

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **GL60MG**  
Voltage **230V 50/60Hz ~1**  
Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High Back Pressure	Displacement	5,98 cm <sup>3</sup>	Nominal Power	1/5 hp
Refrigerant	R134a	Diameter	20,88 mm	Voltage/Frequency	230V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	17,47 mm	Voltage range	196-244 V
Expansion	Capillar/Valve	Net Weight	9,00 Kg	Type	CSIR
Comp. Cooling	Static	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	295 cm <sup>3</sup>	Locked Rotor Amps (LRA)	9,90 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	2,80 A
				Main W. resist. at 25°C	12,00 Ω
				Start W. resist. at 25°C	30,00 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	445 kCal/h	427 W
COP	1,99 W/W	1,70 W/W
EER	1,71 kCal/Wh	1,47 kCal/Wh
Input Power	260 W	252 W
Current	1,70 A	1,68 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 127.			
Pick-Up	4,80 A			
Drop-Out	4,10 A			
Protector	Option 1	Option 2		
Reference	AE11FU	T0490		
Current	9,40 A	9,40 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	120,00 / 62,00 °C	130,00 / 62,00 °C		



## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	250	178	1,53	1,63	1,40
40	-10	285	184	1,54	1,81	1,55
40	-5	339	193	1,56	2,04	1,75
40	0	410	206	1,58	2,32	1,99
40	5	500	222	1,61	2,62	2,25
40	7,2	545	230	1,63	2,76	2,37
40	10	607	241	1,66	2,93	2,52

45	-15	232	182	1,54	1,48	1,27
45	-10	264	189	1,55	1,62	1,39
45	-5	314	200	1,57	1,83	1,57
45	0	382	214	1,60	2,08	1,79
45	5	468	231	1,63	2,35	2,02
45	7,2	512	240	1,65	2,48	2,13
45	10	572	252	1,68	2,64	2,27

50	-15	213	186	1,54	1,33	1,15
50	-10	242	195	1,56	1,45	1,24
50	-5	289	207	1,58	1,63	1,40
50	0	353	222	1,61	1,85	1,59
50	5	436	241	1,65	2,11	1,81
50	7,2	478	250	1,68	2,23	1,91
50	10	537	263	1,71	2,38	2,04

55	-15	195	190	1,55	1,19	1,03
55	-10	220	200	1,57	1,28	1,10
55	-5	264	213	1,59	1,44	1,24
55	0	325	230	1,63	1,64	1,41
55	5	404	250	1,68	1,88	1,62
55	7,2	445	260	1,70	1,99	1,71
55	10	502	274	1,73	2,13	1,83

60	-15	177	194	1,56	1,06	0,91
60	-10	199	205	1,58	1,13	0,97
60	-5	239	220	1,61	1,26	1,08
60	0	297	238	1,65	1,45	1,25
60	5	373	259	1,70	1,67	1,44
60	7,2	412	270	1,73	1,77	1,52
60	10	467	284	1,76	1,91	1,64

65	-15	158	198	1,56	0,93	0,80
65	-10	177	211	1,59	0,98	0,84
65	-5	213	227	1,62	1,10	0,94
65	0	268	246	1,67	1,27	1,09
65	5	341	269	1,72	1,47	1,27
65	7,2	378	280	1,75	1,57	1,35
65	10	431	295	1,79	1,70	1,46

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	269	179	1,53	1,50	1,30
40	-10	308	185	1,54	1,67	1,44
40	-5	366	194	1,56	1,88	1,63
40	0	443	207	1,58	2,14	1,85
40	5	538	223	1,62	2,41	2,08
40	7,2	587	231	1,63	2,53	2,19
40	10	653	243	1,66	2,69	2,32

45	-15	248	183	1,54	1,36	1,17
45	-10	283	190	1,55	1,49	1,29
45	-5	337	201	1,57	1,68	1,45
45	0	410	215	1,60	1,90	1,64
45	5	501	233	1,64	2,15	1,86
45	7,2	548	242	1,66	2,27	1,96
45	10	612	254	1,68	2,41	2,08

50	-15	227	187	1,54	1,22	1,05
50	-10	258	196	1,56	1,32	1,14
50	-5	308	208	1,58	1,48	1,28
50	0	377	223	1,62	1,69	1,46
50	5	464	242	1,66	1,92	1,66
50	7,2	509	252	1,68	2,02	1,75
50	10	571	265	1,71	2,16	1,86

55	-15	206	191	1,55	1,08	0,93
55	-10	233	201	1,57	1,16	1,00
55	-5	279	215	1,60	1,30	1,12
55	0	343	231	1,63	1,48	1,28
55	5	427	252	1,68	1,70	1,47
55	7,2	470	262	1,70	1,80	1,55
55	10	530	275	1,74	1,92	1,66

60	-15	185	195	1,56	0,95	0,82
60	-10	208	206	1,58	1,01	0,87
60	-5	250	221	1,61	1,13	0,98
60	0	310	239	1,65	1,30	1,12
60	5	390	261	1,70	1,49	1,29
60	7,2	431	272	1,73	1,59	1,37
60	10	489	286	1,77	1,71	1,48

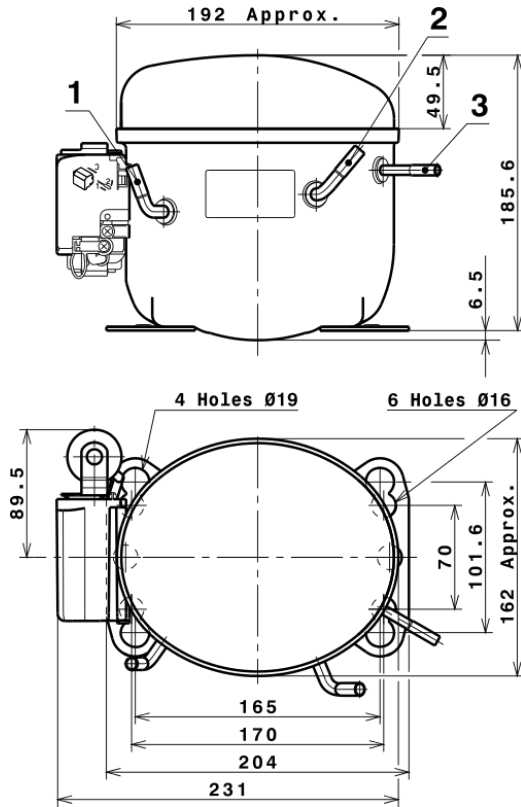
65	-15	164	199	1,57	0,83	0,71
65	-10	183	212	1,59	0,86	0,75
65	-5	221	228	1,63	0,97	0,84
65	0	277	248	1,67	1,12	0,97
65	5	353	271	1,73	1,30	1,13
65	7,2	392	282	1,76	1,39	1,20
65	10	448	297	1,80	1,51	1,30

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	708,6191311256	145,8152760417	1,4343359075	11,973064871194
2	23,8066549524	0,7854455327	0,0003221867	0,44440478048324
3	-6,7930243370	1,6651812652	0,0038569988	-0,057546912030585
4	0,3724392634	0,0719692054	0,0002176020	0,010529805961802
5	-0,1687434553	0,0561347641	0,0001581833	-0,00081279080577133

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

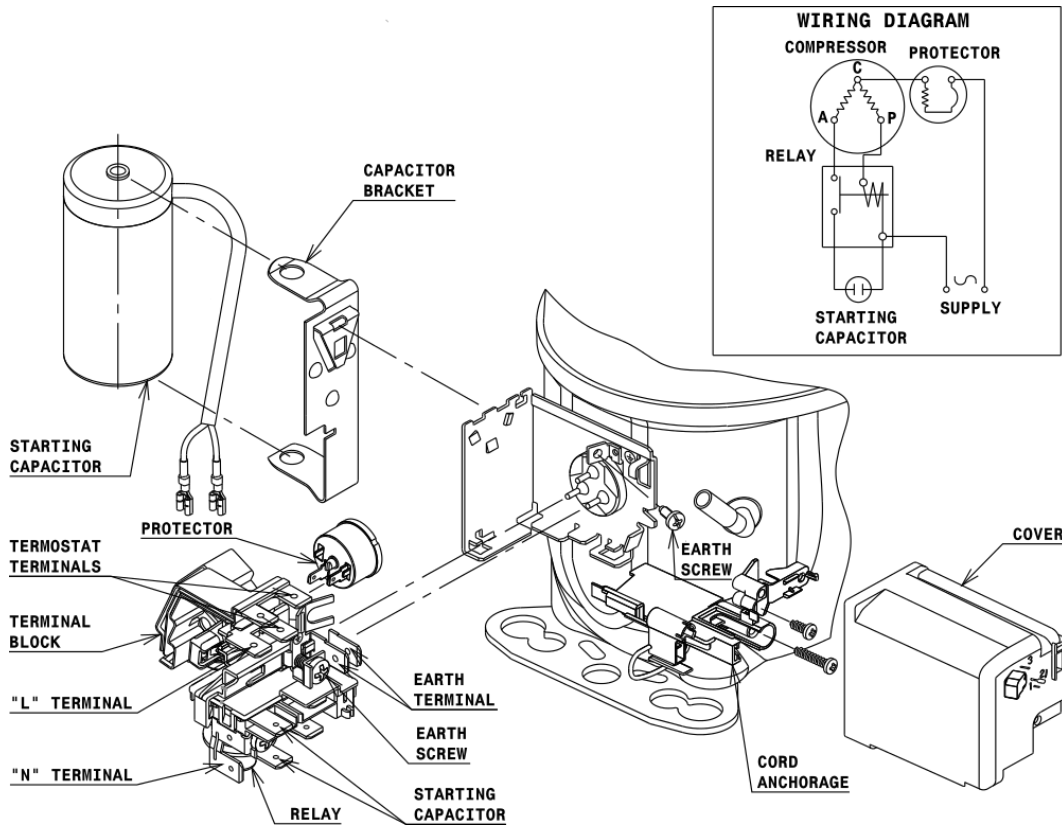


## DESIGNATION INTERNAL DIAM.

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

Ø16 holes (170x70 net)



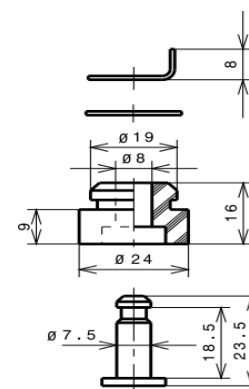
### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R134a HBP

