

Technical Data Sheet

Compressor model **GL80TC**
 Voltage **100V 50/60Hz ~1**
 Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	7,57 cm ³	Nominal Power	1/5 hp
Refrigerant	R134a	Diameter	25,40 mm	Voltage/Frequency	100V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	14,92 mm	Voltage range	85-110 V
Expansion	Capillar/Valve	Net Weight	10,98 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 ³	Locked Rotor Amps (LRA)	25,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	7,50 A
				Main W. resist. at 25°C	1,38 Ω
				Start W. resist. at 25°C	6,12 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	667 kCal/h	647 W
COP	2,22 W/W	1,92 W/W
EER	1,91 kCal/Wh	1,66 kCal/Wh
Input Power	350 W	338 W
Current	4,60 A	4,46 A

TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (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	100 V 60 Hz	100 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	170 µF 160 V			
Relay	Option 1			
Reference	2014 170.			
Pick-Up	12,10 A			
Drop-Out	10,30 A			
Protector	Option 1	Option 2		
Reference	MRT20ALK	T0103		
Current	15,80 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	175	150	2,80	1,36	1,17
40	-20	241	172	2,95	1,63	1,40
40	-15	320	194	3,12	1,92	1,65
40	-10	411	217	3,30	2,21	1,90
40	-5	516	240	3,50	2,50	2,15
40	0	633	264	3,72	2,79	2,40
40	5	764	289	3,96	3,07	2,64
40	7,2	825	300	4,07	3,20	2,75
40	10	907	314	4,21	3,36	2,89

45	-25	158	150	2,80	1,22	1,05
45	-20	218	174	2,97	1,46	1,25
45	-15	291	199	3,16	1,70	1,46
45	-10	378	224	3,37	1,96	1,68
45	-5	477	251	3,59	2,21	1,90
45	0	589	277	3,84	2,47	2,12
45	5	713	304	4,11	2,72	2,34
45	7,2	772	317	4,24	2,84	2,44
45	10	851	332	4,41	2,98	2,56

50	-25	140	150	2,80	1,09	0,94
50	-20	195	177	2,99	1,28	1,10
50	-15	263	204	3,20	1,50	1,29
50	-10	344	232	3,43	1,72	1,48
50	-5	437	261	3,69	1,95	1,68
50	0	544	290	3,97	2,18	1,87
50	5	663	320	4,27	2,41	2,07
50	7,2	720	333	4,42	2,51	2,16
50	10	795	350	4,61	2,64	2,27

55	-25	123	150	2,80	0,95	0,82
55	-20	172	179	3,01	1,12	0,96
55	-15	235	209	3,24	1,30	1,12
55	-10	310	240	3,50	1,50	1,29
55	-5	398	271	3,78	1,71	1,47
55	0	499	303	4,10	1,92	1,65
55	5	613	336	4,44	2,12	1,83
55	7,2	667	350	4,60	2,22	1,91
55	10	740	369	4,81	2,33	2,01

60	-25	106	150	2,80	0,82	0,70
60	-20	150	182	3,03	0,96	0,82
60	-15	206	215	3,28	1,12	0,96
60	-10	276	248	3,57	1,30	1,11
60	-5	359	282	3,88	1,48	1,27
60	0	454	316	4,23	1,67	1,44
60	5	563	351	4,61	1,86	1,60
60	7,2	614	367	4,79	1,95	1,68
60	10	684	387	5,03	2,06	1,77

65	-25	88	150	2,80	0,68	0,59
65	-20	127	185	3,05	0,80	0,69
65	-15	178	220	3,33	0,94	0,81
65	-10	242	256	3,64	1,10	0,95
65	-5	320	292	3,99	1,27	1,09
65	0	409	329	4,37	1,45	1,24
65	5	512	367	4,79	1,63	1,40
65	7,2	562	383	4,99	1,70	1,47
65	10	628	405	5,25	1,80	1,55

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	189	151	2,81	1,25	1,08
40	-20	260	173	2,96	1,51	1,30
40	-15	346	195	3,13	1,77	1,53
40	-10	444	218	3,31	2,04	1,76
40	-5	557	242	3,51	2,31	1,99
40	0	683	266	3,73	2,57	2,22
40	5	822	291	3,97	2,83	2,44
40	7,2	888	302	4,09	2,94	2,54
40	10	975	316	4,23	3,08	2,66

45	-25	169	151	2,81	1,12	0,97
45	-20	234	175	2,98	1,34	1,16
45	-15	313	200	3,17	1,57	1,35
45	-10	406	226	3,38	1,80	1,55
45	-5	511	252	3,61	2,03	1,75
45	0	631	279	3,86	2,26	1,95
45	5	764	306	4,13	2,49	2,15
45	7,2	827	319	4,26	2,59	2,24
45	10	910	335	4,43	2,72	2,35

50	-25	150	151	2,81	0,99	0,86
50	-20	208	178	3,00	1,17	1,01
50	-15	281	205	3,21	1,37	1,18
50	-10	367	234	3,44	1,57	1,36
50	-5	466	262	3,70	1,78	1,53
50	0	579	292	3,99	1,98	1,71
50	5	706	322	4,29	2,19	1,89
50	7,2	766	335	4,44	2,28	1,97
50	10	846	353	4,63	2,40	2,07

55	-25	130	151	2,81	0,86	0,75
55	-20	183	180	3,02	1,01	0,87
55	-15	248	211	3,25	1,18	1,02
55	-10	328	241	3,51	1,36	1,17
55	-5	421	273	3,80	1,54	1,33
55	0	527	305	4,12	1,73	1,49
55	5	647	338	4,46	1,92	1,66
55	7,2	704	352	4,63	2,00	1,73
55	10	781	371	4,84	2,10	1,82

60	-25	111	151	2,81	0,73	0,63
60	-20	157	183	3,04	0,86	0,74
60	-15	216	216	3,29	1,00	0,87
60	-10	289	249	3,58	1,16	1,00
60	-5	375	283	3,90	1,33	1,15
60	0	476	318	4,25	1,50	1,29
60	5	589	353	4,64	1,67	1,44
60	7,2	643	369	4,82	1,74	1,51
60	10	716	389	5,06	1,84	1,59

65	-25	91	151	2,81	0,61	0,52
65	-20	131	186	3,06	0,70	0,61
65	-15	184	221	3,34	0,83	0,72
65	-10	250	257	3,65	0,97	0,84
65	-5	330	294	4,00	1,12	0,97
65	0	424	331	4,39	1,28	1,11
65	5	531	369	4,82	1,44	1,24
65	7,2	582	386	5,02	1,51	1,30
65	10	651	407	5,28	1,60	1,38

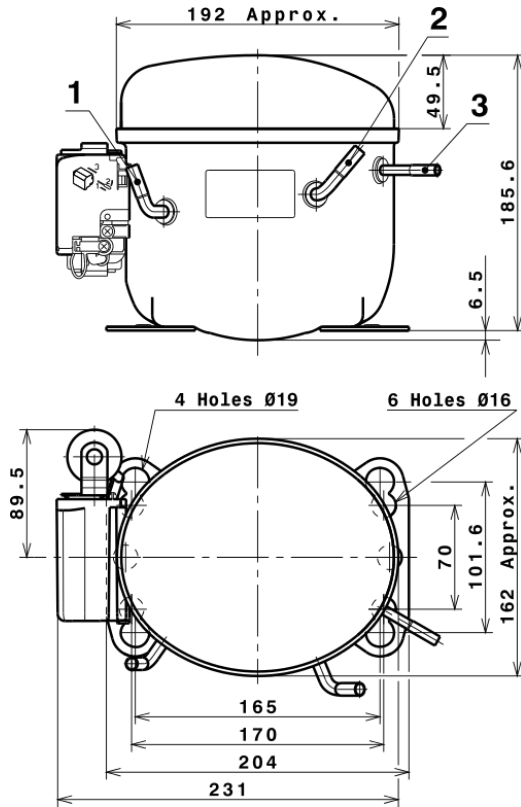
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.099,5556462246	165,6441842559	2,5952593893	18,868497948169
2	36,9777071831	0,8362312175	0,0056474083	0,69603399602864
3	-10,6382243747	2,6777323582	0,0292330796	-0,096321833601046
4	0,2661581999	0,0150639438	0,0005988290	0,0077132431812667
5	-0,2693503140	0,1071092943	0,0011693232	-0,0016370990245772

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Technical Data Sheet

COMPRESSOR DIMENSIONS

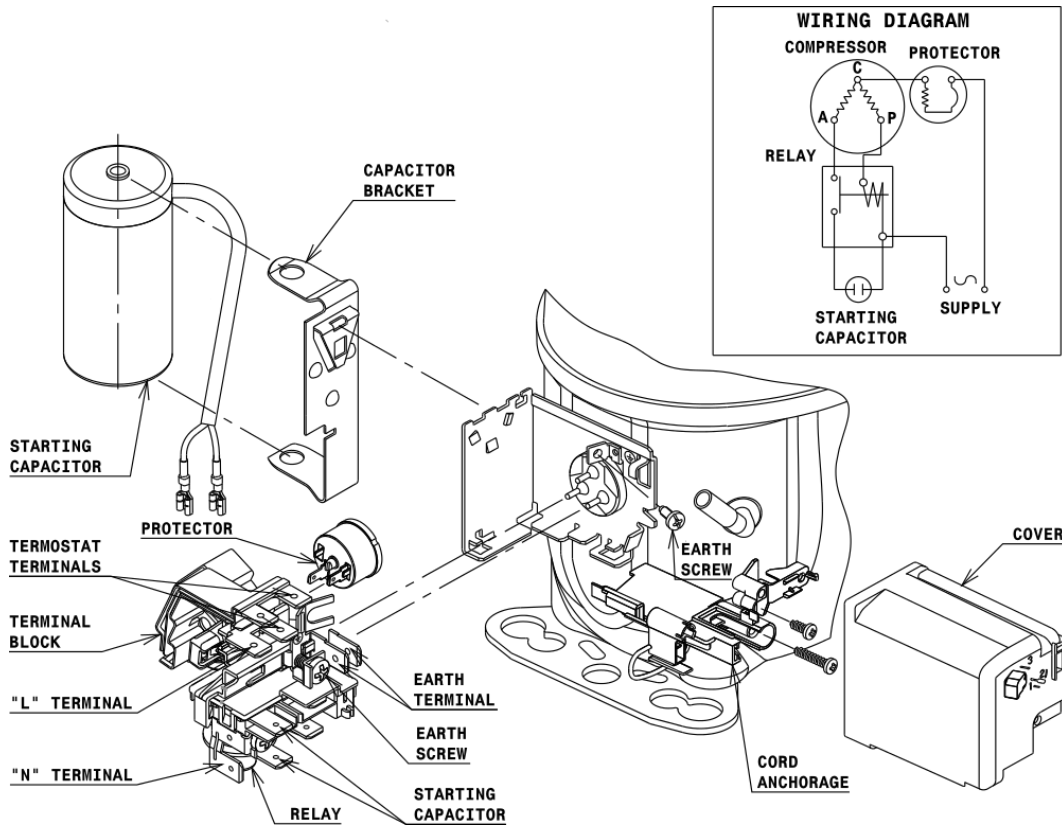


DESIGNATION INTERNAL DIAM.

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)



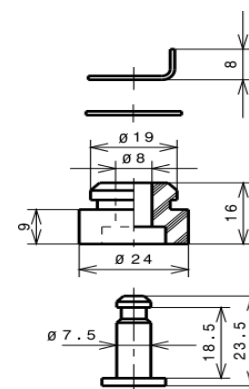
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP

