

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **GE70TG**  
Voltage **220-240/230V 50/60Hz ~1**  
Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High Back Pressure	Displacement	6,70 cm <sup>3</sup>	Nominal Power	1/5 hp
Refrigerant	R134a	Diameter	24,28 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	14,50 mm	Voltage range	187-254 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)	14,00 A
Compatible refriger.	R1234yf			Main W. resist. at 25°C	10,50 Ω
				Start W. resist. at 25°C	23,30 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	604 kCal/h	584 W
COP	2,36 W/W	2,01 W/W
EER	2,03 kCal/Wh	1,74 kCal/Wh
Input Power	298 W	291 W
Current	1,99 A	1,97 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	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	B85-105			
Current	8,50 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 61,00 °C			



## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	278	196	1,78	1,65	1,42
40	-10	345	208	1,80	1,93	1,66
40	-5	427	220	1,82	2,26	1,94
40	0	525	233	1,85	2,62	2,25
40	5	638	248	1,87	3,00	2,58
40	7,2	693	254	1,89	3,17	2,73
40	10	767	262	1,91	3,40	2,92

45	-15	262	202	1,79	1,51	1,30
45	-10	326	216	1,81	1,76	1,51
45	-5	405	230	1,84	2,05	1,76
45	0	500	245	1,87	2,37	2,04
45	5	610	261	1,90	2,71	2,33
45	7,2	663	269	1,92	2,87	2,47
45	10	736	278	1,94	3,08	2,64

50	-15	245	208	1,80	1,37	1,18
50	-10	306	224	1,83	1,59	1,37
50	-5	383	240	1,86	1,85	1,59
50	0	474	257	1,89	2,15	1,84
50	5	582	275	1,93	2,46	2,11
50	7,2	634	283	1,95	2,60	2,24
50	10	704	294	1,98	2,79	2,40

55	-15	229	214	1,81	1,24	1,07
55	-10	287	232	1,84	1,44	1,24
55	-5	360	250	1,88	1,68	1,44
55	0	449	269	1,92	1,94	1,67
55	5	553	289	1,97	2,23	1,91
55	7,2	604	298	1,99	2,36	2,03
55	10	673	310	2,02	2,53	2,17

60	-15	213	220	1,82	1,12	0,97
60	-10	268	239	1,86	1,30	1,12
60	-5	338	260	1,90	1,51	1,30
60	0	424	281	1,95	1,75	1,51
60	5	525	303	2,00	2,02	1,73
60	7,2	574	313	2,03	2,14	1,84
60	10	642	325	2,06	2,29	1,97

65	-15	196	226	1,83	1,01	0,87
65	-10	248	247	1,87	1,17	1,00
65	-5	316	270	1,92	1,36	1,17
65	0	398	293	1,98	1,58	1,36
65	5	497	317	2,04	1,82	1,57
65	7,2	545	327	2,07	1,94	1,66
65	10	610	341	2,11	2,08	1,79

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	299	197	1,78	1,52	1,31
40	-10	372	209	1,80	1,78	1,54
40	-5	461	221	1,82	2,08	1,80
40	0	566	235	1,85	2,41	2,08
40	5	687	249	1,88	2,76	2,38
40	7,2	746	256	1,89	2,92	2,52
40	10	825	264	1,91	3,12	2,70

45	-15	280	203	1,79	1,38	1,19
45	-10	349	217	1,81	1,61	1,39
45	-5	434	231	1,84	1,88	1,62
45	0	535	247	1,87	2,17	1,87
45	5	653	263	1,91	2,48	2,15
45	7,2	710	270	1,92	2,63	2,27
45	10	787	280	1,95	2,81	2,43

50	-15	261	209	1,80	1,25	1,08
50	-10	326	225	1,83	1,45	1,25
50	-5	408	241	1,86	1,69	1,46
50	0	505	259	1,90	1,95	1,69
50	5	619	277	1,94	2,23	1,93
50	7,2	674	285	1,96	2,36	2,04
50	10	749	296	1,98	2,53	2,19

55	-15	242	215	1,81	1,13	0,97
55	-10	303	233	1,84	1,30	1,13
55	-5	381	251	1,88	1,52	1,31
55	0	475	271	1,92	1,75	1,51
55	5	584	291	1,97	2,01	1,74
55	7,2	638	300	1,99	2,13	1,84
55	10	711	312	2,03	2,28	1,97

60	-15	223	221	1,82	1,01	0,87
60	-10	281	241	1,86	1,17	1,01
60	-5	354	261	1,90	1,36	1,17
60	0	444	283	1,95	1,57	1,36
60	5	550	305	2,01	1,81	1,56
60	7,2	602	315	2,03	1,91	1,65
60	10	672	328	2,07	2,05	1,77

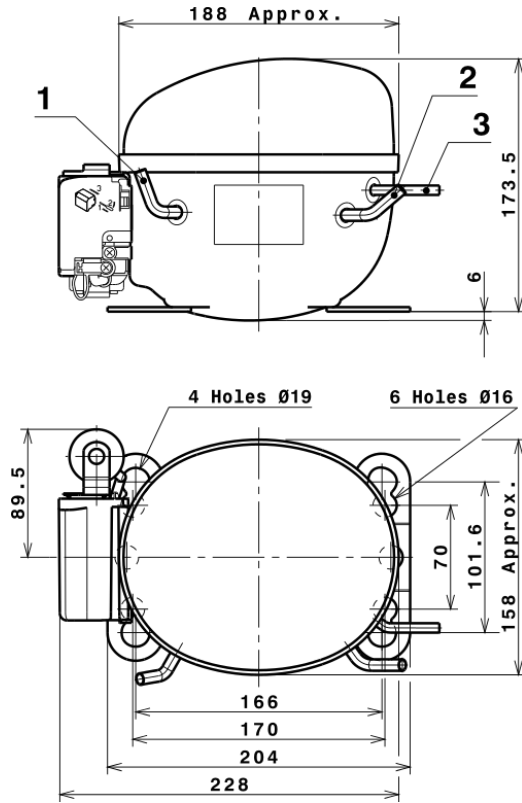
65	-15	204	227	1,83	0,90	0,78
65	-10	258	249	1,88	1,04	0,89
65	-5	328	271	1,93	1,21	1,04
65	0	414	294	1,98	1,40	1,21
65	5	516	319	2,04	1,62	1,40
65	7,2	566	329	2,08	1,72	1,48
65	10	634	344	2,12	1,85	1,60

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	813,3830256515	142,8410014576	1,6280564293	13,081455498462
2	28,9806960285	-0,3388802403	-0,0033122745	0,50251276800005
3	-6,3738869630	2,4511648805	0,0056721399	-0,016597924611427
4	0,3199594962	0,0193793720	0,0001235088	0,0094689181094857
5	-0,1646628173	0,0810950116	0,0002382990	0,00081968723366307

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

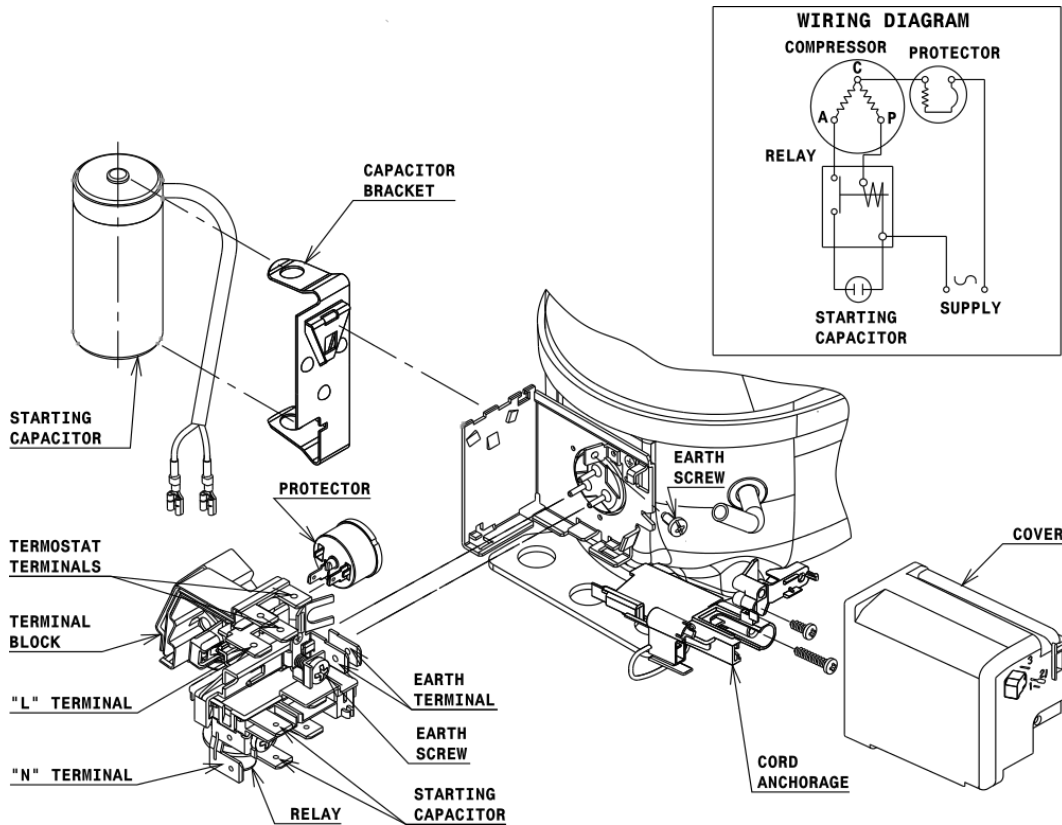


## DESIGNATION INTERNAL DIAM.

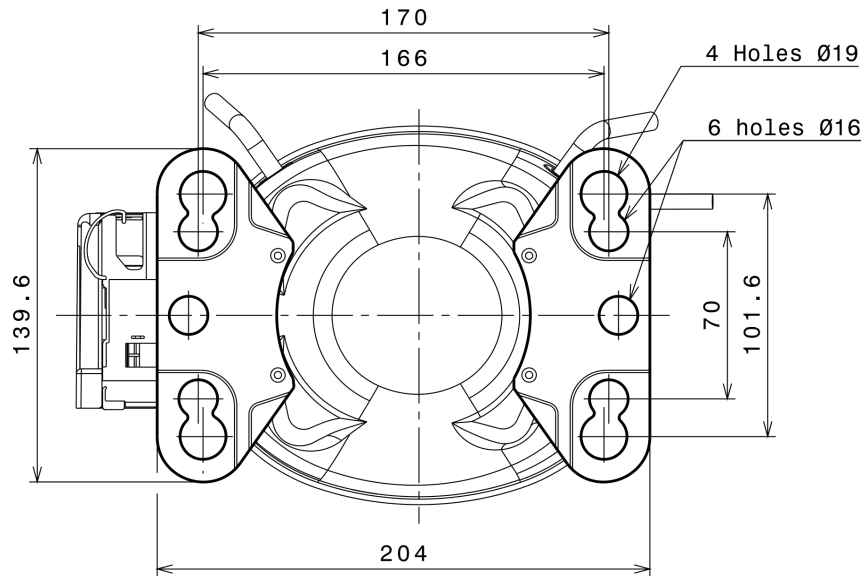
DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction	6,2 mm
3 Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (U range)



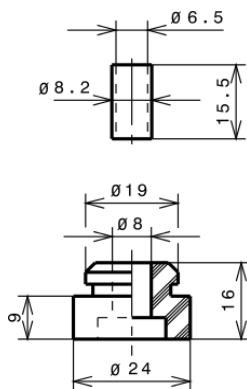
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

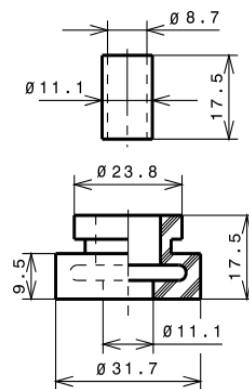
### STANDARD

$\varnothing 16$  holes (170x70 net)



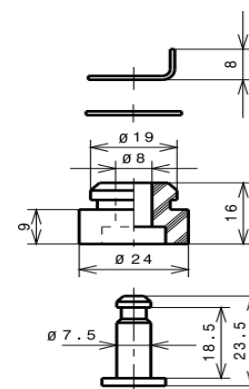
### AMERICAN FEET

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



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R134a HBP

