

Technical Data Sheet

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

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	34,42 cm ³	Nominal Power	1 hp
Refrigerant	R134a	Diameter	42,86 mm	Voltage/Frequency	220-230V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	23,85 mm	Voltage range	198-253 V
Expansion	Capillar/Valve	Net Weight	21,82 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	700 cm ³	Locked Rotor Amps (LRA)	39,50 A
Compatible refriger.	R1234yf			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

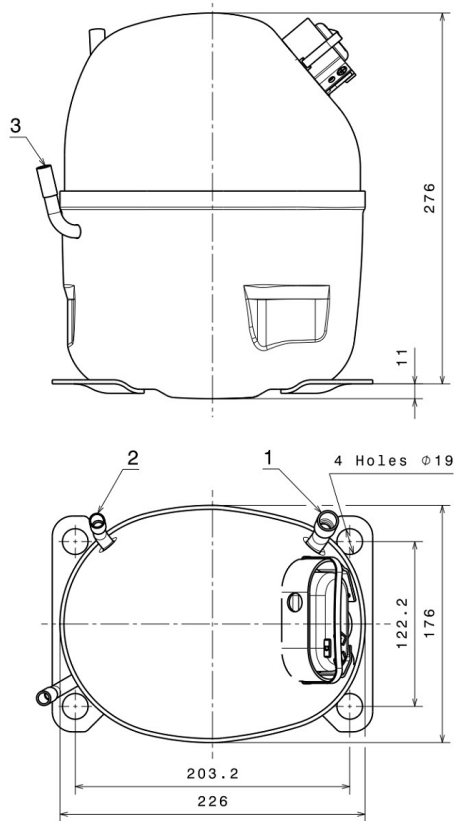
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	5,276,481,630,9478	978,811,249,0036	4,504,543,1452	89,436,697,360,195
2	179,396,115,4437	-4,616,687,1238	-0,014,091,3332	3,289,486,868,0965
3	-49,756,594,9438	7,908,211,5564	0,035,764,2798	-0,407,692,652,442,67
4	1,389,544,2439	-0,024,247,7539	0,000,245,1518	0,040,276,589,502,88
5	-1,094,645,3654	0,702,739,5731	0,002,910,0074	-0,000,737,905,241,504,17

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

COMPRESSOR DIMENSIONS

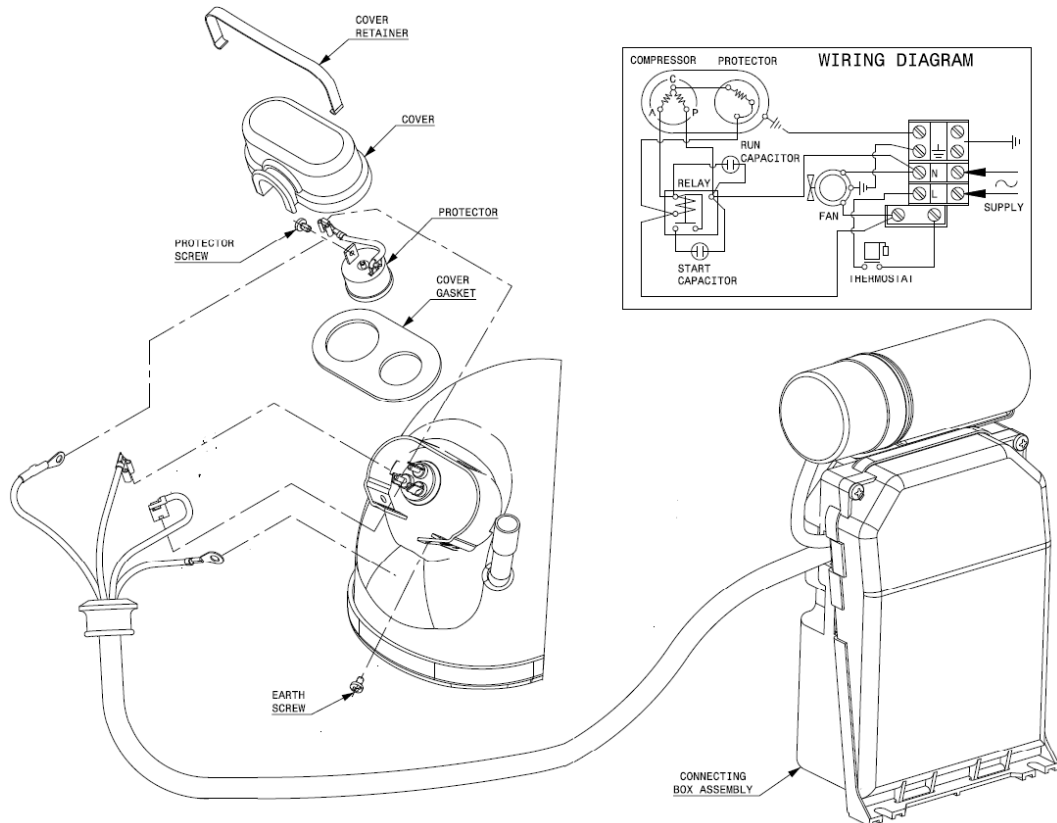


DESIGNATION INTERNAL DIAM.

1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

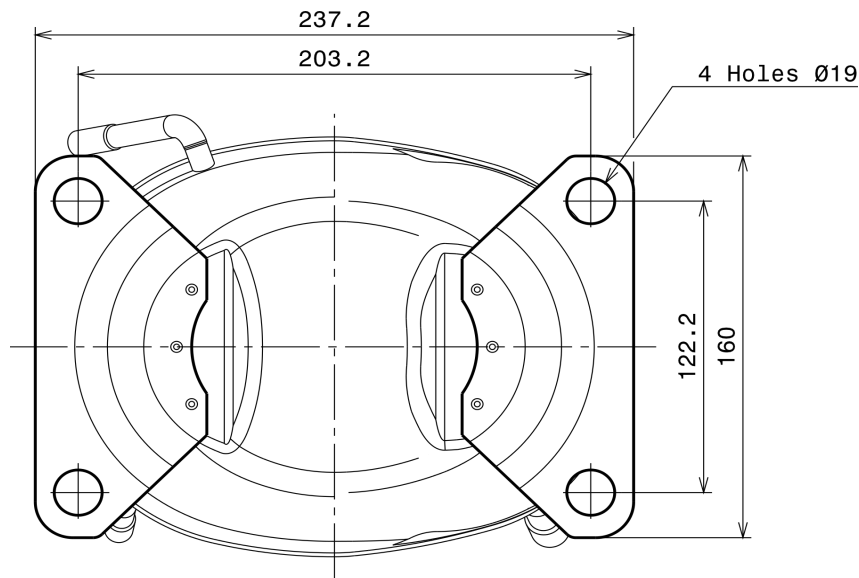
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (NS Range)



Technical Data Sheet

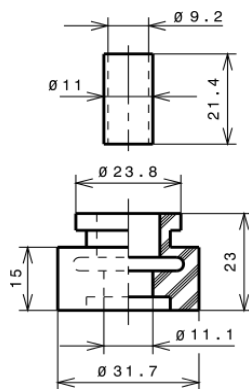
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R134a HMBP

