

# Technical Data Sheet

Compressor model **GL90PE**  
 Voltage **115V 60Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	8,85 cm <sup>3</sup>	Nominal Power	1/4 hp
Refrigerant	R134a	Diameter	25,40 mm	Voltage/Frequency	115V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	17,47 mm	Voltage range	98-132 V
Expansion	Capillar	Net Weight	11,27 Kg	Type	RSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	300 cm <sup>3</sup>	Locked Rotor Amps (LRA)	35,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	7,00 A
				Main W. resist. at 25°C	1,43 Ω
				Start W. resist. at 25°C	8,16 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	796 kCal/h	773 W
COP	2,06 W/W	1,78 W/W
EER	1,77 kCal/Wh	1,54 kCal/Wh
Input Power	450 W	434 W
Current	4,90 A	4,77 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (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	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Relay	Option 1			
Reference	2014 170.			
Pick-Up	12,10 A			
Drop-Out	10,30 A			
Protector	Option 1	Option 2		
Reference	MRT16ALK	T0103		
Current	16,20 A	15,80 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 °C	120,00 / 62,00 °C		

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	205	205	3,30	1,16	1,00
40	-20	283	232	3,44	1,42	1,22
40	-15	377	261	3,60	1,68	1,44
40	-10	486	291	3,78	1,94	1,67
40	-5	611	324	3,99	2,20	1,89
40	0	752	358	4,22	2,45	2,10
40	5	909	394	4,47	2,69	2,31
40	7,2	983	410	4,59	2,79	2,40
40	10	1.081	431	4,75	2,92	2,51

45	-25	189	205	3,30	1,07	0,92
45	-20	260	234	3,45	1,29	1,11
45	-15	347	265	3,63	1,52	1,31
45	-10	449	298	3,82	1,75	1,51
45	-5	567	332	4,04	1,99	1,71
45	0	700	368	4,29	2,21	1,90
45	5	850	406	4,56	2,43	2,09
45	7,2	921	423	4,69	2,53	2,17
45	10	1.015	446	4,87	2,65	2,28

50	-25	174	205	3,30	0,99	0,85
50	-20	237	236	3,46	1,17	1,00
50	-15	316	269	3,65	1,37	1,18
50	-10	411	304	3,86	1,58	1,35
50	-5	522	340	4,10	1,78	1,53
50	0	649	378	4,36	1,99	1,71
50	5	791	419	4,66	2,20	1,89
50	7,2	858	437	4,79	2,29	1,97
50	10	949	460	4,98	2,40	2,06

55	-25	158	205	3,30	0,90	0,77
55	-20	214	238	3,48	1,05	0,90
55	-15	286	273	3,68	1,22	1,05
55	-10	374	310	3,90	1,40	1,21
55	-5	477	349	4,15	1,59	1,37
55	0	597	389	4,44	1,78	1,53
55	5	732	431	4,75	1,97	1,70
55	7,2	796	450	4,90	2,06	1,77
55	10	882	475	5,10	2,16	1,86

60	-25	142	205	3,30	0,81	0,69
60	-20	191	240	3,49	0,93	0,80
60	-15	256	277	3,70	1,07	0,92
60	-10	337	316	3,94	1,24	1,06
60	-5	433	357	4,21	1,41	1,21
60	0	545	399	4,51	1,59	1,36
60	5	672	443	4,85	1,76	1,52
60	7,2	734	463	5,01	1,84	1,58
60	10	816	489	5,22	1,94	1,67

65	-25	127	205	3,30	0,72	0,62
65	-20	168	242	3,50	0,81	0,69
65	-15	226	282	3,72	0,93	0,80
65	-10	299	322	3,98	1,08	0,93
65	-5	388	365	4,27	1,24	1,06
65	0	493	410	4,59	1,40	1,20
65	5	613	456	4,95	1,57	1,35
65	7,2	671	477	5,12	1,64	1,41
65	10	750	504	5,34	1,73	1,49

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	221	206	3,31	1,07	0,93
40	-20	306	233	3,45	1,31	1,13
40	-15	407	262	3,61	1,55	1,34
40	-10	525	293	3,79	1,79	1,55
40	-5	660	326	4,00	2,03	1,75
40	0	811	360	4,23	2,25	1,95
40	5	979	396	4,49	2,47	2,13
40	7,2	1.058	413	4,61	2,56	2,22
40	10	1.163	434	4,78	2,68	2,31

45	-25	203	206	3,31	0,98	0,85
45	-20	279	235	3,46	1,19	1,03
45	-15	372	266	3,64	1,40	1,21
45	-10	482	299	3,83	1,61	1,39
45	-5	608	334	4,05	1,82	1,57
45	0	751	370	4,30	2,03	1,75
45	5	910	409	4,58	2,23	1,92
45	7,2	985	426	4,71	2,31	2,00
45	10	1.086	449	4,89	2,42	2,09

50	-25	185	206	3,31	0,90	0,78
50	-20	253	237	3,47	1,07	0,92
50	-15	338	271	3,66	1,25	1,08
50	-10	439	305	3,87	1,44	1,24
50	-5	556	342	4,11	1,63	1,40
50	0	691	381	4,38	1,81	1,57
50	5	842	421	4,68	2,00	1,73
50	7,2	913	439	4,82	2,08	1,80
50	10	1.009	463	5,01	2,18	1,88

55	-25	167	206	3,31	0,81	0,70
55	-20	227	239	3,48	0,95	0,82
55	-15	303	275	3,68	1,10	0,95
55	-10	396	312	3,91	1,27	1,10
55	-5	505	351	4,17	1,44	1,24
55	0	631	391	4,45	1,61	1,39
55	5	773	434	4,77	1,78	1,54
55	7,2	841	453	4,92	1,86	1,60
55	10	932	478	5,13	1,95	1,68

60	-25	149	206	3,31	0,72	0,63
60	-20	200	242	3,49	0,83	0,72
60	-15	268	279	3,71	0,96	0,83
60	-10	352	318	3,95	1,11	0,96
60	-5	453	359	4,22	1,26	1,09
60	0	570	402	4,53	1,42	1,23
60	5	704	446	4,87	1,58	1,36
60	7,2	768	466	5,03	1,65	1,42
60	10	855	492	5,25	1,74	1,50

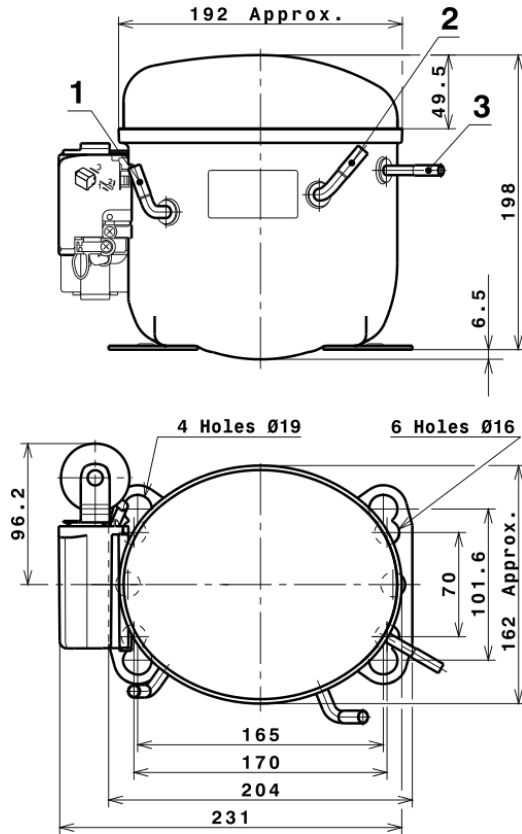
65	-25	131	206	3,31	0,64	0,55
65	-20	174	244	3,51	0,71	0,62
65	-15	233	283	3,73	0,82	0,71
65	-10	309	324	3,99	0,95	0,82
65	-5	401	367	4,28	1,09	0,94
65	0	510	412	4,61	1,24	1,07
65	5	635	459	4,97	1,39	1,20
65	7,2	696	480	5,14	1,45	1,25
65	10	777	507	5,37	1,53	1,32

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.295,8804366377	283,6709501611	3,6035626884	22,126179369728
2	45,4991233929	3,9073471776	0,0265263939	0,86445385541761
3	-12,3771628391	2,1421858866	0,0169229084	-0,10726174157057
4	0,3253920037	0,0395023997	0,0006219930	0,0093979048813084
5	-0,3503601710	0,0856874355	0,0006769163	-0,0026727655382162

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

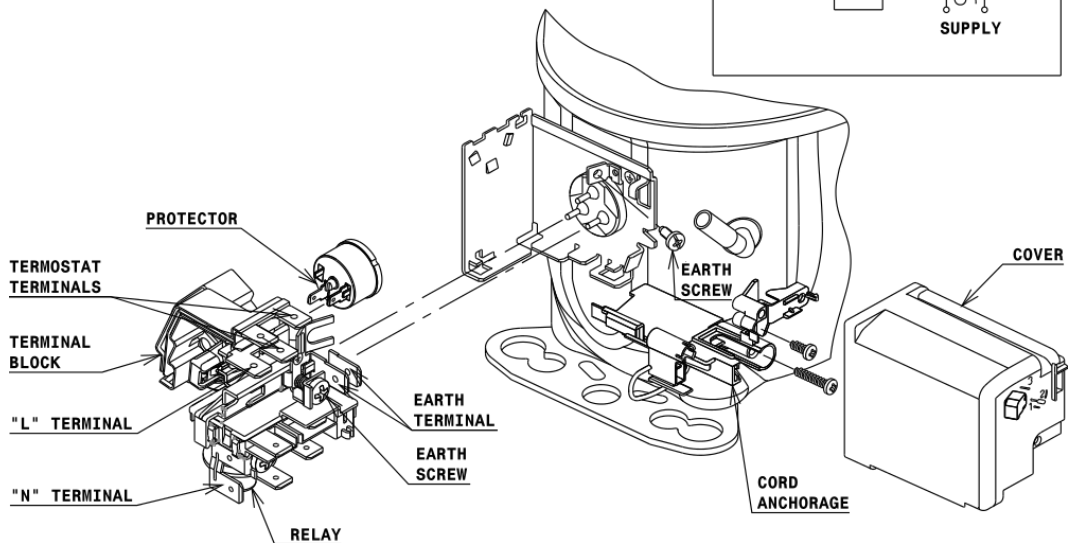
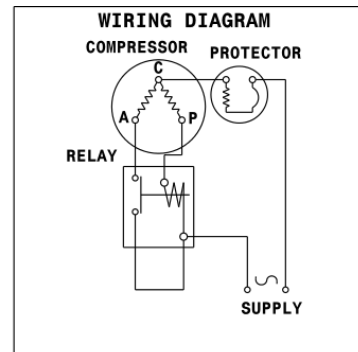


## DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSIR CONNECTION (RELAY) (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 HMBP

