

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **GE80TG**
Voltage **220-240/230V 50/60Hz ~1**
Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High Back Pressure	Displacement	8,10 cm ³	Nominal Power	1/4 hp
Refrigerant	R134a	Diameter	24,28 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	17,50 mm	Voltage range	187-264 V
Expansion	Capillar/Valve	Net Weight	8,80 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 22 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	220 cm ³	Locked Rotor Amps (LRA)	14,70 A
Compatible refriger.	R1234yf			Main W. resist. at 25°C	9,60 Ω
				Start W. resist. at 25°C	24,50 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	714 kCal/h	687 W
COP	2,20 W/W	1,89 W/W
EER	1,89 kCal/Wh	1,64 kCal/Wh
Input Power	377 W	362 W
Current	2,20 A	2,14 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	60-61 µF 330 V			
Relay	Option 1			
Reference	QLZ-6.1A			
Pick-Up	6.10 A			
Drop-Out	5.20 A			
Protector	Option 1			
Reference	B96-105			
Current	9,60 A			
Time check	7,5-16 seg			
Disc temp. (Open/Close)	115,00 / 52,00 °C			



ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	326	255	1,81	1,49	1,28
40	-10	398	263	1,82	1,76	1,52
40	-5	493	274	1,85	2,09	1,80
40	0	610	291	1,90	2,44	2,10
40	5	750	311	1,96	2,80	2,41
40	7,2	819	322	1,99	2,96	2,54
40	10	913	337	2,04	3,15	2,71

45	-15	307	252	1,80	1,42	1,22
45	-10	376	264	1,83	1,65	1,42
45	-5	467	281	1,87	1,93	1,66
45	0	581	302	1,93	2,23	1,92
45	5	717	328	2,01	2,54	2,19
45	7,2	784	340	2,05	2,68	2,30
45	10	876	358	2,12	2,85	2,45

50	-15	288	249	1,80	1,35	1,16
50	-10	353	266	1,83	1,54	1,33
50	-5	441	288	1,89	1,78	1,53
50	0	551	314	1,96	2,04	1,76
50	5	683	344	2,07	2,31	1,99
50	7,2	749	359	2,12	2,43	2,09
50	10	839	379	2,21	2,58	2,21

55	-15	269	246	1,79	1,27	1,09
55	-10	330	268	1,84	1,43	1,23
55	-5	414	294	1,90	1,64	1,41
55	0	521	325	2,00	1,86	1,60
55	5	650	360	2,13	2,10	1,81
55	7,2	714	377	2,20	2,20	1,89
55	10	802	400	2,30	2,33	2,01

60	-15	250	243	1,78	1,20	1,03
60	-10	308	270	1,84	1,33	1,14
60	-5	388	301	1,92	1,50	1,29
60	0	491	336	2,04	1,70	1,46
60	5	617	376	2,20	1,91	1,64
60	7,2	679	395	2,28	2,00	1,72
60	10	765	421	2,41	2,11	1,82

65	-15	231	240	1,78	1,12	0,96
65	-10	285	272	1,85	1,22	1,05
65	-5	362	307	1,94	1,37	1,18
65	0	461	348	2,08	1,54	1,33
65	5	583	393	2,27	1,73	1,49
65	7,2	644	414	2,37	1,81	1,56
65	10	728	442	2,52	1,92	1,65

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	351	256	1,81	1,37	1,18
40	-10	430	264	1,83	1,63	1,41
40	-5	532	276	1,86	1,93	1,67
40	0	658	292	1,90	2,25	1,94
40	5	808	313	1,96	2,58	2,23
40	7,2	881	324	2,00	2,72	2,35
40	10	981	339	2,05	2,90	2,50

45	-15	329	253	1,80	1,30	1,12
45	-10	403	266	1,83	1,52	1,31
45	-5	501	283	1,87	1,77	1,53
45	0	622	304	1,93	2,05	1,77
45	5	768	330	2,02	2,33	2,01
45	7,2	839	343	2,06	2,45	2,12
45	10	936	360	2,13	2,60	2,25

50	-15	307	250	1,80	1,23	1,06
50	-10	376	268	1,84	1,41	1,21
50	-5	470	289	1,89	1,62	1,40
50	0	586	315	1,97	1,86	1,61
50	5	727	346	2,08	2,10	1,82
50	7,2	797	361	2,13	2,21	1,91
50	10	891	381	2,22	2,34	2,02

55	-15	285	247	1,79	1,15	0,99
55	-10	350	269	1,84	1,30	1,12
55	-5	438	296	1,91	1,48	1,28
55	0	551	327	2,01	1,68	1,45
55	5	687	362	2,14	1,89	1,64
55	7,2	754	379	2,21	1,99	1,72
55	10	847	402	2,32	2,10	1,82

60	-15	262	244	1,79	1,07	0,93
60	-10	323	271	1,84	1,19	1,03
60	-5	407	303	1,93	1,34	1,16
60	0	515	338	2,05	1,52	1,31
60	5	646	379	2,21	1,71	1,47
60	7,2	712	398	2,29	1,79	1,55
60	10	802	423	2,42	1,89	1,64

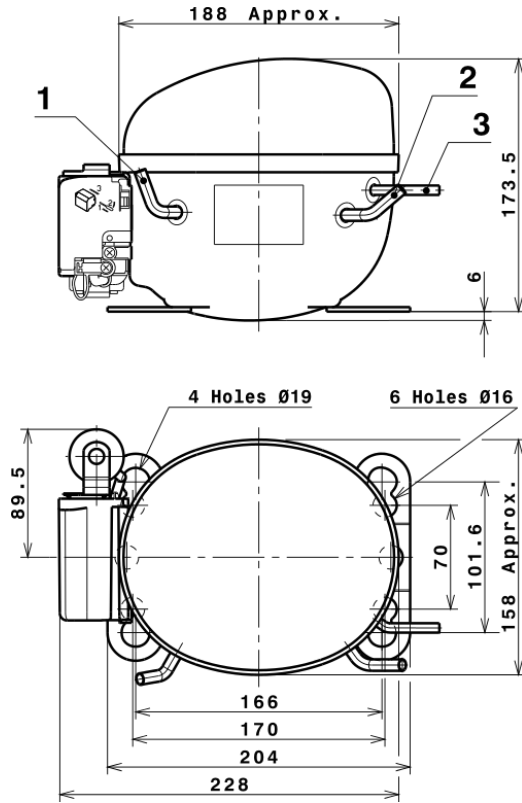
65	-15	240	241	1,78	1,00	0,86
65	-10	296	273	1,85	1,08	0,94
65	-5	376	309	1,95	1,21	1,05
65	0	479	350	2,09	1,37	1,18
65	5	606	395	2,28	1,53	1,33
65	7,2	669	416	2,38	1,61	1,39
65	10	757	445	2,53	1,70	1,47

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	949,6716062760	205,4831849257	1,4906036406	15,167091901898
2	35,1572881973	-4,0230144247	-0,0154340389	0,61600020431823
3	-7,5024792783	2,3631578889	0,0099213779	-0,019040270459349
4	0,4662156625	0,0944381351	0,0006904352	0,013509374318494
5	-0,1970732496	0,1987018495	0,0007501199	0,00093507081752188

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

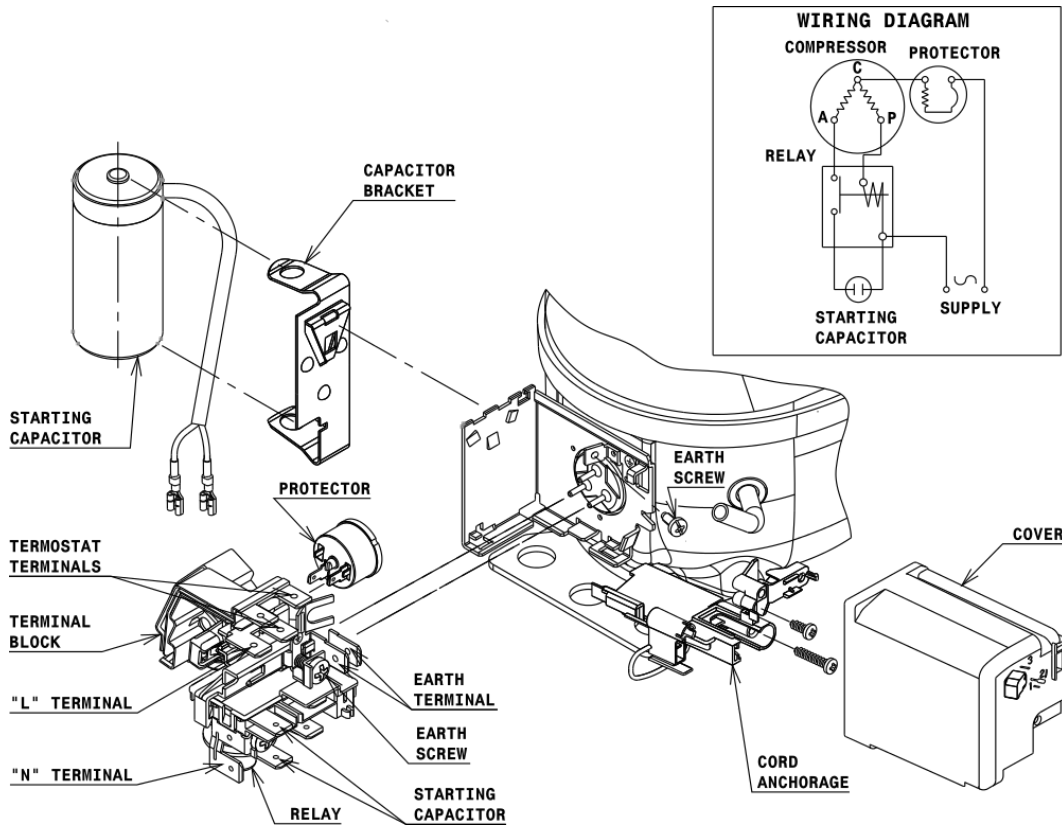


DESIGNATION INTERNAL DIAM.

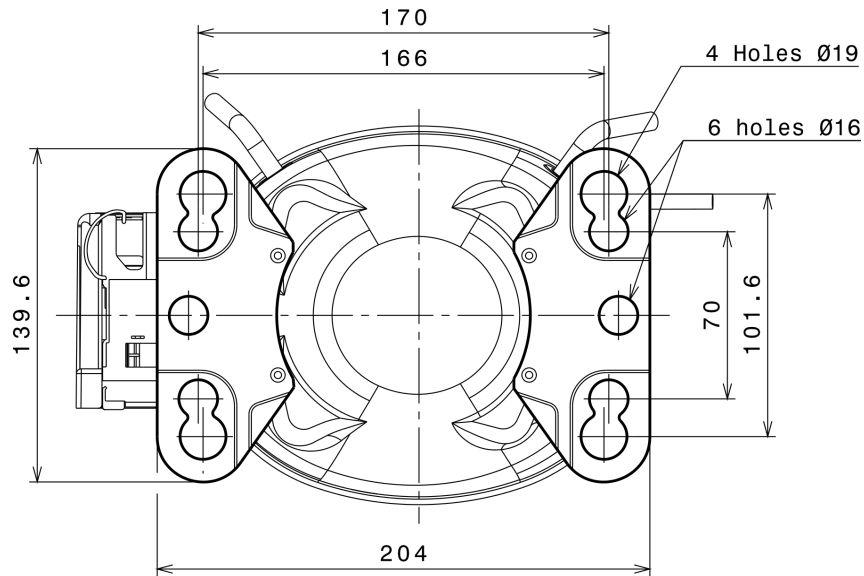
DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction	6,2 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



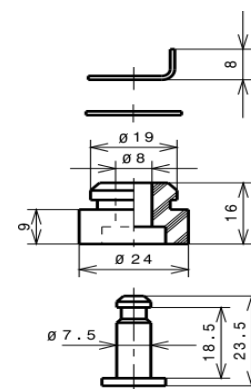
AMERICAN FEET

$\varnothing 19$ holes (166x101.6 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a HBP

