

# 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 <sup>3</sup>	Nominal Power	1/4 hp
Refrigerant	R134a	Diameter	24,28 mm	Voltage/Frequency	230V 60Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	17,50 mm	Voltage range	196-253 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 <sup>3</sup>	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	834 kCal/h	798 W
COP	2,28 W/W	1,95 W/W
EER	1,96 kCal/Wh	1,69 kCal/Wh
Input Power	425 W	408 W
Current	1,98 A	1,93 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (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	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			

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## ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-15	375	252	1,57	1,73	1,49
40	-10	451	268	1,60	1,96	1,68
40	-5	558	290	1,63	2,24	1,93
40	0	694	316	1,68	2,56	2,20
40	5	861	348	1,75	2,88	2,48
40	7,2	944	363	1,79	3,02	2,60
40	10	1.058	384	1,85	3,20	2,75

45	-15	353	260	1,59	1,58	1,36
45	-10	426	279	1,61	1,77	1,53
45	-5	529	303	1,66	2,03	1,74
45	0	663	333	1,72	2,32	1,99
45	5	826	367	1,80	2,62	2,25
45	7,2	907	384	1,85	2,75	2,36
45	10	1.019	406	1,92	2,92	2,51

50	-15	332	269	1,60	1,44	1,23
50	-10	401	290	1,63	1,61	1,38
50	-5	501	317	1,68	1,84	1,58
50	0	631	349	1,76	2,10	1,81
50	5	791	386	1,86	2,38	2,05
50	7,2	871	404	1,91	2,50	2,15
50	10	981	429	1,99	2,66	2,29

55	-15	310	277	1,61	1,30	1,12
55	-10	376	302	1,65	1,45	1,25
55	-5	473	331	1,71	1,66	1,43
55	0	599	366	1,80	1,90	1,64
55	5	756	406	1,92	2,17	1,86
55	7,2	834	425	1,98	2,28	1,96
55	10	942	451	2,07	2,43	2,09

60	-15	288	285	1,62	1,18	1,01
60	-10	351	313	1,67	1,31	1,12
60	-5	444	345	1,75	1,50	1,29
60	0	567	383	1,85	1,72	1,48
60	5	720	425	1,98	1,97	1,69
60	7,2	797	446	2,05	2,08	1,79
60	10	904	473	2,16	2,22	1,91

65	-15	267	294	1,64	1,06	0,91
65	-10	326	324	1,70	1,17	1,01
65	-5	416	359	1,78	1,35	1,16
65	0	535	399	1,90	1,56	1,34
65	5	685	445	2,05	1,79	1,54
65	7,2	761	466	2,13	1,90	1,63
65	10	865	495	2,25	2,03	1,75

## CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-15	404	253	1,58	1,59	1,38
40	-10	487	270	1,60	1,81	1,56
40	-5	602	291	1,63	2,07	1,79
40	0	749	318	1,69	2,36	2,04
40	5	927	350	1,76	2,65	2,29
40	7,2	1.016	365	1,80	2,78	2,40
40	10	1.137	387	1,86	2,94	2,54

45	-15	379	262	1,59	1,45	1,25
45	-10	457	281	1,62	1,63	1,41
45	-5	568	305	1,66	1,86	1,61
45	0	710	335	1,72	2,12	1,83
45	5	884	369	1,81	2,39	2,07
45	7,2	971	386	1,86	2,51	2,17
45	10	1.090	409	1,93	2,66	2,30

50	-15	353	270	1,60	1,31	1,13
50	-10	428	292	1,64	1,46	1,27
50	-5	534	319	1,69	1,67	1,45
50	0	672	351	1,76	1,91	1,65
50	5	841	389	1,86	2,16	1,87
50	7,2	926	407	1,92	2,28	1,97
50	10	1.042	431	2,00	2,42	2,09

55	-15	328	279	1,61	1,18	1,02
55	-10	398	303	1,66	1,31	1,13
55	-5	500	333	1,72	1,50	1,30
55	0	633	368	1,81	1,72	1,49
55	5	798	408	1,93	1,95	1,69
55	7,2	881	428	1,99	2,06	1,78
55	10	995	454	2,08	2,19	1,89

60	-15	303	287	1,63	1,05	0,91
60	-10	368	314	1,68	1,17	1,01
60	-5	465	347	1,75	1,34	1,16
60	0	594	385	1,85	1,54	1,33
60	5	755	428	1,99	1,76	1,52
60	7,2	836	449	2,06	1,86	1,61
60	10	947	476	2,17	1,99	1,72

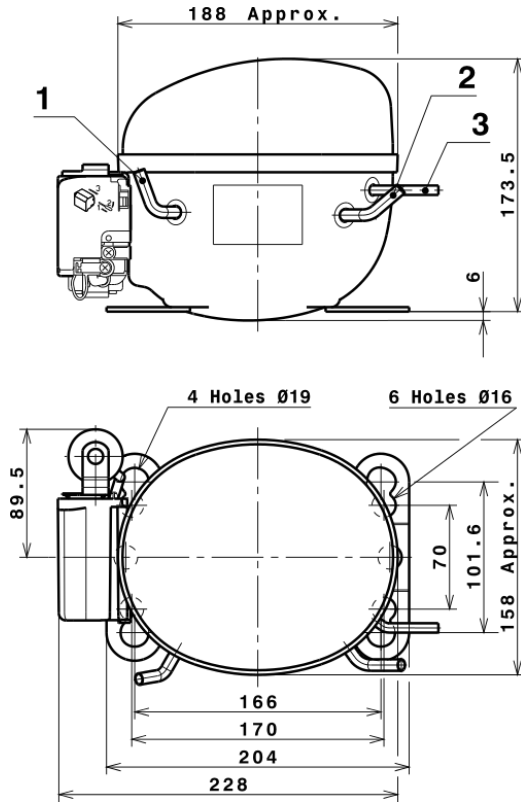
65	-15	277	295	1,64	0,94	0,81
65	-10	338	326	1,70	1,04	0,90
65	-5	431	361	1,79	1,19	1,03
65	0	556	402	1,90	1,38	1,20
65	5	712	448	2,06	1,59	1,37
65	7,2	791	469	2,14	1,68	1,46
65	10	900	499	2,26	1,81	1,56

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.063,9988908200	188,2557160475	1,2770659364	16,67071181739
2	39,9491786405	1,4735676026	-0,0042236485	0,69408605682135
3	-8,1193268114	3,4458241271	0,0100985279	-0,0079439720086131
4	0,6228166291	0,1090954931	0,0006174741	0,017843644863815
5	-0,1952383014	0,1153938579	0,0004989955	0,0019391431961628

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

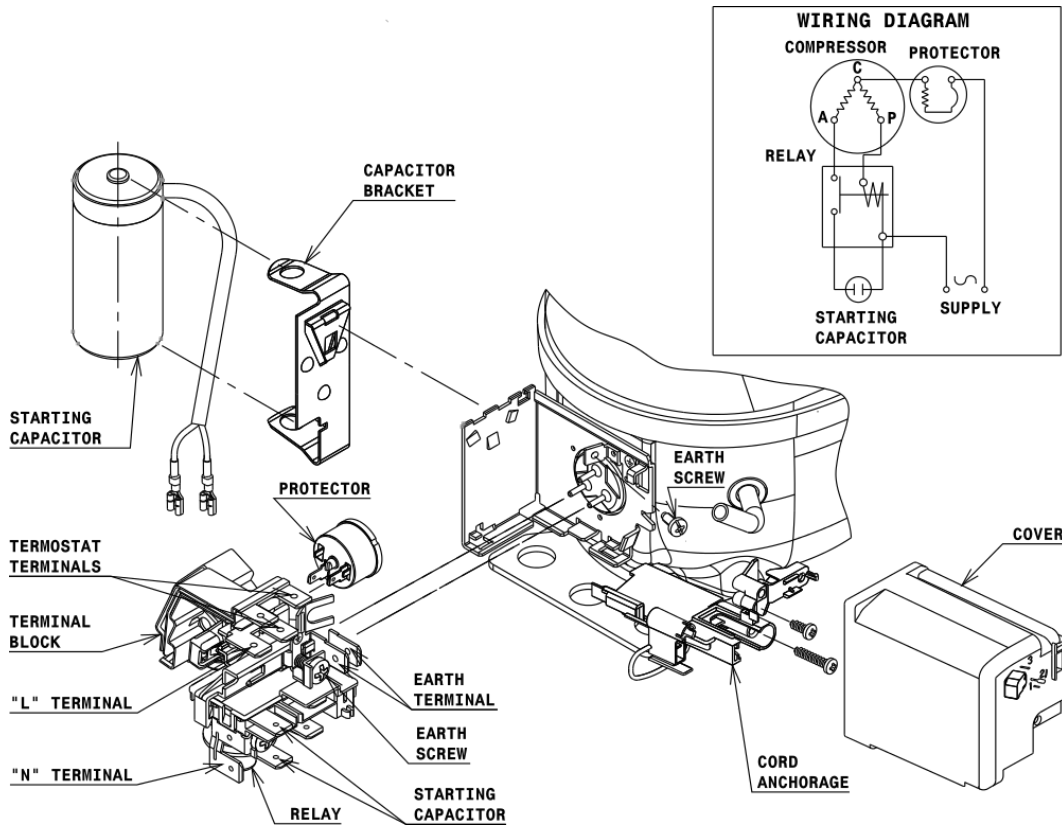


## DESIGNATION INTERNAL DIAM.

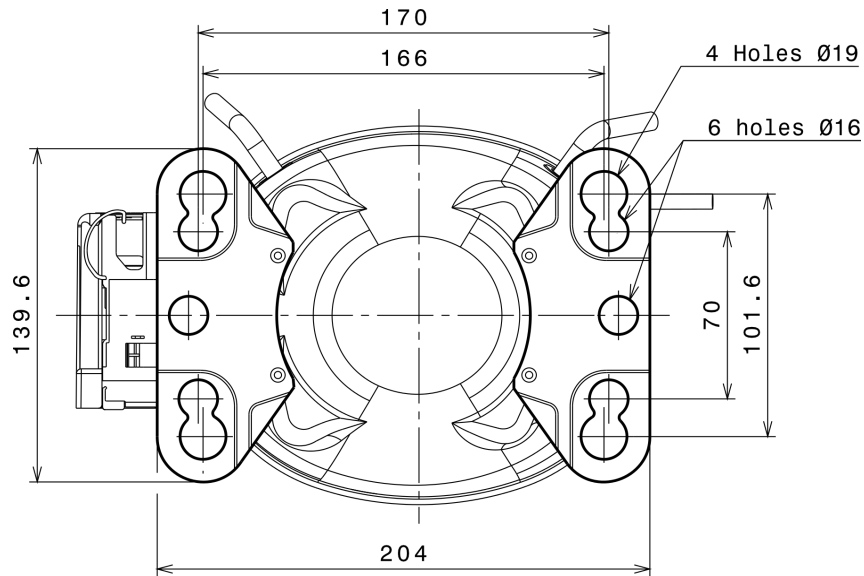
DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction	6,2 mm
3 Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (U range)



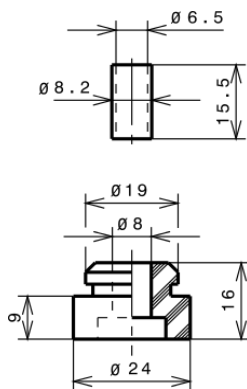
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

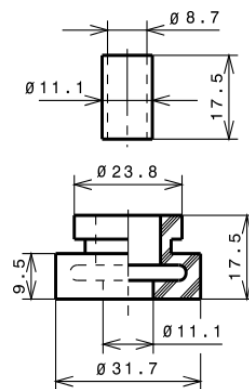
### STANDARD

$\varnothing 16$  holes (170x70 net)



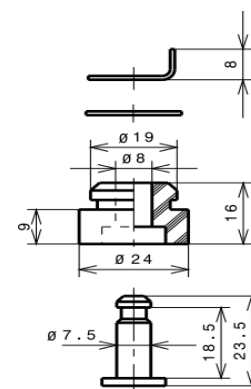
### AMERICAN FEET

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



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA