

Compressor Technical Data

Model: EGAS80HLR

Code: 513701024

Description

Refrigerant:	R-134a	Displacement (cm ³):	6,36
Voltage:	220-240 V 50-60 Hz 1 ~	Lubricant Type:	ISO10
Frequency (Hz):	50	Lubricant Charge (ml):	230
Application:	LBP	Motor Type:	RSIR-CSIR
HP:	1/4+	Starting Torque:	LST
Efficiency:	5,20	Type of Test:	ASHRAE32
Capacity:	665,00		

Approval

IRAM

TUV

VDE

Data

External Features

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

Oil Cooler:	
Base Plate:	Universal EG/F/AMEM version 2
Tray Holder:	No
Weight (kg):	9,92

Application

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

Mechanical Data

Bill of materials:	513701024
Starting torque:	Low Starting Torque
Bore (mm):	22,50
Stroke (mm):	8,00
Weight (kg):	9,92

Electrical Data

Motor type:	RSIR-CSIR
Winding Resistance (25°C) - Start:	10,90
Winding Resistance (25°C) - Run:	38,20

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	168	195	666	128	1,07	1,31	1,53	5,21

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	82	95	324	84	0,70	1,83	0,97	1,13	3,85
-30	123	143	488	103	0,86	2,77	1,19	1,39	4,74
-25	168	196	667	122	1,01	3,79	1,38	1,61	5,49
-20	219	255	871	140	1,16	4,95	1,57	1,83	6,23
-15	279	324	1.107	157	1,30	6,32	1,77	2,06	7,04
-10	349	406	1.386	174	1,44	7,94	2,01	2,34	7,97

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	66	77	262	75	0,63	1,48	0,88	1,02	3,49
-30	106	123	419	97	0,82	2,38	1,09	1,26	4,31
-25	150	175	595	120	1,01	3,38	1,25	1,45	4,96
-20	202	235	800	143	1,20	4,56	1,41	1,64	5,59
-15	263	306	1.043	167	1,39	5,95	1,58	1,83	6,25
-10	336	390	1.332	190	1,58	7,63	1,76	2,05	7,00

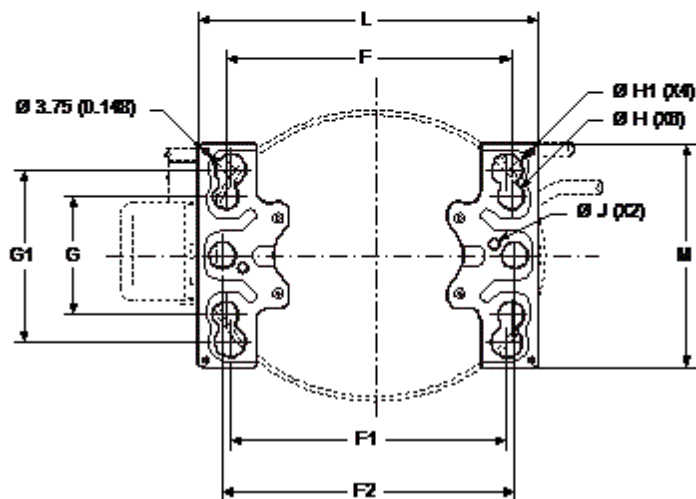
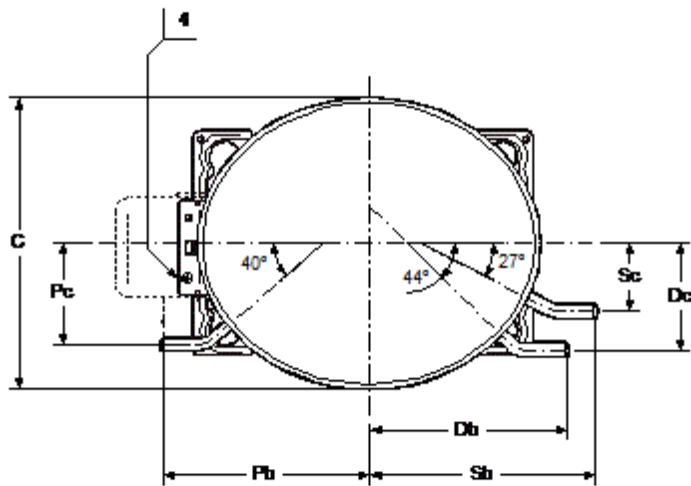
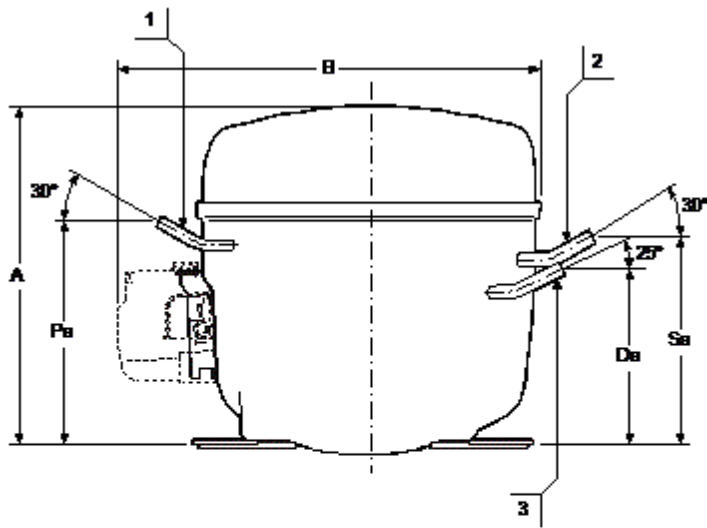
Condensing Temperature 65 °C

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	51	59	201	69	0,58	1,14	0,74	0,86	2,92
-30	87	101	345	93	0,78	1,96	0,94	1,09	3,72
-25	129	150	513	118	0,99	2,91	1,10	1,27	4,35
-20	180	209	714	145	1,21	4,06	1,24	1,45	4,94
-15	241	280	957	173	1,43	5,46	1,40	1,63	5,55
-10	315	366	1.250	201	1,66	7,16	1,57	1,82	6,21

Dimensions

Compressor Housing

	mm	inch		mm	inch		mm	inch		mm	inch
A	195,00	7,68	Rb	---	---	Sa	118,00	4,65	Rc	---	---
B	251,00	9,88	F	178,00	7,01	Pa	126,00	4,96	G1	1.016,00	40,00
C	173,00	6,81	G	70,00	2,76	Da	98,00	3,86	F2	170,00	6,69
E	---	---	F1	165,00	6,50	Ra	---	---	N	---	---
Sb	132,00	5,20	T	---	---	Sc	40,00	1,57	L	203,00	7,99
Pb	125,00	4,92	M	1.315,00	51,77	Pc	60,00	2,36	H	16,00	0,63
Db	115,00	4,53	J	7,00	0,28	Dc	63,00	2,48	H1	19,00	0,75

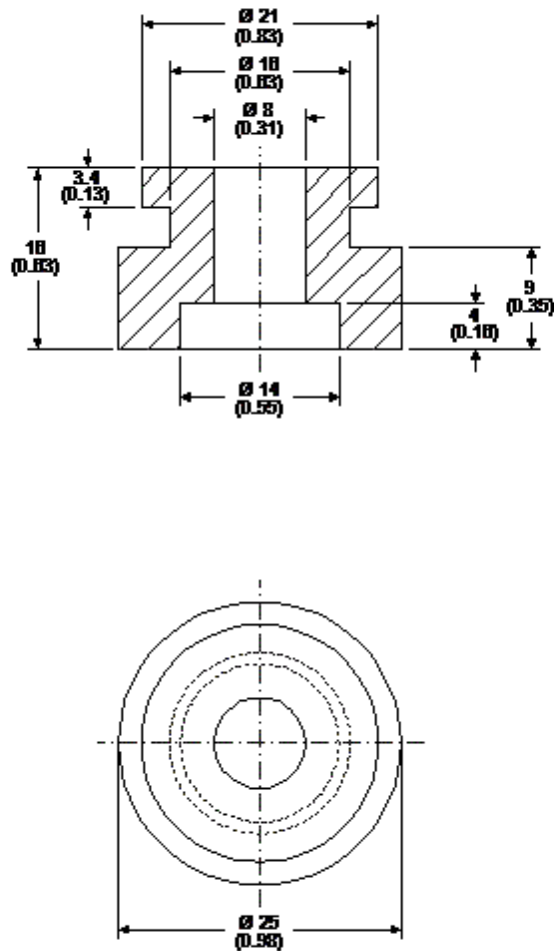


1 - Process Connector 2 - Suction Connector 3 - Discharge Connector 4 - Earthing Terminal 6 - Tray Hold

Rubber Grommet

Engineering Code	13146411
Dimensions	mm (Inch)

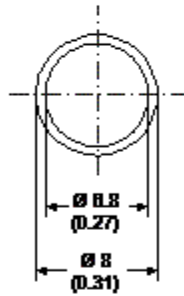
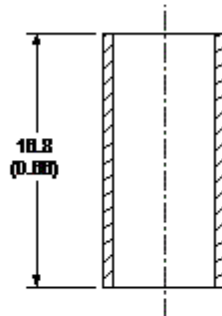
The grommets are made of special rubber and used in the nut and bolt type or in the snap on type assembly. The rummer grommet, the dimensions of which are shown in the figure below, was developed for installation in compressors with 16 and 19 mm diameters holes in the base plate.



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.

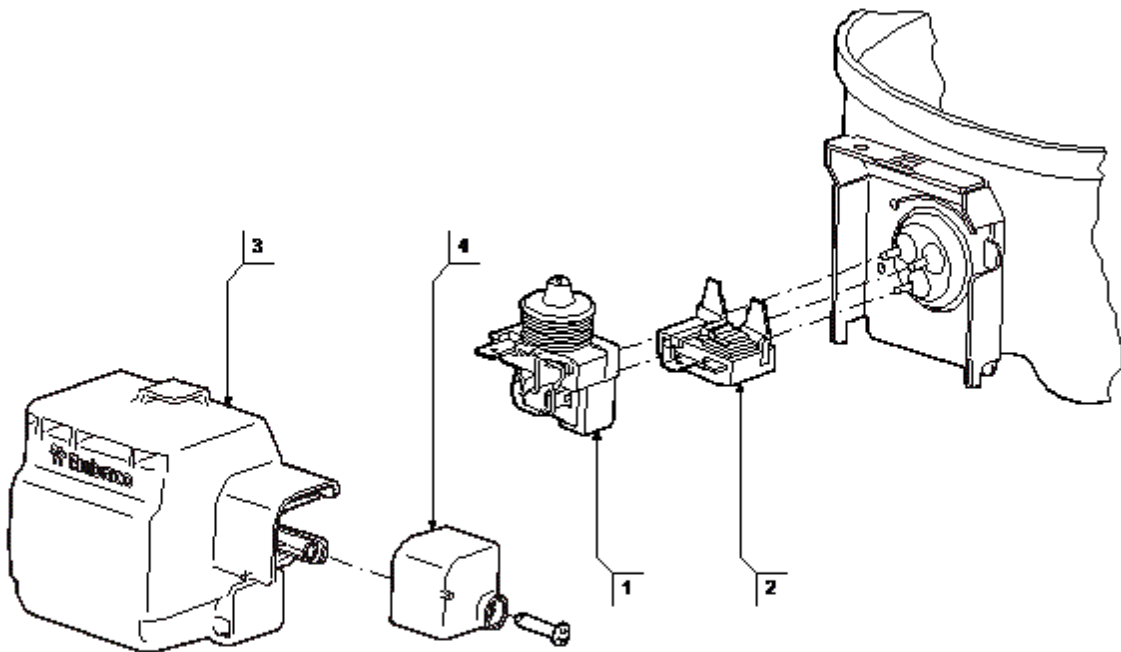


Accessories

Starting Device

Assembly Engineering Code	513506312
Starting Device - Relay	Starting Device - Relay
Overload Protector	13634351
Electrical Components Cover	13555007

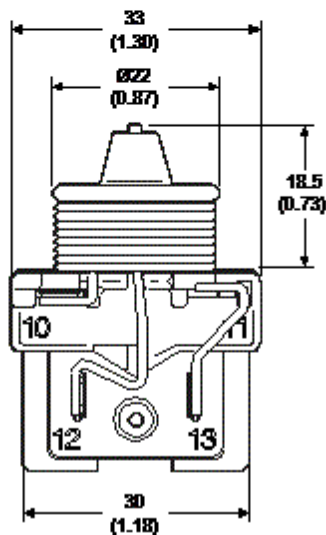
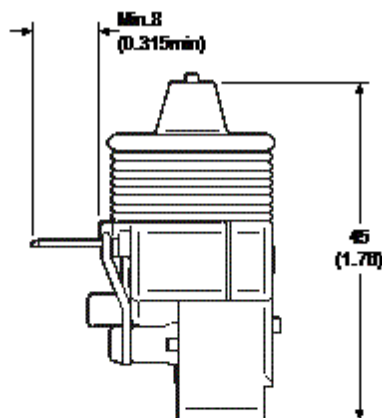
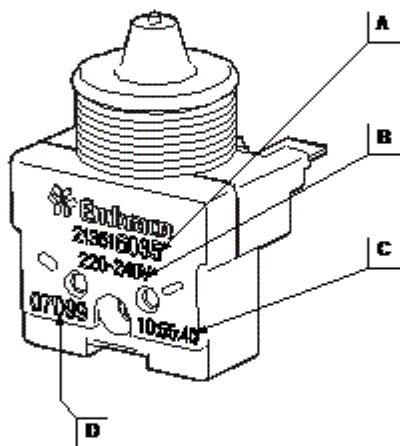
Note: 1 - Starting device - Relay 2 - Overload protector 3 - Electrical components cover 4 - Cord relief



Starting Device - Relay

Engineering Code	213516493
Pick Up Current (A)	4,9
Drop-Out Current (A)	3,7
Terminal Size "E"	6.3 x 0.8 (0.250 x 0.03)
Dimensions	mm (Inch)

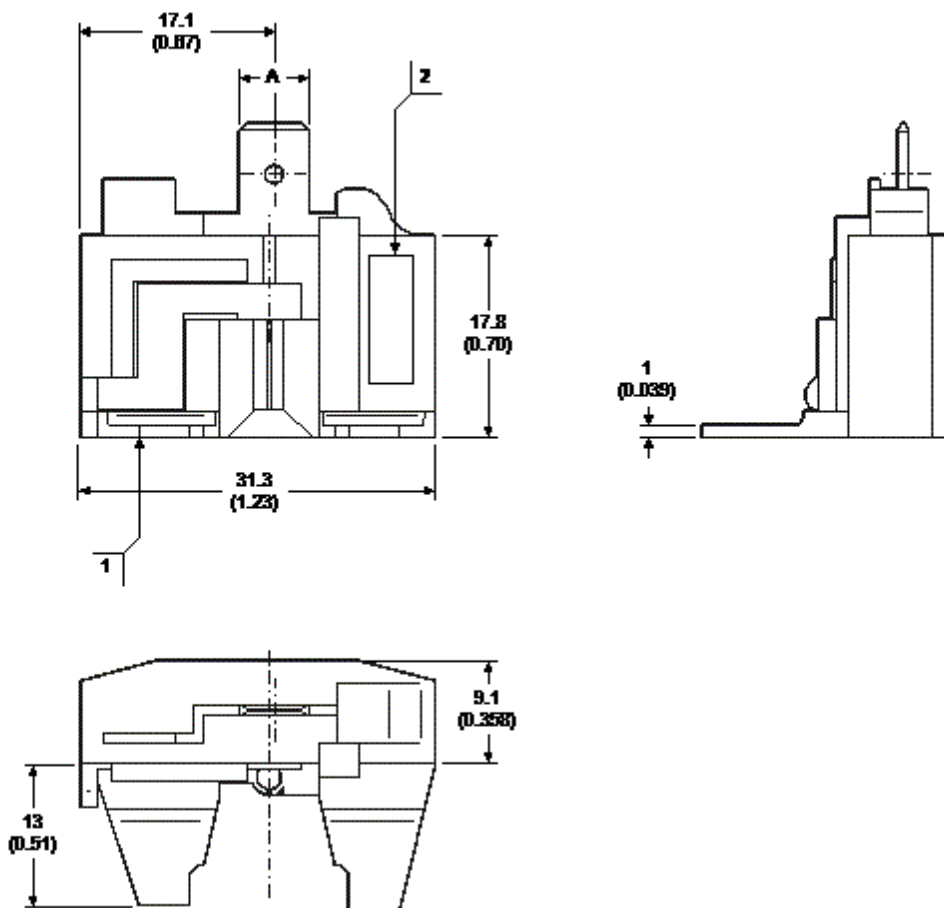
Note: A - Subassembly code. B - Voltage. C - Manufacturing time. D - Manufacturing date (Example: 03C99 - MARCH 03, 1999)
 Type: Electromagnetic. Materials: Body - Bakelite. Contacts: Silver.
 Cooper wire: B class (130°C/266°F).
 Manufacturer: Embraco. Application: Starting capacitor (Optional)



Overload Protector

Engineering Code	13634351
Vendor Code	4TM743KFBYY-53
Opening Temperature	105°C (221°F)
Closing Temperature	61°C (141,8°F)
Triping Current at 25°C (77°F)	9,3 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 number 2 - Overload protector model



Electrical Components Cover

Engineering Code	013555007
Material	Technyl A205F
Material Class	V - 2
Thickness	1.8 (0.07)
Dimensions	mm (inch)

