

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **GL80MG**
Voltage **230V 50/60Hz ~1**
Refrigerant **R134a**

APPLICATION

Application High Back Pressure
Refrigerant R134a
Evaporating Temp. -15,0 °C to 10,0 °C
Expansion Capillar/Valve
Comp. Cooling Static
Max. ambient temp. 43,0 °C
Compatible refriger. R1234yf

COMPRESSOR

Displacement 7,57 cm³
Diameter 25,40 mm
Stroke 14,92 mm
Net Weight 9,53 Kg
Oil type ISO VG 32 ESTER
Oil charge 295 cm³

MOTOR

Nominal Power 1/5 hp
Voltage/Frequency 230V 60Hz
Voltage range 196-253 V
Type CSIR
Phase number 1 PH
Locked Rotor Amps (LRA) 13,00 A
Max. Cont. Current (MCC) 3,30 A
Main W. resist. at 25°C 8,50 Ω
Start W. resist. at 25°C 33,20 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	702 kCal/h	674 W
COP	2,15 W/W	1,84 W/W
EER	1,85 kCal/Wh	1,59 kCal/Wh
Input Power	380 W	366 W
Current	2,10 A	2,04 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (C)
Evaporating temp. (T _e)	7,2 °C	5,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	46,0 °C	55,0 °C
Ambient temp. (T _{amb.})	35,0 °C	32,0 °C
Suction temp. (T _{suction})	35,0 °C	32,0 °C
Voltage/Frequency	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Relay	Option 1			
Reference	2014 135.			
Pick-Up	5,80 A			
Drop-Out	4,95 A			
Protector	Option 1			
Reference	T0170			
Current	11,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	120,00 / 69,00 °C			

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ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	425	230	1,62	2,15	1,85
40	-10	476	240	1,64	2,30	1,98
40	-5	557	256	1,68	2,53	2,17
40	0	668	278	1,73	2,79	2,40
40	5	809	306	1,82	3,07	2,64
40	7,2	880	320	1,86	3,20	2,75
40	10	979	340	1,94	3,35	2,88

45	-15	392	242	1,64	1,88	1,62
45	-10	437	254	1,67	2,00	1,72
45	-5	512	272	1,72	2,19	1,88
45	0	617	295	1,79	2,43	2,09
45	5	752	325	1,88	2,69	2,31
45	7,2	821	340	1,94	2,81	2,41
45	10	917	361	2,02	2,96	2,54

50	-15	358	253	1,67	1,65	1,41
50	-10	398	267	1,71	1,73	1,49
50	-5	467	287	1,76	1,89	1,63
50	0	566	313	1,84	2,10	1,81
50	5	695	344	1,95	2,35	2,02
50	7,2	761	360	2,02	2,46	2,11
50	10	854	382	2,11	2,60	2,24

55	-15	325	265	1,70	1,43	1,23
55	-10	358	281	1,74	1,48	1,28
55	-5	422	302	1,81	1,62	1,39
55	0	515	330	1,90	1,82	1,56
55	5	638	363	2,03	2,04	1,76
55	7,2	702	380	2,10	2,15	1,85
55	10	792	403	2,20	2,29	1,97

60	-15	292	277	1,73	1,23	1,05
60	-10	319	294	1,78	1,26	1,08
60	-5	377	318	1,86	1,38	1,18
60	0	464	347	1,96	1,55	1,34
60	5	582	383	2,11	1,77	1,52
60	7,2	643	400	2,19	1,87	1,61
60	10	729	424	2,31	2,00	1,72

65	-15	258	288	1,76	1,04	0,90
65	-10	280	308	1,82	1,06	0,91
65	-5	332	333	1,91	1,16	0,99
65	0	413	365	2,03	1,32	1,13
65	5	525	402	2,20	1,52	1,31
65	7,2	583	420	2,29	1,62	1,39
65	10	666	445	2,42	1,74	1,50

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	458	231	1,62	1,98	1,71
40	-10	514	241	1,64	2,13	1,84
40	-5	601	258	1,68	2,33	2,02
40	0	720	280	1,74	2,57	2,22
40	5	871	308	1,82	2,83	2,44
40	7,2	947	322	1,87	2,94	2,54
40	10	1.053	342	1,94	3,08	2,66

45	-15	420	243	1,65	1,73	1,49
45	-10	469	255	1,68	1,84	1,59
45	-5	549	273	1,72	2,01	1,74
45	0	662	297	1,79	2,23	1,92
45	5	805	327	1,89	2,46	2,13
45	7,2	878	342	1,95	2,57	2,22
45	10	981	363	2,03	2,70	2,33

50	-15	382	255	1,67	1,50	1,29
50	-10	424	269	1,71	1,58	1,36
50	-5	498	289	1,77	1,72	1,49
50	0	603	315	1,85	1,92	1,66
50	5	740	346	1,96	2,14	1,84
50	7,2	810	362	2,02	2,24	1,93
50	10	908	384	2,12	2,36	2,04

55	-15	344	266	1,70	1,29	1,11
55	-10	379	282	1,75	1,34	1,16
55	-5	446	304	1,81	1,47	1,27
55	0	544	332	1,91	1,64	1,42
55	5	674	366	2,04	1,84	1,59
55	7,2	741	382	2,11	1,94	1,67
55	10	836	405	2,22	2,06	1,78

60	-15	306	278	1,74	1,10	0,95
60	-10	334	296	1,79	1,13	0,98
60	-5	394	320	1,86	1,23	1,07
60	0	486	349	1,97	1,39	1,20
60	5	609	385	2,12	1,58	1,37
60	7,2	673	403	2,20	1,67	1,44
60	10	763	427	2,32	1,79	1,55

65	-15	268	290	1,77	0,92	0,80
65	-10	289	310	1,83	0,93	0,81
65	-5	342	335	1,92	1,02	0,88
65	0	427	367	2,04	1,16	1,01
65	5	543	404	2,21	1,34	1,16
65	7,2	604	423	2,30	1,43	1,24
65	10	691	448	2,44	1,54	1,33

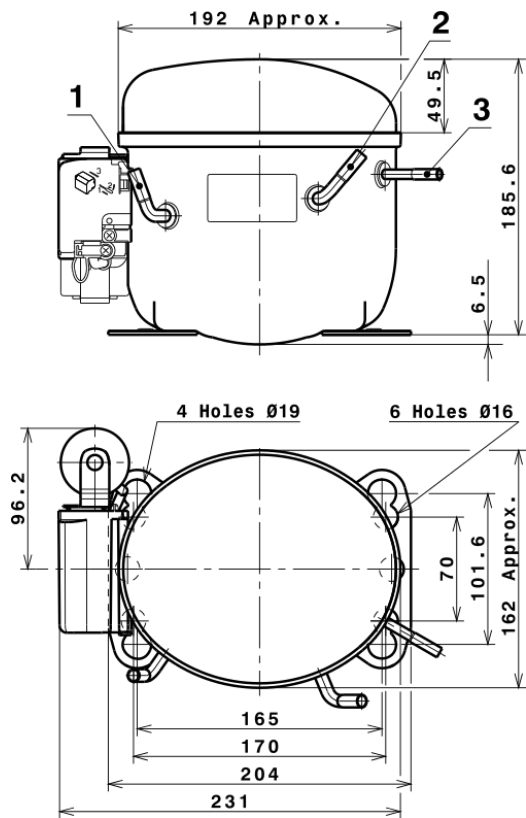
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.190,8084136420	143,9880293805	1,2039570072	20,46809284546
2	38,1505302542	2,0960367880	-0,0025697694	0,72516561797774
3	-11,9992333566	3,5750857153	0,0133665013	-0,1183786321329
4	0,6193311323	0,1247806918	0,0007203179	0,017420105015544
5	-0,2871714650	0,0782801969	0,0005086760	-0,001984014739882

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Technical Data Sheet

COMPRESSOR DIMENSIONS

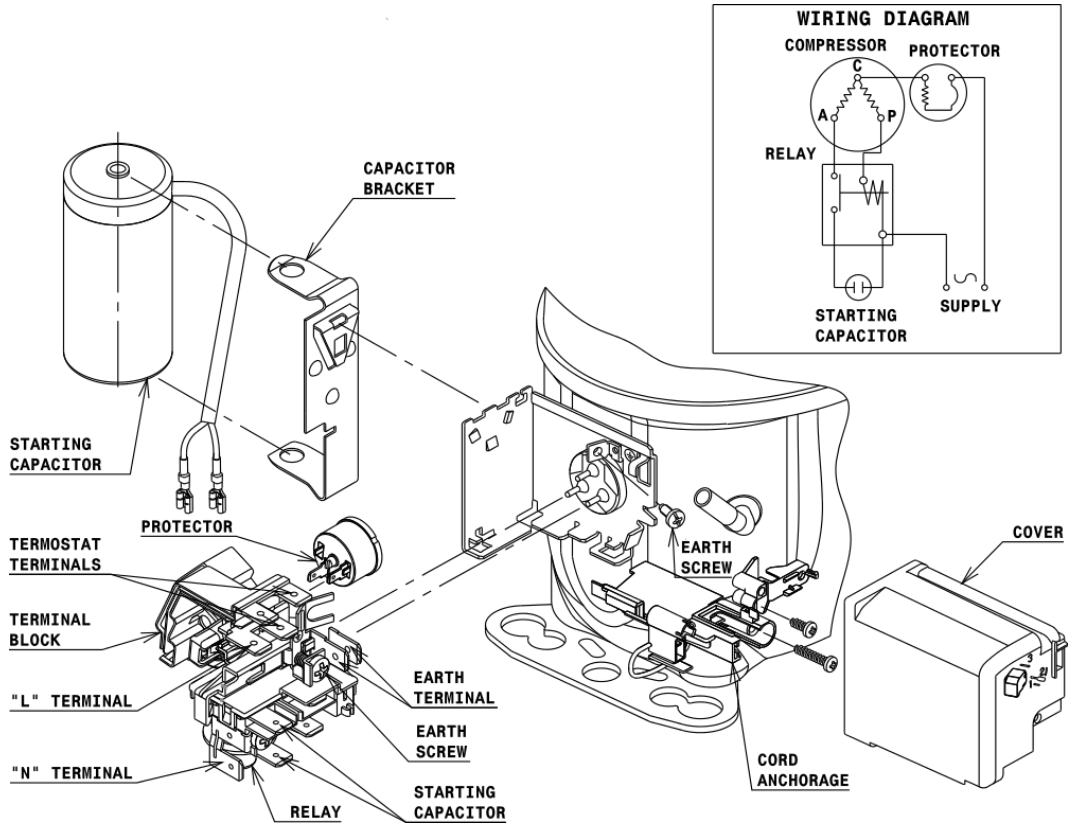


DESIGNATION INTERNAL DIAM.

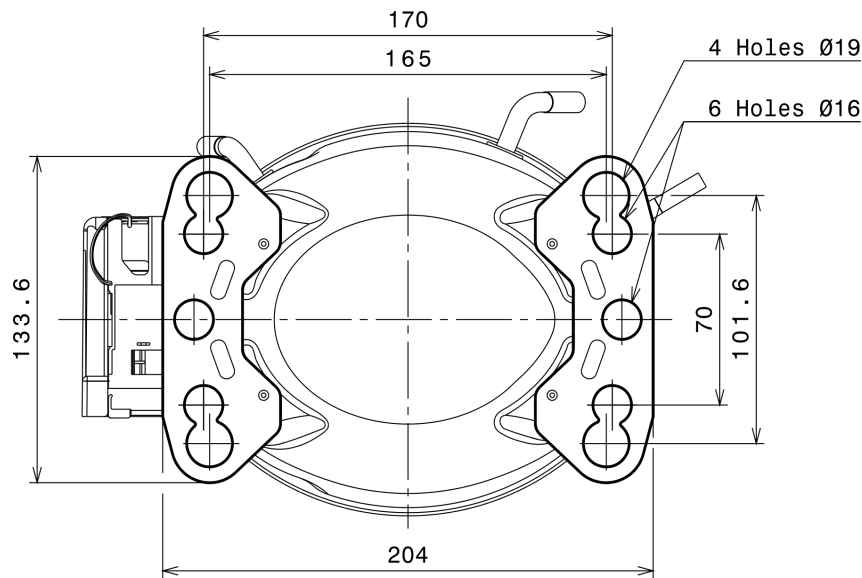
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



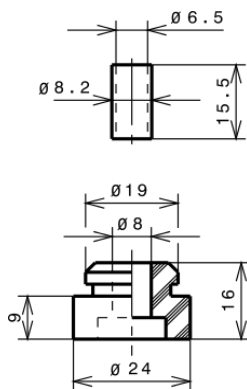
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

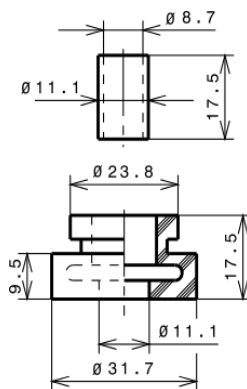
STANDARD

Ø16 holes (170x70 net)



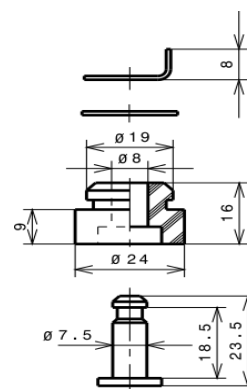
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HBP

