

# Technical Data Sheet

Compressor model **GL90TG**  
 Voltage **200-220/220-230V 50/60Hz ~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	200-220V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	17,47 mm	Voltage range	170-242 V
Expansion	Capillar/Valve	Net Weight	9,70 Kg	Type	CSIR
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)	12,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	4,00 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	680 kCal/h	660 W
COP	2,08 W/W	1,80 W/W
EER	1,79 kCal/Wh	1,56 kCal/Wh
Input Power	380 W	367 W
Current	2,45 A	2,39 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	200 V 50 Hz	200 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	MRP36AMK	T0171	
Current	10,30 A	10,30 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 61,00 °C	105,00 / 61,00 °C	

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	175	175	1,75	1,16	1,00
40	-20	242	195	1,80	1,45	1,24
40	-15	322	215	1,85	1,74	1,50
40	-10	416	237	1,91	2,04	1,75
40	-5	523	260	1,98	2,34	2,01
40	0	643	284	2,06	2,64	2,27
40	5	777	309	2,15	2,93	2,52
40	7,2	840	320	2,20	3,05	2,63
40	10	924	335	2,26	3,21	2,76

45	-25	162	175	1,75	1,07	0,92
45	-20	222	198	1,80	1,31	1,12
45	-15	296	222	1,87	1,56	1,34
45	-10	384	246	1,94	1,81	1,56
45	-5	485	272	2,02	2,07	1,78
45	0	599	299	2,12	2,33	2,00
45	5	726	327	2,23	2,58	2,22
45	7,2	787	340	2,28	2,69	2,31
45	10	867	356	2,35	2,83	2,43

50	-25	148	175	1,75	0,99	0,85
50	-20	203	201	1,81	1,17	1,01
50	-15	271	228	1,89	1,38	1,19
50	-10	352	256	1,97	1,60	1,38
50	-5	447	285	2,07	1,82	1,57
50	0	554	315	2,18	2,05	1,76
50	5	676	346	2,30	2,27	1,95
50	7,2	733	360	2,36	2,37	2,04
50	10	810	378	2,44	2,49	2,14

55	-25	135	175	1,75	0,90	0,77
55	-20	183	204	1,82	1,05	0,90
55	-15	245	234	1,90	1,22	1,05
55	-10	320	265	2,00	1,40	1,21
55	-5	408	297	2,11	1,60	1,37
55	0	510	330	2,24	1,80	1,54
55	5	625	365	2,38	1,99	1,71
55	7,2	680	380	2,45	2,08	1,79
55	10	754	400	2,54	2,19	1,88

60	-25	122	175	1,75	0,81	0,70
60	-20	164	207	1,83	0,92	0,79
60	-15	219	240	1,92	1,06	0,91
60	-10	288	274	2,03	1,22	1,05
60	-5	370	310	2,16	1,39	1,20
60	0	466	346	2,30	1,57	1,35
60	5	575	383	2,46	1,74	1,50
60	7,2	627	400	2,54	1,82	1,57
60	10	697	422	2,65	1,92	1,65

65	-25	108	175	1,75	0,72	0,62
65	-20	144	210	1,84	0,80	0,69
65	-15	193	246	1,94	0,91	0,79
65	-10	256	284	2,06	1,05	0,90
65	-5	332	322	2,20	1,20	1,03
65	0	421	361	2,37	1,36	1,17
65	5	524	402	2,55	1,52	1,30
65	7,2	573	420	2,64	1,59	1,37
65	10	640	443	2,76	1,68	1,44

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	189	176	1,75	1,07	0,93
40	-20	261	196	1,80	1,34	1,15
40	-15	348	216	1,85	1,61	1,39
40	-10	449	238	1,92	1,89	1,63
40	-5	564	261	1,99	2,16	1,87
40	0	693	285	2,07	2,43	2,10
40	5	837	311	2,16	2,69	2,33
40	7,2	904	322	2,20	2,81	2,43
40	10	994	337	2,26	2,95	2,55

45	-25	173	176	1,75	0,99	0,85
45	-20	239	199	1,81	1,20	1,04
45	-15	319	223	1,87	1,43	1,24
45	-10	412	248	1,95	1,66	1,44
45	-5	520	274	2,03	1,90	1,64
45	0	642	301	2,13	2,13	1,84
45	5	778	329	2,23	2,36	2,04
45	7,2	842	342	2,29	2,46	2,13
45	10	928	359	2,36	2,59	2,23

50	-25	158	176	1,75	0,90	0,78
50	-20	216	202	1,82	1,07	0,93
50	-15	289	229	1,89	1,26	1,09
50	-10	375	257	1,97	1,46	1,26
50	-5	476	286	2,07	1,66	1,44
50	0	590	317	2,18	1,86	1,61
50	5	719	348	2,31	2,07	1,78
50	7,2	780	362	2,37	2,15	1,86
50	10	862	381	2,45	2,26	1,96

55	-25	143	176	1,75	0,81	0,70
55	-20	194	205	1,82	0,95	0,82
55	-15	259	235	1,91	1,10	0,95
55	-10	338	266	2,00	1,27	1,10
55	-5	432	299	2,12	1,44	1,25
55	0	539	332	2,25	1,62	1,40
55	5	660	367	2,39	1,80	1,56
55	7,2	718	382	2,46	1,88	1,62
55	10	796	403	2,56	1,98	1,71

60	-25	128	176	1,75	0,73	0,63
60	-20	172	208	1,83	0,82	0,71
60	-15	229	241	1,93	0,95	0,82
60	-10	301	276	2,04	1,09	0,94
60	-5	387	311	2,16	1,24	1,08
60	0	488	348	2,31	1,40	1,21
60	5	602	386	2,48	1,56	1,35
60	7,2	656	403	2,56	1,63	1,41
60	10	730	424	2,66	1,72	1,49

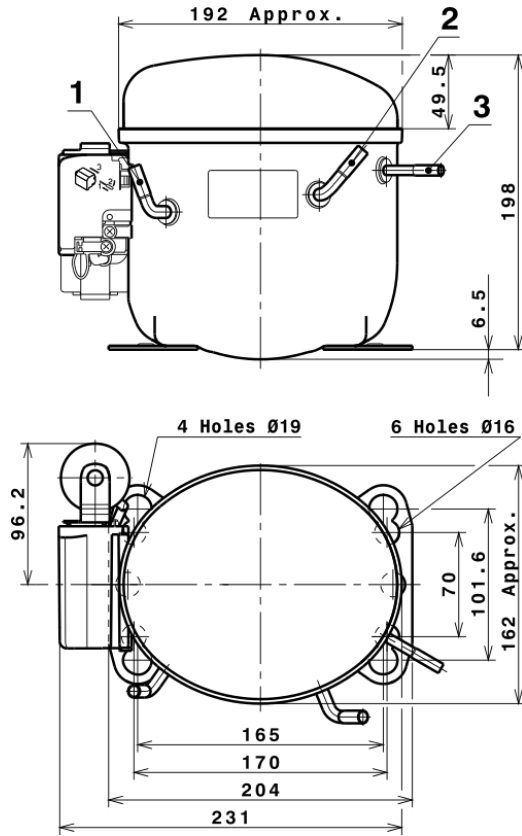
65	-25	112	176	1,75	0,64	0,55
65	-20	149	211	1,84	0,71	0,61
65	-15	200	248	1,95	0,81	0,70
65	-10	264	285	2,07	0,93	0,80
65	-5	343	324	2,21	1,06	0,92
65	0	436	364	2,38	1,20	1,04
65	5	543	404	2,56	1,34	1,16
65	7,2	594	423	2,65	1,41	1,21
65	10	664	446	2,78	1,49	1,28

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.108,0205830309	164,3323533456	1,5153809944	18,925390568274
2	38,8815135982	-0,0076516668	-0,0016718906	0,73865613283421
3	-10,5849037382	3,2132788299	0,0139843444	-0,091891749657412
4	0,2760196588	0,0245151229	0,0003263947	0,0079776951788833
5	-0,3001843003	0,1285311532	0,0005593738	-0,0023032739683551

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)



## 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 HMBP

