

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 50Hz
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	685 kCal/h	661 W
COP	2,10 W/W	1,79 W/W
EER	1,80 kCal/Wh	1,55 kCal/Wh
Input Power	380 W	369 W
Current	2,55 A	2,52 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 50 Hz	230 V 50 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	410	255	2,21	1,87	1,61
40	-10	467	263	2,24	2,06	1,77
40	-5	548	276	2,27	2,31	1,98
40	0	654	293	2,32	2,59	2,23
40	5	785	314	2,38	2,90	2,50
40	7,2	850	325	2,41	3,04	2,62
40	10	940	340	2,45	3,22	2,77

45	-15	377	265	2,24	1,65	1,42
45	-10	428	275	2,27	1,81	1,56
45	-5	505	290	2,31	2,03	1,74
45	0	606	309	2,37	2,28	1,96
45	5	732	332	2,43	2,56	2,21
45	7,2	795	343	2,46	2,69	2,32
45	10	882	359	2,50	2,86	2,46

50	-15	343	275	2,27	1,45	1,25
50	-10	390	287	2,31	1,58	1,36
50	-5	462	304	2,35	1,77	1,52
50	0	558	324	2,41	2,00	1,72
50	5	679	349	2,47	2,26	1,94
50	7,2	740	362	2,51	2,38	2,05
50	10	825	379	2,55	2,53	2,18

55	-15	310	285	2,30	1,27	1,09
55	-10	352	299	2,34	1,37	1,18
55	-5	419	317	2,39	1,53	1,32
55	0	510	340	2,45	1,74	1,50
55	5	626	367	2,52	1,98	1,71
55	7,2	685	380	2,55	2,10	1,80
55	10	767	398	2,59	2,24	1,93

60	-15	277	295	2,33	1,09	0,94
60	-10	314	311	2,37	1,17	1,01
60	-5	376	331	2,43	1,32	1,13
60	0	462	356	2,49	1,51	1,30
60	5	573	384	2,56	1,73	1,49
60	7,2	630	398	2,59	1,84	1,58
60	10	709	417	2,64	1,98	1,70

65	-15	243	305	2,36	0,93	0,80
65	-10	276	323	2,40	0,99	0,85
65	-5	332	345	2,46	1,12	0,96
65	0	414	371	2,53	1,30	1,12
65	5	520	402	2,60	1,51	1,29
65	7,2	575	417	2,63	1,61	1,38
65	10	651	437	2,68	1,73	1,49

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	442	256	2,22	1,72	1,49
40	-10	503	265	2,24	1,90	1,64
40	-5	591	278	2,28	2,13	1,84
40	0	705	295	2,33	2,39	2,07
40	5	845	316	2,39	2,67	2,31
40	7,2	915	327	2,42	2,80	2,42
40	10	1.011	342	2,46	2,96	2,55

45	-15	404	266	2,25	1,52	1,31
45	-10	460	277	2,28	1,66	1,43
45	-5	542	292	2,32	1,86	1,61
45	0	650	311	2,37	2,09	1,81
45	5	784	334	2,43	2,35	2,03
45	7,2	851	346	2,46	2,46	2,13
45	10	944	362	2,50	2,61	2,26

50	-15	366	277	2,28	1,32	1,14
50	-10	416	289	2,31	1,44	1,24
50	-5	492	305	2,36	1,61	1,39
50	0	594	326	2,41	1,82	1,57
50	5	723	352	2,48	2,06	1,78
50	7,2	787	364	2,51	2,16	1,87
50	10	877	381	2,55	2,30	1,99

55	-15	328	287	2,30	1,14	0,99
55	-10	372	301	2,34	1,24	1,07
55	-5	443	319	2,40	1,39	1,20
55	0	539	342	2,46	1,58	1,36
55	5	661	369	2,52	1,79	1,55
55	7,2	723	382	2,56	1,89	1,63
55	10	810	401	2,60	2,02	1,75

60	-15	290	297	2,33	0,98	0,84
60	-10	329	313	2,38	1,05	0,91
60	-5	393	333	2,43	1,18	1,02
60	0	484	358	2,50	1,35	1,17
60	5	600	387	2,57	1,55	1,34
60	7,2	660	401	2,60	1,65	1,42
60	10	743	420	2,64	1,77	1,53

65	-15	252	307	2,36	0,82	0,71
65	-10	285	325	2,41	0,88	0,76
65	-5	344	347	2,47	0,99	0,86
65	0	428	374	2,53	1,15	0,99
65	5	539	404	2,61	1,33	1,15
65	7,2	596	419	2,64	1,42	1,23
65	10	676	440	2,68	1,54	1,33

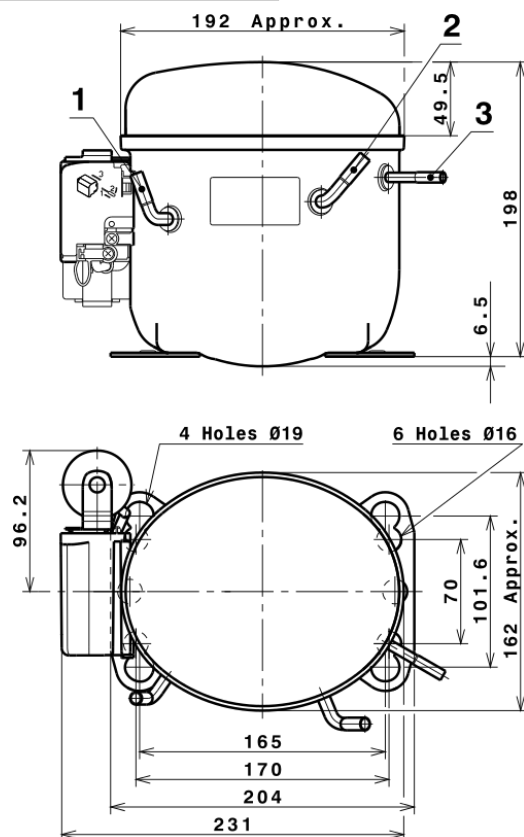
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.149,6056534120	173,2447885627	2,0226240674	19,748207386957
2	34,9149741522	0,9103545359	0,0044906390	0,64930351803731
3	-11,3437993363	3,2308128176	0,0082815493	-0,10775357756138
4	0,5109634455	0,0910077184	0,0001808544	0,014554422949309
5	-0,2454117866	0,0781942205	0,0001551725	-0,001067365391521

Equation

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

COMPRESSOR DIMENSIONS

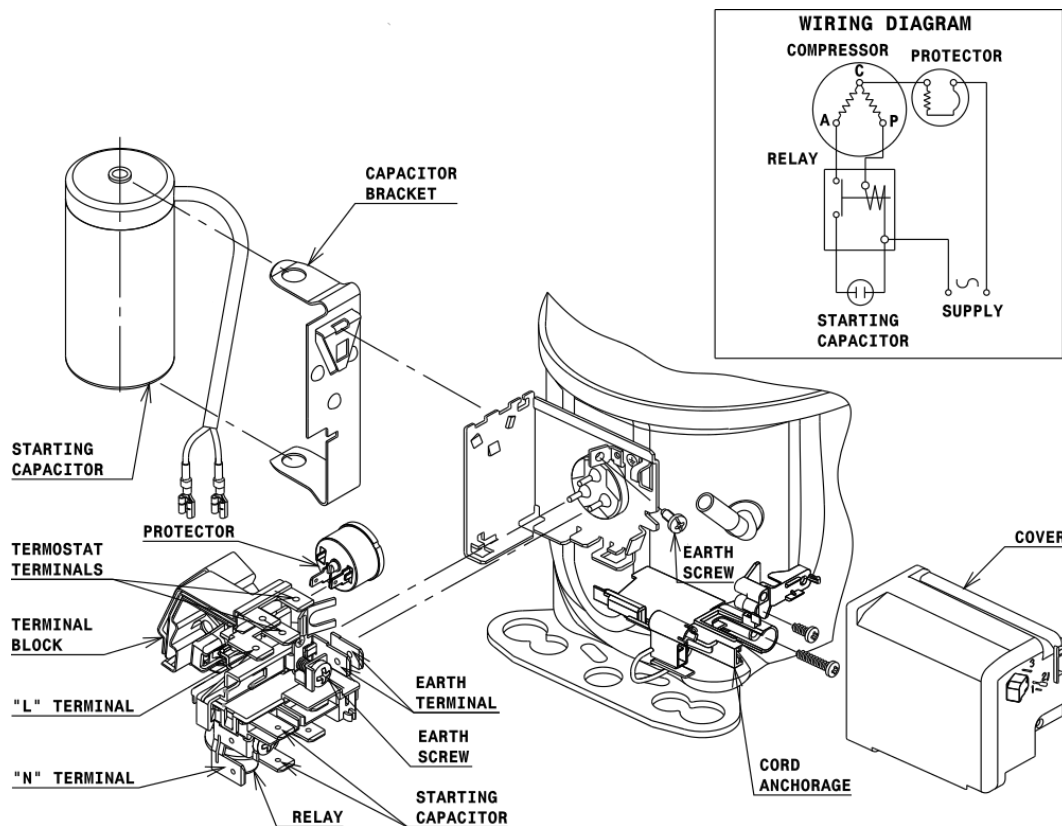


DESIGNATION INTERNAL DIAM.

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

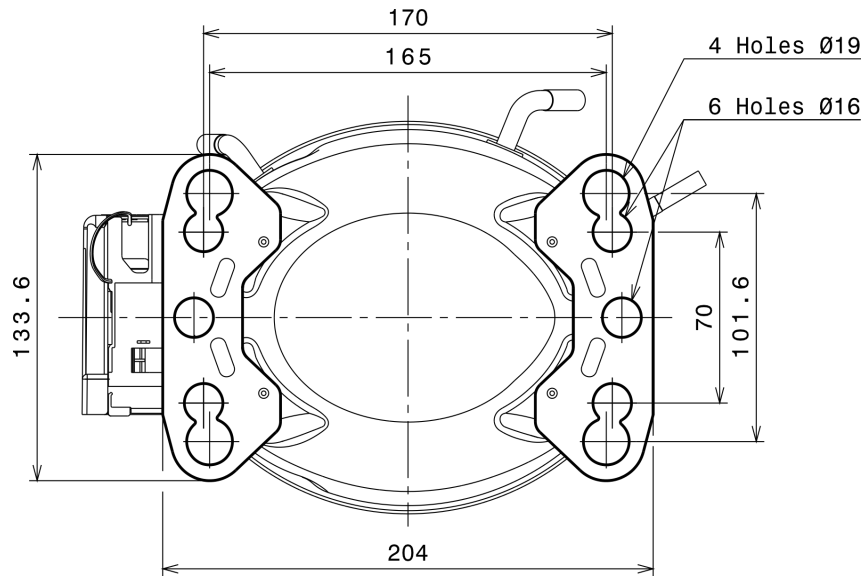
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



Technical Data Sheet

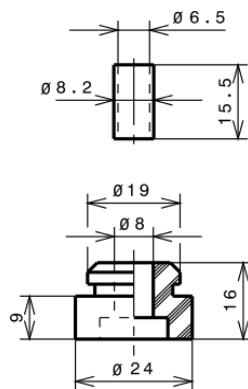
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

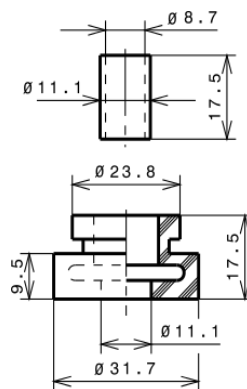
STANDARD

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HBP

