

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **GL80TG**  
Voltage **200-220/220-230V 50/60Hz ~1**  
Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	7,57 cm <sup>3</sup>	Nominal Power	1/5 hp
Refrigerant	R134a	Diameter	25,40 mm	Voltage/Frequency	220-230V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	14,92 mm	Voltage range	196-253 V
Expansion	Capillar/Valve	Net Weight	9,48 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)	12,20 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	3,20 A
				Main W. resist. at 25°C	8,55 Ω
				Start W. resist. at 25°C	31,90 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	667 kCal/h	647 W
COP	2,04 W/W	1,78 W/W
EER	1,76 kCal/Wh	1,53 kCal/Wh
Input Power	380 W	365 W
Current	2,10 A	2,04 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	Option 2	
Reference	2014 135.	QLZ-5.8A	
Pick-Up	5,80 A	5.80 A	
Drop-Out	4,95 A	4.95 A	
Protector	Option 1	Option 2	
Reference	T0269	B96-105	
Current	9,60 A	9,60 A	
Time check	7,5-14 seg	7,5-16 seg	
Disc temp. (Open/Close)	105,00 / 52,00 °C	115,00 / 52,00 °C	



## ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-25	175	170	1,40	1,20	1,03
40	-20	241	188	1,45	1,49	1,28
40	-15	320	209	1,51	1,78	1,53
40	-10	411	232	1,58	2,06	1,78
40	-5	516	257	1,66	2,33	2,01
40	0	633	285	1,75	2,58	2,22
40	5	764	316	1,86	2,81	2,42
40	7,2	825	330	1,91	2,91	2,50
40	10	907	349	1,98	3,02	2,60

45	-25	158	170	1,40	1,08	0,93
45	-20	218	191	1,46	1,33	1,14
45	-15	291	214	1,52	1,59	1,36
45	-10	378	239	1,60	1,83	1,58
45	-5	477	268	1,69	2,07	1,78
45	0	589	298	1,79	2,30	1,97
45	5	713	331	1,91	2,50	2,15
45	7,2	772	347	1,97	2,59	2,23
45	10	851	367	2,05	2,70	2,32

50	-25	140	170	1,40	0,96	0,83
50	-20	195	193	1,46	1,18	1,01
50	-15	263	219	1,54	1,40	1,20
50	-10	344	247	1,63	1,62	1,39
50	-5	437	278	1,73	1,83	1,57
50	0	544	311	1,84	2,03	1,75
50	5	663	347	1,97	2,22	1,91
50	7,2	720	363	2,03	2,30	1,98
50	10	795	385	2,12	2,40	2,07

55	-25	123	170	1,40	0,84	0,72
55	-20	172	196	1,47	1,02	0,88
55	-15	235	224	1,55	1,22	1,05
55	-10	310	255	1,65	1,41	1,22
55	-5	398	288	1,76	1,61	1,38
55	0	499	324	1,89	1,79	1,54
55	5	613	362	2,03	1,97	1,69
55	7,2	667	380	2,10	2,04	1,76
55	10	740	403	2,19	2,13	1,83

60	-25	106	170	1,40	0,72	0,62
60	-20	150	198	1,48	0,88	0,75
60	-15	206	229	1,57	1,05	0,90
60	-10	276	263	1,68	1,22	1,05
60	-5	359	299	1,80	1,40	1,20
60	0	454	337	1,93	1,57	1,35
60	5	563	378	2,09	1,73	1,49
60	7,2	614	397	2,17	1,80	1,55
60	10	684	421	2,27	1,89	1,62

65	-25	88	170	1,40	0,60	0,52
65	-20	127	201	1,49	0,73	0,63
65	-15	178	235	1,59	0,88	0,76
65	-10	242	271	1,70	1,04	0,90
65	-5	320	309	1,83	1,20	1,03
65	0	409	350	1,98	1,36	1,17
65	5	512	393	2,15	1,51	1,30
65	7,2	562	413	2,24	1,58	1,36
65	10	628	439	2,35	1,66	1,43

## CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-25	189	171	1,40	1,10	0,95
40	-20	260	189	1,45	1,38	1,19
40	-15	346	210	1,51	1,65	1,42
40	-10	444	233	1,58	1,91	1,65
40	-5	557	259	1,66	2,15	1,86
40	0	683	287	1,76	2,38	2,06
40	5	822	318	1,86	2,59	2,24
40	7,2	888	332	1,92	2,67	2,31
40	10	975	351	1,99	2,78	2,40

45	-25	169	171	1,40	0,99	0,85
45	-20	234	192	1,46	1,22	1,06
45	-15	313	215	1,53	1,46	1,26
45	-10	406	241	1,61	1,68	1,46
45	-5	511	269	1,70	1,90	1,64
45	0	631	300	1,80	2,10	1,82
45	5	764	333	1,92	2,29	1,98
45	7,2	827	349	1,98	2,37	2,05
45	10	910	369	2,06	2,47	2,13

50	-25	150	171	1,40	0,88	0,76
50	-20	208	194	1,47	1,07	0,93
50	-15	281	220	1,54	1,28	1,10
50	-10	367	249	1,63	1,47	1,27
50	-5	466	280	1,73	1,67	1,44
50	0	579	313	1,85	1,85	1,60
50	5	706	349	1,98	2,02	1,75
50	7,2	766	366	2,04	2,09	1,81
50	10	846	388	2,13	2,18	1,89

55	-25	130	171	1,40	0,76	0,66
55	-20	183	197	1,47	0,93	0,80
55	-15	248	225	1,56	1,10	0,95
55	-10	328	256	1,65	1,28	1,10
55	-5	421	290	1,77	1,45	1,25
55	0	527	326	1,89	1,62	1,40
55	5	647	365	2,04	1,78	1,53
55	7,2	704	382	2,11	1,84	1,59
55	10	781	406	2,21	1,92	1,66

60	-25	111	171	1,40	0,65	0,56
60	-20	157	199	1,48	0,78	0,68
60	-15	216	231	1,57	0,94	0,81
60	-10	289	264	1,68	1,09	0,94
60	-5	375	300	1,80	1,25	1,08
60	0	476	339	1,94	1,40	1,21
60	5	589	380	2,10	1,55	1,34
60	7,2	643	399	2,18	1,61	1,39
60	10	716	424	2,28	1,69	1,46

65	-25	91	171	1,40	0,53	0,46
65	-20	131	202	1,49	0,65	0,56
65	-15	184	236	1,59	0,78	0,67
65	-10	250	272	1,71	0,92	0,79
65	-5	330	311	1,84	1,06	0,92
65	0	424	352	1,99	1,20	1,04
65	5	531	396	2,16	1,34	1,16
65	7,2	582	416	2,25	1,40	1,21
65	10	651	442	2,36	1,47	1,27

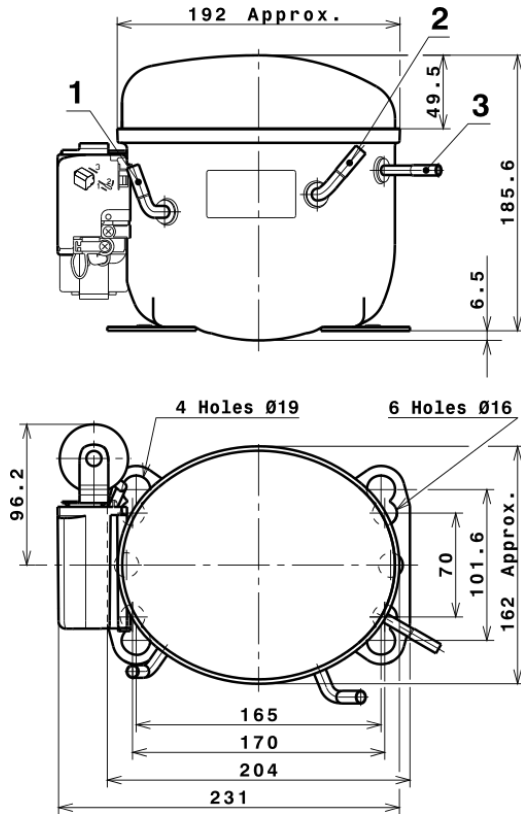


## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.099,5556462246	187,3686959008	1,3534155330	18,868497948169
2	36,9777071831	1,8512487739	0,0056772585	0,69603399602864
3	-10,6382243747	2,6777323582	0,0104767155	-0,096321833601046
4	0,2661581999	0,0537914794	0,0003218796	0,0077132431812667
5	-0,2693503140	0,1071092943	0,0004190686	-0,0016370990245772

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

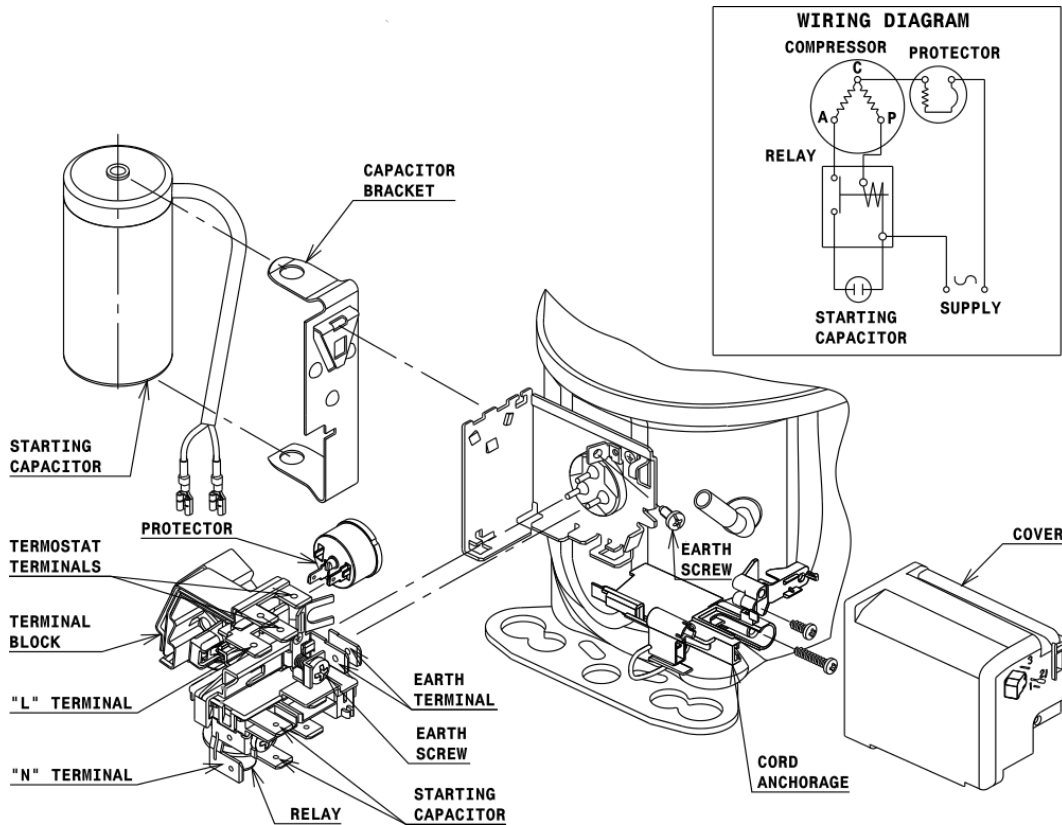


## DESIGNATION INTERNAL DIAM.

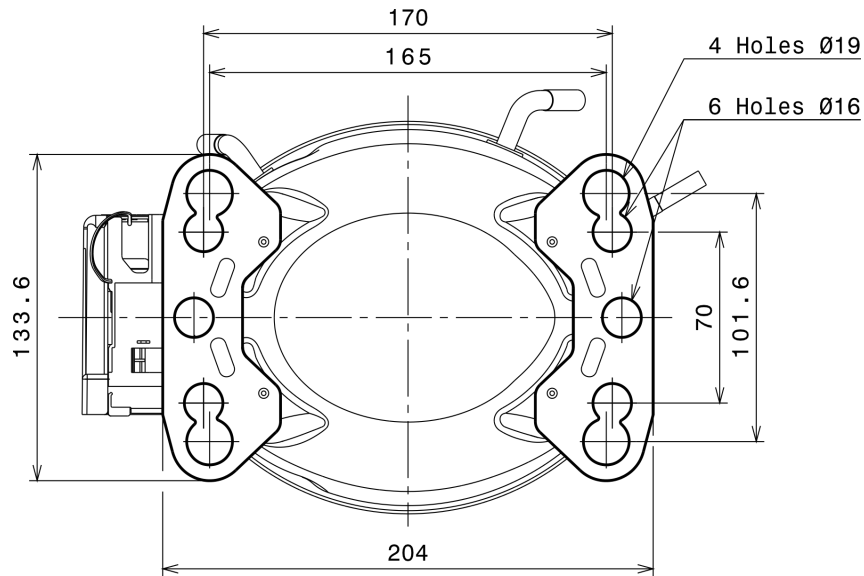
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (L, P ranges)



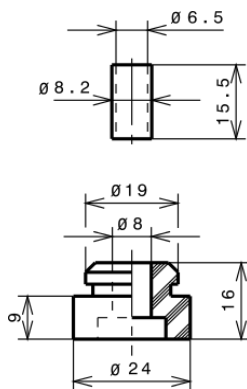
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

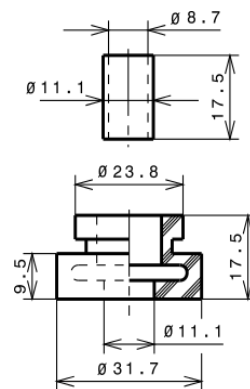
### STANDARD

Ø16 holes (170x70 net)



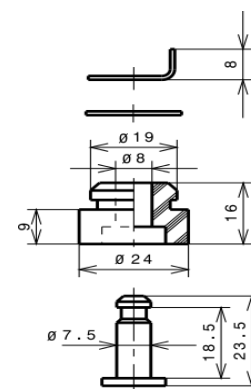
### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R134a HMBP

