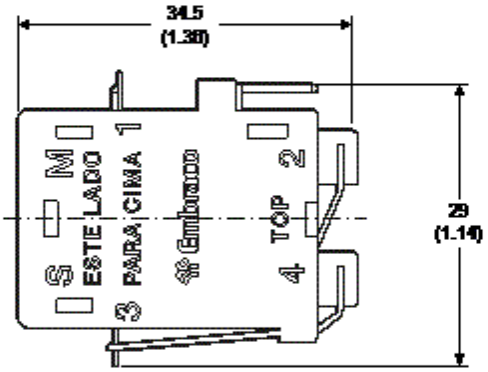


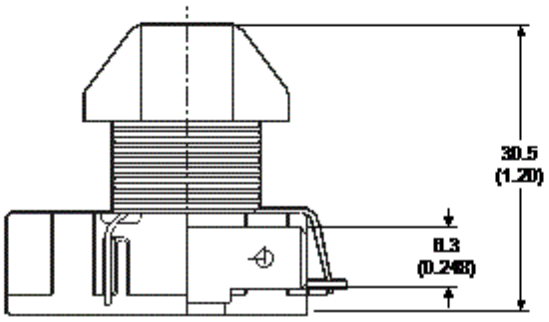
Starting Device - Relay

Engineering Code	213514000
Pick Up Current (A)	1,88
Drop-Out Current (A)	1,45
Terminal Size "E"	6.3 x 0.8 (0.250 x 0.03)
Dimensions	mm (Inch)

Note: A - Subassembly code. B - Voltage. C - Manufacturing time. D - Manufacturing date (Example: 03C99 - MARCH 03, 1999) Type: Electromagnetic. Materials: Body - Bakelite. Contacts: Silver. Cooper wire: B class (130°C/266°F). Manufacturer: Embraco. Application: Starting capacitor (Optional)







Overload Protector

Engineering Code	13634505
Vendor Code	4TM189KFBYY-53
Opening Temperature	105°C (221°F)
Closing Temperature	61°C (141,8°F)
Triping Current at 25ºC (77ºF)	5,6 A
Reaction Time	5.0s - 15.0s
Terminal Size "A"	6.3 x 0.8 (0.250 x 0.03)
Dimensions	mm (Inch)

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 number2 - Overload protector model