

# Technical Data Sheet

Compressor model **GL45TG**  
 Voltage **200-240/220-230V 50/60Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	4,56 cm <sup>3</sup>	Nominal Power	1/6 hp
Refrigerant	R134a	Diameter	19,09 mm	Voltage/Frequency	220-230V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,93 mm	Voltage range	187-253 V
Expansion	Capillar/Valve	Net Weight	8,78 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	295 cm <sup>3</sup>	Locked Rotor Amps (LRA)	9,30 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	2,10 A
				Main W. resist. at 25°C	14,33 Ω
				Start W. resist. at 25°C	38,66 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	412 kCal/h	400 W
COP	1,92 W/W	1,65 W/W
EER	1,65 kCal/Wh	1,43 kCal/Wh
Input Power	250 W	242 W
Current	1,45 A	1,42 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	230 V 60 Hz	230 V 60 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	T0078	AE26FHY	
Current	7,10 A	7,10 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	110,00 / 62,00 °C	105,00 / 62,00 °C	

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	112	125	0,95	1,04	0,90
40	-20	152	140	1,01	1,27	1,09
40	-15	201	155	1,07	1,51	1,30
40	-10	258	171	1,13	1,76	1,51
40	-5	324	187	1,20	2,01	1,73
40	0	398	204	1,27	2,27	1,95
40	5	481	222	1,34	2,52	2,17
40	7,2	520	230	1,37	2,63	2,26
40	10	572	240	1,41	2,77	2,38

45	-25	103	125	0,95	0,96	0,82
45	-20	139	141	1,01	1,15	0,99
45	-15	183	157	1,08	1,36	1,17
45	-10	237	174	1,15	1,58	1,36
45	-5	298	191	1,22	1,81	1,56
45	0	368	209	1,29	2,04	1,76
45	5	447	228	1,36	2,28	1,96
45	7,2	484	237	1,40	2,38	2,05
45	10	534	248	1,44	2,51	2,16

50	-25	93	125	0,95	0,87	0,75
50	-20	125	142	1,02	1,03	0,88
50	-15	166	159	1,09	1,21	1,04
50	-10	215	177	1,16	1,41	1,21
50	-5	272	195	1,23	1,62	1,39
50	0	338	215	1,31	1,83	1,58
50	5	413	234	1,39	2,05	1,76
50	7,2	448	243	1,42	2,14	1,84
50	10	495	255	1,47	2,26	1,94

55	-25	84	125	0,95	0,78	0,67
55	-20	112	143	1,02	0,91	0,78
55	-15	148	161	1,09	1,07	0,92
55	-10	193	180	1,17	1,25	1,07
55	-5	246	200	1,25	1,44	1,23
55	0	308	220	1,33	1,63	1,40
55	5	378	241	1,41	1,83	1,57
55	7,2	412	250	1,45	1,92	1,65
55	10	457	262	1,50	2,03	1,74

60	-25	75	125	0,95	0,69	0,60
60	-20	98	144	1,02	0,80	0,68
60	-15	131	163	1,10	0,93	0,80
60	-10	171	183	1,18	1,09	0,94
60	-5	220	204	1,26	1,26	1,08
60	0	278	225	1,35	1,44	1,24
60	5	344	247	1,44	1,62	1,39
60	7,2	376	257	1,48	1,70	1,46
60	10	419	269	1,53	1,81	1,56

65	-25	65	125	0,95	0,61	0,52
65	-20	85	145	1,03	0,68	0,59
65	-15	113	165	1,11	0,80	0,68
65	-10	149	186	1,19	0,93	0,80
65	-5	195	208	1,28	1,09	0,94
65	0	248	230	1,37	1,25	1,08
65	5	310	253	1,46	1,42	1,23
65	7,2	340	263	1,50	1,50	1,29
65	10	381	277	1,56	1,60	1,38

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	121	126	0,95	0,96	0,83
40	-20	165	140	1,01	1,17	1,01
40	-15	217	156	1,07	1,40	1,21
40	-10	279	172	1,14	1,63	1,40
40	-5	350	188	1,20	1,86	1,61
40	0	429	206	1,27	2,09	1,80
40	5	518	223	1,34	2,32	2,00
40	7,2	560	231	1,38	2,42	2,09
40	10	615	242	1,42	2,54	2,20

45	-25	110	126	0,95	0,88	0,76
45	-20	149	141	1,02	1,05	0,91
45	-15	197	158	1,08	1,25	1,08
45	-10	254	175	1,15	1,45	1,26
45	-5	320	192	1,22	1,66	1,44
45	0	395	211	1,29	1,87	1,62
45	5	478	230	1,37	2,08	1,80
45	7,2	518	238	1,40	2,18	1,88
45	10	571	249	1,45	2,29	1,98

50	-25	99	126	0,95	0,79	0,68
50	-20	134	142	1,02	0,94	0,81
50	-15	177	160	1,09	1,11	0,96
50	-10	229	178	1,16	1,29	1,11
50	-5	290	197	1,24	1,48	1,28
50	0	360	216	1,31	1,67	1,44
50	5	439	236	1,39	1,86	1,61
50	7,2	477	245	1,43	1,95	1,68
50	10	527	257	1,48	2,05	1,77

55	-25	89	126	0,95	0,71	0,61
55	-20	118	143	1,02	0,83	0,71
55	-15	157	162	1,10	0,97	0,84
55	-10	204	181	1,17	1,13	0,97
55	-5	260	201	1,25	1,30	1,12
55	0	326	221	1,33	1,47	1,27
55	5	400	242	1,42	1,65	1,43
55	7,2	435	252	1,46	1,73	1,49
55	10	483	264	1,51	1,83	1,58

60	-25	78	126	0,95	0,62	0,54
60	-20	103	145	1,03	0,71	0,62
60	-15	137	164	1,11	0,83	0,72
60	-10	179	184	1,19	0,97	0,84
60	-5	231	205	1,27	1,13	0,97
60	0	291	226	1,36	1,29	1,11
60	5	360	248	1,44	1,45	1,25
60	7,2	394	258	1,48	1,52	1,32
60	10	439	271	1,53	1,62	1,40

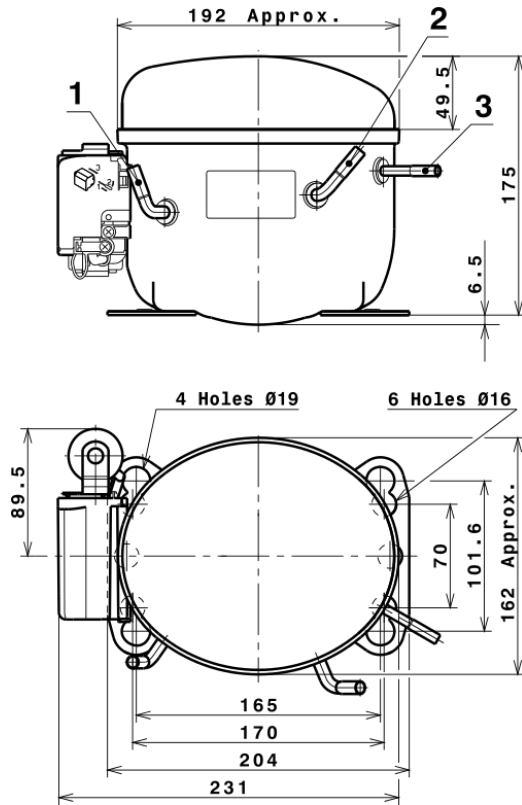
65	-25	68	126	0,95	0,54	0,47
65	-20	88	146	1,03	0,60	0,52
65	-15	116	166	1,11	0,70	0,61
65	-10	154	187	1,20	0,82	0,71
65	-5	201	209	1,29	0,96	0,83
65	0	256	232	1,38	1,11	0,96
65	5	321	255	1,47	1,26	1,09
65	7,2	352	265	1,51	1,33	1,15
65	10	394	278	1,56	1,42	1,22

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	707,1236799112	168,0264581389	1,1221058326	12,269206218876
2	24,5103530936	1,9461664577	0,0077846658	0,47076008268712
3	-7,0816910084	1,0710929433	0,0042843718	-0,07072575615604
4	0,1754645262	0,0145421502	0,0000581686	0,0050452822696131
5	-0,1978186945	0,0428437177	0,0001713749	-0,0017820211344545

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)



# 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

