

Technical Data Sheet

Compressor model **GS34TG_T**
Voltage **200-220/220-230V 50/60Hz ~1**
Refrigerant **R134a**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R134a
Evaporating Temp.	-25,0 °C to 10,0 °C
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 °C
Compatible refriger.	R1234yf

COMPRESSOR

Displacement	34,42 cm³
Diameter	42,86 mm
Stroke	23,85 mm
Net Weight	22,27 Kg
Oil type	ISO VG 32 ESTER
Oil charge	887 cm³

MOTOR

Nominal Power	1 hp
Voltage/Frequency	220-230V 60Hz
Voltage range	198-253 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	39,50 A
Max. Cont. Current (MCC)	10,00 A
Main W. resist. at 25°C	1,53 Ω
Start W. resist. at 25°C	7,44 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	3.365 kCal/h	3.248 W
COP	2,44 W/W	2,11 W/W
EER	2,10 kCal/Wh	1,82 kCal/Wh
Input Power	1.602 W	1.541 W
Current	7,29 A	7,02 A

APPROVALS



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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	88-108 µF 330 V			
Run capacitor	16 µF 450 V			
Relay	Option 1	Option 2		
Reference	3ARR3 10A3	RVA 3AM..		
Pick-Up	239-270 V	239-270 V		
Drop-Out	50-110 V	50-110 V		
Protector	Option 1			
Reference	T0534			
Current	20,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 52,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	722	674	3,46	1,25	1,07
40	-20	1.061	794	3,92	1,55	1,34
40	-15	1.466	912	4,39	1,87	1,61
40	-10	1.940	1.028	4,86	2,19	1,89
40	-5	2.480	1.142	5,33	2,53	2,17
40	0	3.087	1.255	5,80	2,86	2,46
40	5	3.762	1.366	6,27	3,20	2,75
40	7,2	4.080	1.414	6,47	3,36	2,89
40	10	4.504	1.475	6,74	3,55	3,05

45	-25	620	627	3,28	1,15	0,99
45	-20	937	764	3,81	1,43	1,23
45	-15	1.322	899	4,34	1,71	1,47
45	-10	1.774	1.032	4,88	2,00	1,72
45	-5	2.293	1.163	5,42	2,29	1,97
45	0	2.879	1.293	5,96	2,59	2,23
45	5	3.533	1.421	6,50	2,89	2,49
45	7,2	3.842	1.477	6,74	3,03	2,60
45	10	4.254	1.547	7,05	3,20	2,75

50	-25	518	580	3,10	1,04	0,89
50	-20	814	734	3,69	1,29	1,11
50	-15	1.178	886	4,29	1,55	1,33
50	-10	1.609	1.036	4,89	1,81	1,55
50	-5	2.106	1.184	5,50	2,07	1,78
50	0	2.672	1.331	6,12	2,33	2,01
50	5	3.304	1.476	6,74	2,60	2,24
50	7,2	3.603	1.539	7,02	2,72	2,34
50	10	4.003	1.619	7,37	2,88	2,47

55	-25	416	533	2,92	0,91	0,78
55	-20	691	704	3,57	1,14	0,98
55	-15	1.033	873	4,24	1,38	1,18
55	-10	1.443	1.040	4,91	1,61	1,39
55	-5	1.920	1.206	5,59	1,85	1,59
55	0	2.464	1.369	6,28	2,09	1,80
55	5	3.075	1.531	6,98	2,34	2,01
55	7,2	3.365	1.602	7,29	2,44	2,10
55	10	3.753	1.692	7,69	2,58	2,22

60	-25	314	486	2,74	0,75	0,65
60	-20	568	674	3,46	0,98	0,84
60	-15	889	860	4,19	1,20	1,03
60	-10	1.277	1.044	4,93	1,42	1,22
60	-5	1.733	1.227	5,68	1,64	1,41
60	0	2.256	1.407	6,45	1,86	1,60
60	5	2.846	1.586	7,22	2,09	1,79
60	7,2	3.127	1.665	7,57	2,18	1,88
60	10	3.503	1.764	8,01	2,31	1,99

65	-25	212	439	2,57	0,56	0,48
65	-20	445	644	3,34	0,80	0,69
65	-15	745	847	4,13	1,02	0,88
65	-10	1.112	1.048	4,94	1,23	1,06
65	-5	1.546	1.248	5,77	1,44	1,24
65	0	2.048	1.446	6,61	1,65	1,42
65	5	2.617	1.642	7,46	1,85	1,59
65	7,2	2.888	1.727	7,85	1,94	1,67
65	10	3.253	1.836	8,33	2,06	1,77

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	778	678	3,47	1,15	0,99
40	-20	1.147	798	3,94	1,44	1,24
40	-15	1.586	916	4,41	1,73	1,50
40	-10	2.096	1.033	4,88	2,03	1,75
40	-5	2.677	1.149	5,36	2,33	2,01
40	0	3.328	1.262	5,83	2,64	2,28
40	5	4.051	1.374	6,30	2,95	2,55
40	7,2	4.391	1.423	6,51	3,09	2,67
40	10	4.843	1.485	6,78	3,26	2,82

45	-25	665	630	3,29	1,06	0,91
45	-20	1.008	768	3,82	1,31	1,13
45	-15	1.422	903	4,36	1,57	1,36
45	-10	1.906	1.038	4,90	1,84	1,59
45	-5	2.461	1.170	5,44	2,10	1,82
45	0	3.087	1.301	5,99	2,37	2,05
45	5	3.783	1.430	6,54	2,65	2,29
45	7,2	4.112	1.486	6,78	2,77	2,39
45	10	4.550	1.557	7,09	2,92	2,52

50	-25	553	583	3,11	0,95	0,82
50	-20	870	738	3,71	1,18	1,02
50	-15	1.258	890	4,31	1,41	1,22
50	-10	1.716	1.042	4,92	1,65	1,42
50	-5	2.245	1.191	5,53	1,88	1,63
50	0	2.845	1.339	6,15	2,12	1,84
50	5	3.515	1.485	6,78	2,37	2,04
50	7,2	3.833	1.549	7,06	2,47	2,14
50	10	4.257	1.630	7,41	2,61	2,26

55	-25	440	536	2,93	0,82	0,71
55	-20	732	707	3,59	1,03	0,89
55	-15	1.093	878	4,26	1,25	1,08
55	-10	1.526	1.046	4,93	1,46	1,26
55	-5	2.029	1.213	5,62	1,67	1,45
55	0	2.603	1.378	6,32	1,89	1,63
55	5	3.248	1.541	7,02	2,11	1,82
55	7,2	3.554	1.612	7,34	2,20	1,90
55	10	3.963	1.703	7,74	2,33	2,01

60	-25	328	489	2,75	0,67	0,58
60	-20	593	677	3,47	0,88	0,76
60	-15	929	865	4,20	1,07	0,93
60	-10	1.336	1.050	4,95	1,27	1,10
60	-5	1.813	1.234	5,71	1,47	1,27
60	0	2.362	1.416	6,48	1,67	1,44
60	5	2.980	1.596	7,27	1,87	1,61
60	7,2	3.275	1.675	7,61	1,95	1,69
60	10	3.670	1.775	8,06	2,07	1,79

65	-25	215	441	2,58	0,49	0,42
65	-20	455	647	3,36	0,70	0,61
65	-15	765	852	4,15	0,90	0,78
65	-10	1.146	1.054	4,97	1,09	0,94
65	-5	1.598	1.255	5,80	1,27	1,10
65	0	2.120	1.454	6,65	1,46	1,26
65	5	2.713	1.652	7,51	1,64	1,42
65	7,2	2.996	1.738	7,90	1,72	1,49
65	10	3.376	1.848	8,39	1,83	1,58

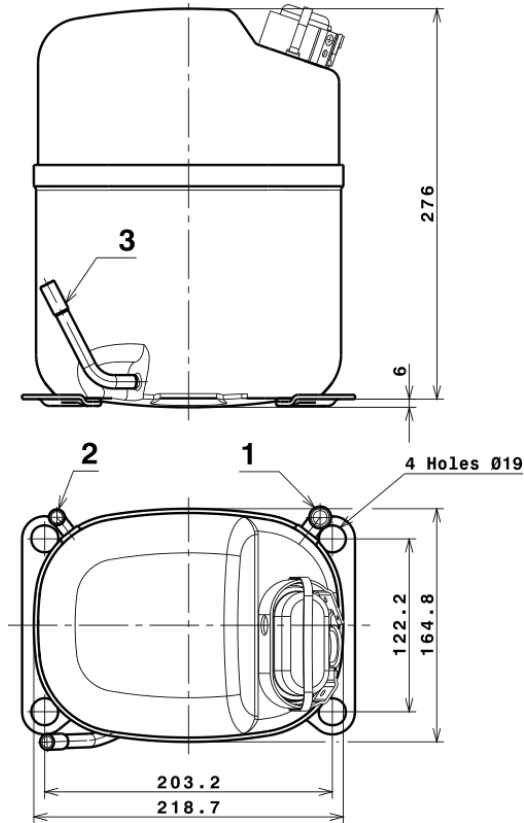
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	5,276,4816309478	978,8112490036	4,5045431452	89,436697360195
2	179,3961154437	-4,6166871238	-0,0140913332	3,2894868680965
3	-49,7565949438	7,9082115564	0,0357642798	-0,40769265244267
4	1,3895442439	-0,0242477539	0,0002451518	0,04027658950288
5	-1,0946453654	0,7027395731	0,0029100074	-0,00073790524150417

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

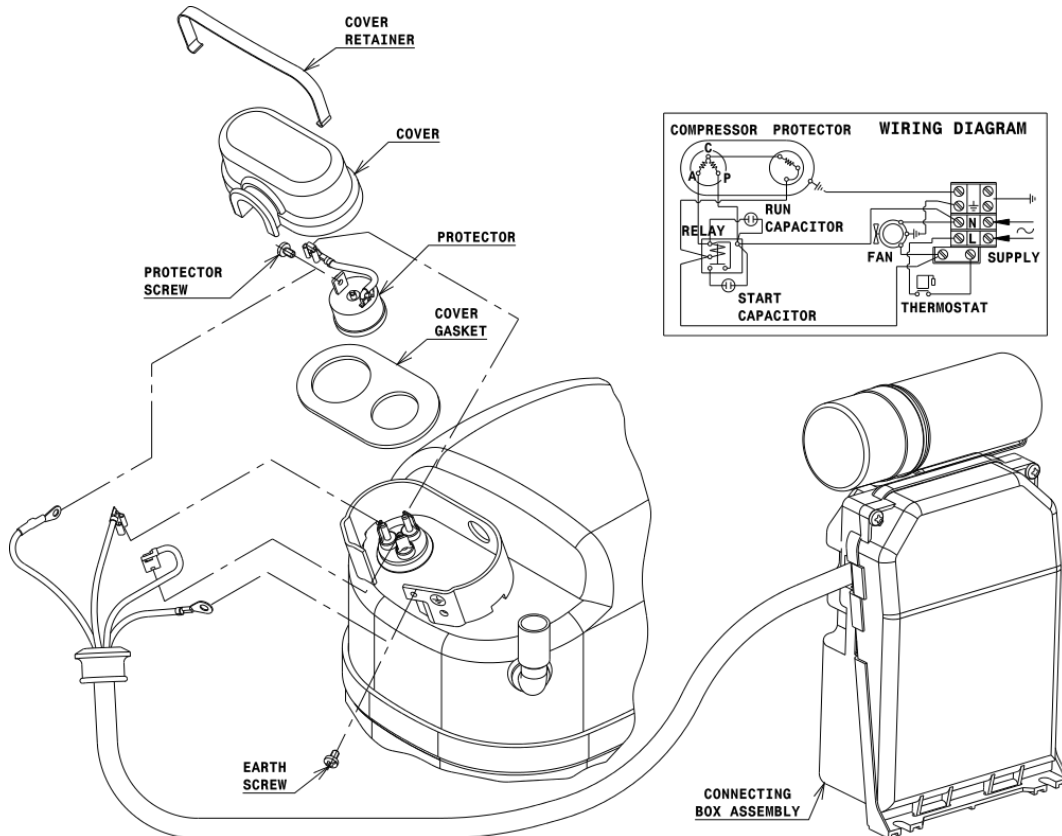
COMPRESSOR DIMENSIONS



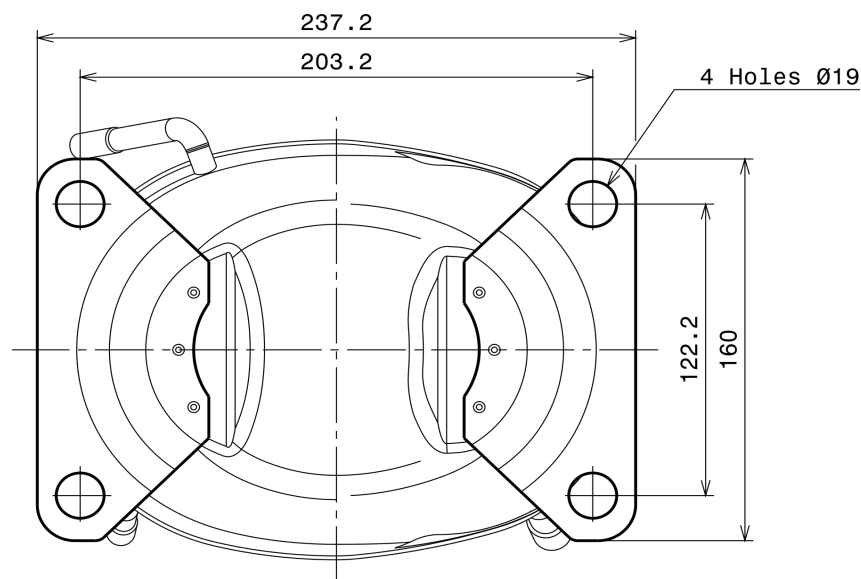
	DESIGNATION	INTERNAL DIAM.
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



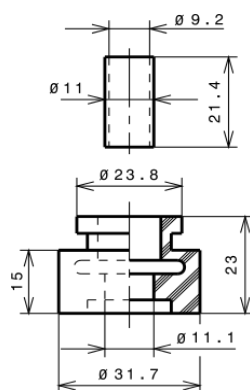
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R134a HMBP

