

Technical Data Sheet

Compressor model **GL90MG**
 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 8,85 cm³
 Diameter 25,40 mm
 Stroke 17,47 mm
 Net Weight 10,61 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 300 cm³

MOTOR

Nominal Power 1/4 hp
 Voltage/Frequency 230V 60Hz
 Voltage range 196-253 V
 Type CSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 14,50 A
 Max. Cont. Current (MCC) 3,60 A
 Main W. resist. at 25°C 7,80 Ω
 Start W. resist. at 25°C 20,90 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	800 kCal/h	772 W
COP	2,11 W/W	1,83 W/W
EER	1,82 kCal/Wh	1,58 kCal/Wh
Input Power	440 W	423 W
Current	2,45 A	2,38 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 145.			
Pick-Up	7,10 A			
Drop-Out	6,00 A			
Protector	Option 1	Option 2		
Reference	MRT36AIN	T0134		
Current	16,60 A	16,00 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	120,00 / 69,00 °C	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	485	275	1,78	2,05	1,76
40	-10	548	286	1,83	2,23	1,92
40	-5	641	304	1,90	2,45	2,11
40	0	764	330	2,00	2,70	2,32
40	5	918	363	2,13	2,94	2,53
40	7,2	995	380	2,20	3,05	2,62
40	10	1.102	404	2,30	3,17	2,73

45	-15	447	285	1,82	1,82	1,57
45	-10	503	298	1,87	1,96	1,69
45	-5	590	318	1,95	2,16	1,85
45	0	708	346	2,06	2,38	2,04
45	5	855	382	2,21	2,60	2,24
45	7,2	930	400	2,28	2,70	2,33
45	10	1.033	425	2,39	2,83	2,43

50	-15	408	295	1,86	1,61	1,38
50	-10	459	310	1,92	1,72	1,48
50	-5	540	333	2,01	1,89	1,62
50	0	651	363	2,13	2,09	1,79
50	5	793	401	2,29	2,30	1,98
50	7,2	865	420	2,37	2,40	2,06
50	10	965	446	2,48	2,52	2,16

55	-15	370	305	1,90	1,41	1,21
55	-10	415	322	1,97	1,50	1,29
55	-5	490	347	2,07	1,64	1,41
55	0	595	380	2,20	1,82	1,57
55	5	731	420	2,37	2,02	1,74
55	7,2	800	440	2,45	2,11	1,82
55	10	897	468	2,57	2,23	1,92

60	-15	332	315	1,94	1,22	1,05
60	-10	370	335	2,02	1,29	1,11
60	-5	439	362	2,13	1,41	1,21
60	0	539	397	2,27	1,58	1,36
60	5	668	439	2,45	1,77	1,52
60	7,2	735	460	2,54	1,86	1,60
60	10	828	489	2,66	1,97	1,69

65	-15	293	325	1,98	1,05	0,90
65	-10	326	347	2,07	1,09	0,94
65	-5	389	377	2,19	1,20	1,03
65	0	482	414	2,34	1,36	1,17
65	5	606	458	2,53	1,54	1,32
65	7,2	670	480	2,62	1,62	1,40
65	10	760	510	2,75	1,73	1,49

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	522	277	1,79	1,89	1,63
40	-10	591	287	1,83	2,06	1,78
40	-5	691	306	1,90	2,26	1,95
40	0	824	332	2,01	2,48	2,15
40	5	988	365	2,14	2,71	2,34
40	7,2	1.071	382	2,21	2,80	2,42
40	10	1.185	406	2,31	2,91	2,52

45	-15	479	287	1,83	1,67	1,44
45	-10	540	300	1,88	1,80	1,56
45	-5	634	320	1,96	1,98	1,71
45	0	759	349	2,07	2,18	1,88
45	5	916	384	2,22	2,38	2,06
45	7,2	996	403	2,29	2,47	2,14
45	10	1.105	428	2,40	2,58	2,23

50	-15	435	297	1,87	1,47	1,27
50	-10	489	312	1,93	1,57	1,36
50	-5	576	335	2,02	1,72	1,48
50	0	694	365	2,14	1,90	1,64
50	5	844	404	2,30	2,09	1,81
50	7,2	920	423	2,38	2,18	1,88
50	10	1.026	449	2,49	2,28	1,97

55	-15	391	307	1,91	1,28	1,10
55	-10	439	324	1,98	1,35	1,17
55	-5	518	350	2,08	1,48	1,28
55	0	629	382	2,21	1,64	1,42
55	5	772	423	2,38	1,83	1,58
55	7,2	845	443	2,46	1,91	1,65
55	10	947	471	2,58	2,01	1,74

60	-15	348	317	1,95	1,10	0,95
60	-10	388	337	2,02	1,15	1,00
60	-5	460	364	2,14	1,26	1,09
60	0	564	399	2,28	1,41	1,22
60	5	700	442	2,46	1,58	1,37
60	7,2	770	463	2,55	1,66	1,44
60	10	868	492	2,67	1,76	1,52

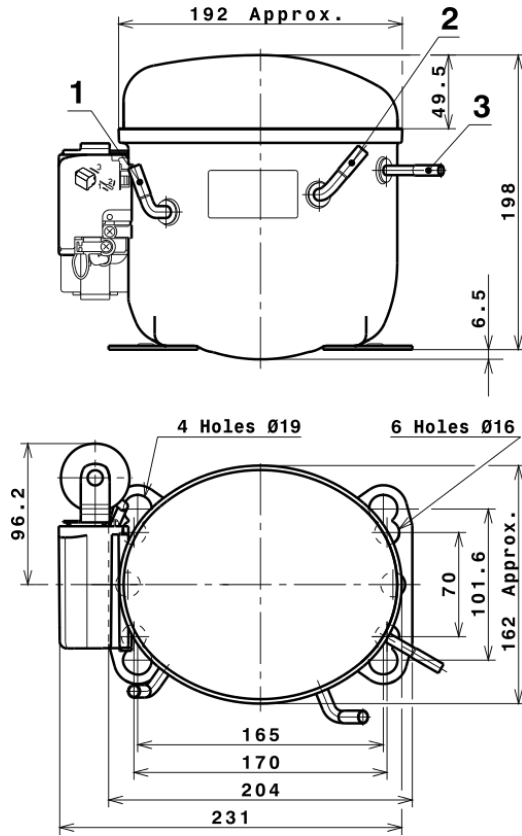
65	-15	304	327	1,99	0,93	0,80
65	-10	337	349	2,07	0,97	0,83
65	-5	402	379	2,19	1,06	0,92
65	0	499	416	2,35	1,20	1,04
65	5	628	461	2,54	1,36	1,18
65	7,2	694	483	2,64	1,44	1,24
65	10	788	513	2,77	1,54	1,33

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.346,0393601011	201,7148580547	1,4611406796	23,10514197321
2	41,3237633848	2,4549796311	0,0084264472	0,77517156800012
3	-13,3223010037	3,4638479039	0,0143469441	-0,12690462876272
4	0,6272845018	0,1589112830	0,0007086282	0,01778844655845
5	-0,2989433417	0,0937298929	0,0004226301	-0,0016141523106247

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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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

$\varnothing 16$ holes (170x70 net)



AMERICAN FEET

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



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a HBP

