

# Technical Data Sheet

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 cm<sup>3</sup>  
 Diameter 25,40 mm  
 Stroke 14,92 mm  
 Net Weight 9,53 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 300 cm<sup>3</sup>

## MOTOR

Nominal Power 1/5 hp  
 Voltage/Frequency 230V 50Hz  
 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	600 kCal/h	576 W
COP	2,10 W/W	1,78 W/W
EER	1,80 kCal/Wh	1,54 kCal/Wh
Input Power	333 W	324 W
Current	2,28 A	2,26 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	230 V 50 Hz	230 V 50 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			

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	147	181	1,96	0,94	0,81
40	-10	241	198	1,99	1,41	1,21
40	-5	359	219	2,03	1,91	1,64
40	0	502	244	2,08	2,40	2,06
40	5	670	272	2,14	2,87	2,47
40	7,2	751	285	2,17	3,06	2,64
40	10	862	303	2,21	3,31	2,84

45	-15	188	206	2,00	1,06	0,91
45	-10	261	221	2,03	1,38	1,18
45	-5	359	240	2,07	1,74	1,50
45	0	481	262	2,12	2,13	1,83
45	5	628	288	2,17	2,53	2,18
45	7,2	701	301	2,20	2,71	2,33
45	10	800	318	2,24	2,92	2,51

50	-15	229	230	2,05	1,16	0,99
50	-10	282	244	2,08	1,34	1,16
50	-5	359	261	2,11	1,60	1,38
50	0	461	281	2,16	1,91	1,64
50	5	587	305	2,21	2,24	1,92
50	7,2	650	317	2,24	2,39	2,05
50	10	738	333	2,28	2,58	2,22

55	-15	270	255	2,10	1,23	1,06
55	-10	302	266	2,12	1,32	1,13
55	-5	359	281	2,16	1,48	1,27
55	0	440	300	2,20	1,71	1,47
55	5	546	322	2,25	1,97	1,69
55	7,2	600	333	2,28	2,10	1,80
55	10	676	348	2,32	2,26	1,94

60	-15	311	280	2,15	1,29	1,11
60	-10	323	289	2,17	1,30	1,12
60	-5	359	302	2,21	1,38	1,19
60	0	419	319	2,24	1,53	1,32
60	5	504	339	2,30	1,73	1,49
60	7,2	550	349	2,32	1,83	1,57
60	10	614	363	2,36	1,97	1,69

65	-15	352	304	2,21	1,35	1,16
65	-10	343	312	2,23	1,28	1,10
65	-5	359	323	2,26	1,29	1,11
65	0	399	338	2,29	1,37	1,18
65	5	463	356	2,34	1,51	1,30
65	7,2	499	365	2,36	1,59	1,37
65	10	552	378	2,40	1,70	1,46

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	158	182	1,96	0,87	0,75
40	-10	260	199	1,99	1,31	1,13
40	-5	388	220	2,03	1,76	1,52
40	0	542	245	2,08	2,21	1,91
40	5	721	273	2,14	2,64	2,28
40	7,2	808	287	2,17	2,82	2,43
40	10	926	305	2,21	3,04	2,62

45	-15	201	207	2,00	0,97	0,84
45	-10	280	222	2,03	1,26	1,09
45	-5	385	241	2,07	1,60	1,38
45	0	516	264	2,12	1,96	1,69
45	5	673	290	2,18	2,32	2,00
45	7,2	750	303	2,21	2,48	2,14
45	10	855	320	2,25	2,67	2,31

50	-15	243	232	2,05	1,05	0,91
50	-10	300	245	2,08	1,22	1,06
50	-5	382	262	2,12	1,46	1,26
50	0	491	283	2,16	1,73	1,50
50	5	625	307	2,22	2,03	1,76
50	7,2	692	319	2,25	2,17	1,87
50	10	785	335	2,29	2,34	2,02

55	-15	286	256	2,10	1,11	0,96
55	-10	320	268	2,13	1,19	1,03
55	-5	379	283	2,16	1,34	1,16
55	0	465	302	2,20	1,54	1,33
55	5	576	324	2,26	1,78	1,54
55	7,2	634	335	2,29	1,89	1,63
55	10	714	350	2,32	2,04	1,76

60	-15	328	281	2,16	1,17	1,01
60	-10	339	291	2,18	1,17	1,01
60	-5	376	304	2,21	1,24	1,07
60	0	439	321	2,25	1,37	1,18
60	5	528	341	2,30	1,55	1,34
60	7,2	576	351	2,33	1,64	1,42
60	10	643	365	2,36	1,76	1,52

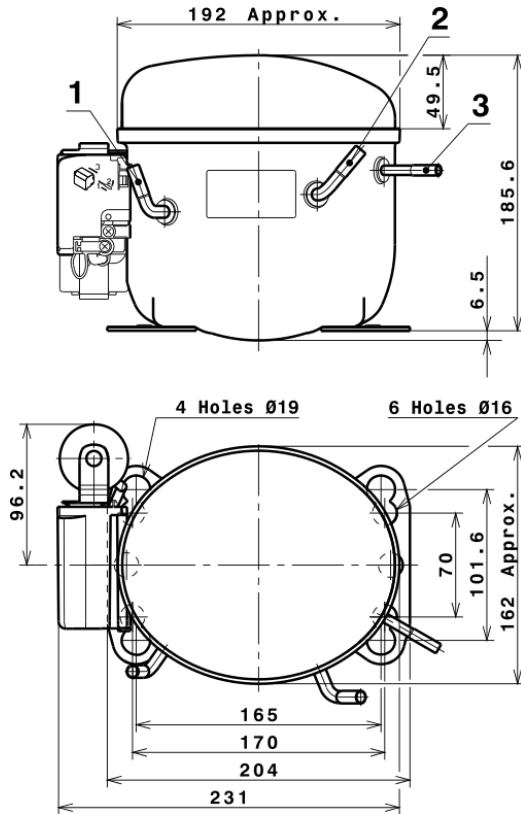
65	-15	370	306	2,21	1,21	1,05
65	-10	359	314	2,23	1,15	0,99
65	-5	374	325	2,26	1,15	0,99
65	0	414	340	2,30	1,22	1,05
65	5	480	358	2,34	1,34	1,16
65	7,2	517	367	2,37	1,41	1,22
65	10	572	380	2,40	1,50	1,30

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	751,7185839874	96,0623902664	1,7462131318	11,637243496635
2	69,1074453697	8,6699161163	0,0148942361	1,4234085928652
3	-5,4213880311	3,8834564369	0,0086655121	0,005225685917711
4	0,5069091473	0,0763563206	0,0002195073	0,014311224577966
5	-0,9057031421	-0,0795130459	-0,0000810833	-0,016219478273426

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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## COMPRESSOR DIMENSIONS

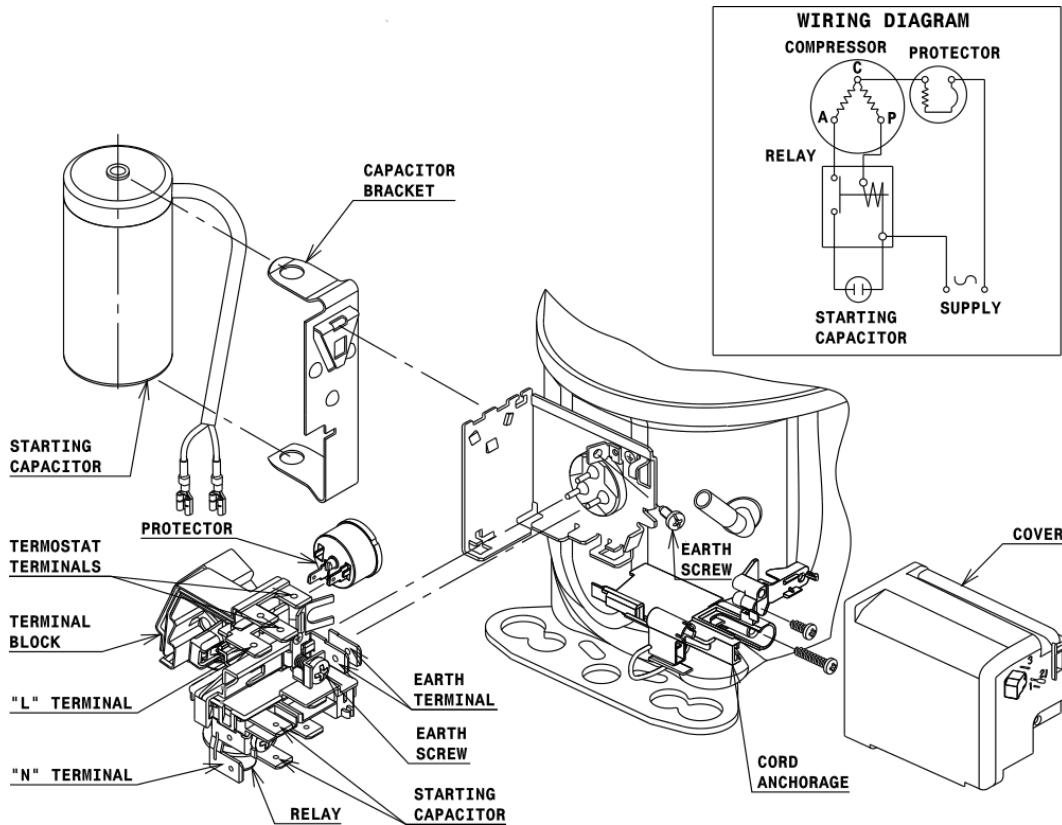


## DESIGNATION INTERNAL DIAM.

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

$\varnothing 16$  holes (170x70 net)



### AMERICAN FEET

$\varnothing 19$  holes (165x101.6 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R134a HBP

