

Technical Data Sheet

Compressor model **GS30TG_T**
 Voltage **200-220/220-230V 50/60Hz ~1**
 Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	29,95 cm ³	Nominal Power	7/8 hp
Refrigerant	R134a	Diameter	39,98 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	23,85 mm	Voltage range	170-242 V
Expansion	Capillar/Valve	Net Weight	23,00 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	860 cm ³	Locked Rotor Amps (LRA)	36,00 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	2.550 kCal/h	2.451 W
COP	2,70 W/W	2,31 W/W
EER	2,32 kCal/Wh	2,00 kCal/Wh
Input Power	1.100 W	1.061 W
Current	6,10 A	5,93 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	200 V 50 Hz	200 V 50 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	Option 2	
Reference	MRA38123	T0534	
Current	22,00 A	20,00 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 52,00 °C	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	500	440	3,26	1,32	1,14
40	-20	747	522	3,61	1,66	1,43
40	-15	1.051	602	3,95	2,03	1,75
40	-10	1.413	678	4,28	2,42	2,08
40	-5	1.833	752	4,59	2,84	2,44
40	0	2.311	823	4,90	3,27	2,81
40	5	2.846	891	5,19	3,72	3,19
40	7,2	3.100	920	5,32	3,92	3,37
40	10	3.439	956	5,48	4,18	3,60

45	-25	433	420	3,17	1,20	1,03
45	-20	662	515	3,58	1,50	1,29
45	-15	948	606	3,97	1,82	1,56
45	-10	1.292	695	4,35	2,16	1,86
45	-5	1.694	782	4,72	2,52	2,17
45	0	2.153	865	5,08	2,90	2,49
45	5	2.671	945	5,43	3,29	2,82
45	7,2	2.917	980	5,58	3,46	2,98
45	10	3.246	1.023	5,77	3,69	3,17

50	-25	367	400	3,09	1,07	0,92
50	-20	577	507	3,54	1,32	1,14
50	-15	845	611	3,99	1,61	1,38
50	-10	1.171	713	4,43	1,91	1,64
50	-5	1.555	811	4,85	2,23	1,92
50	0	1.996	907	5,26	2,56	2,20
50	5	2.495	1.000	5,67	2,90	2,50
50	7,2	2.733	1.040	5,84	3,06	2,63
50	10	3.052	1.090	6,06	3,26	2,80

55	-25	300	380	3,00	0,92	0,79
55	-20	492	499	3,51	1,15	0,99
55	-15	742	616	4,01	1,40	1,20
55	-10	1.050	730	4,50	1,67	1,44
55	-5	1.416	841	4,98	1,96	1,68
55	0	1.839	949	5,45	2,25	1,94
55	5	2.320	1.055	5,90	2,56	2,20
55	7,2	2.550	1.100	6,10	2,70	2,32
55	10	2.859	1.157	6,35	2,87	2,47

60	-25	233	360	2,91	0,75	0,65
60	-20	407	492	3,48	0,96	0,83
60	-15	639	621	4,03	1,20	1,03
60	-10	929	747	4,57	1,45	1,24
60	-5	1.276	871	5,11	1,71	1,47
60	0	1.682	991	5,63	1,97	1,70
60	5	2.145	1.109	6,14	2,25	1,93
60	7,2	2.367	1.160	6,36	2,37	2,04
60	10	2.665	1.224	6,64	2,53	2,18

65	-25	167	340	2,83	0,57	0,49
65	-20	323	484	3,45	0,77	0,67
65	-15	536	626	4,05	1,00	0,86
65	-10	808	765	4,65	1,23	1,06
65	-5	1.137	900	5,23	1,47	1,26
65	0	1.524	1.033	5,81	1,72	1,48
65	5	1.969	1.164	6,38	1,97	1,69
65	7,2	2.183	1.220	6,62	2,08	1,79
65	10	2.472	1.291	6,93	2,23	1,91

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	539	442	3,27	1,22	1,05
40	-20	808	525	3,62	1,54	1,33
40	-15	1.137	605	3,96	1,88	1,62
40	-10	1.528	682	4,29	2,24	1,94
40	-5	1.979	756	4,61	2,62	2,26
40	0	2.492	828	4,92	3,01	2,60
40	5	3.065	897	5,22	3,42	2,95
40	7,2	3.336	926	5,35	3,60	3,11
40	10	3.699	963	5,50	3,84	3,32

45	-25	465	422	3,18	1,10	0,95
45	-20	712	517	3,59	1,38	1,19
45	-15	1.020	610	3,98	1,67	1,45
45	-10	1.389	699	4,37	1,99	1,72
45	-5	1.818	786	4,74	2,31	2,00
45	0	2.309	870	5,10	2,65	2,29
45	5	2.860	951	5,46	3,01	2,60
45	7,2	3.122	986	5,61	3,17	2,73
45	10	3.472	1.030	5,80	3,37	2,91

50	-25	391	402	3,09	0,97	0,84
50	-20	617	510	3,55	1,21	1,04
50	-15	903	615	4,00	1,47	1,27
50	-10	1.250	717	4,44	1,74	1,51
50	-5	1.657	816	4,87	2,03	1,75
50	0	2.126	913	5,29	2,33	2,01
50	5	2.655	1.006	5,69	2,64	2,28
50	7,2	2.908	1.047	5,87	2,78	2,40
50	10	3.245	1.097	6,09	2,96	2,56

55	-25	317	382	3,01	0,83	0,72
55	-20	521	502	3,52	1,04	0,90
55	-15	785	620	4,03	1,27	1,10
55	-10	1.110	734	4,52	1,51	1,31
55	-5	1.496	846	5,00	1,77	1,53
55	0	1.943	955	5,47	2,03	1,76
55	5	2.451	1.061	5,93	2,31	2,00
55	7,2	2.693	1.107	6,13	2,43	2,10
55	10	3.019	1.165	6,38	2,59	2,24

60	-25	244	362	2,92	0,67	0,58
60	-20	425	495	3,49	0,86	0,74
60	-15	668	624	4,05	1,07	0,92
60	-10	971	752	4,59	1,29	1,12
60	-5	1.335	876	5,13	1,52	1,32
60	0	1.760	997	5,65	1,76	1,52
60	5	2.246	1.116	6,17	2,01	1,74
60	7,2	2.479	1.167	6,39	2,12	1,83
60	10	2.792	1.232	6,67	2,27	1,96

65	-25	170	342	2,84	0,50	0,43
65	-20	330	487	3,46	0,68	0,59
65	-15	551	629	4,07	0,87	0,76
65	-10	832	769	4,67	1,08	0,93
65	-5	1.174	906	5,26	1,30	1,12
65	0	1.577	1.040	5,84	1,52	1,31
65	5	2.041	1.171	6,41	1,74	1,51
65	7,2	2.265	1.228	6,66	1,84	1,59
65	10	2.566	1.299	6,97	1,97	1,71

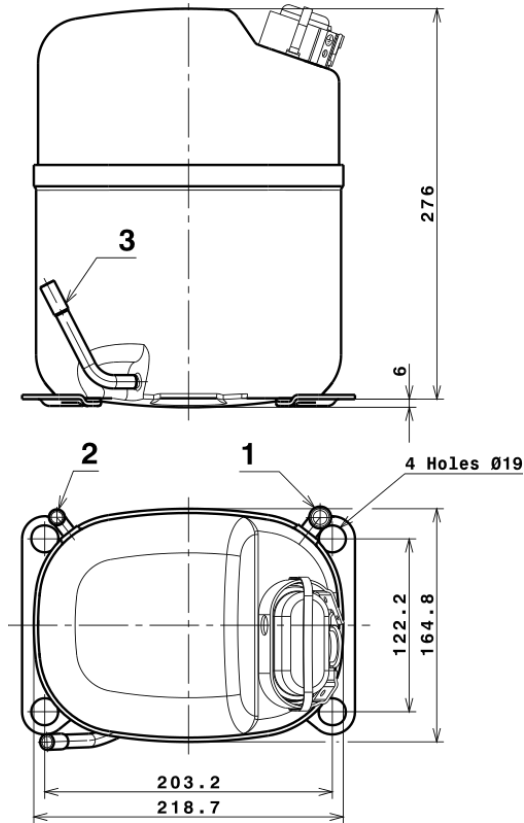
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.966,2669879207	500,3827526264	3,4951585532	67,017021927517
2	143,8311034602	-5,9055867227	-0,0253060036	2,672300054266
3	-37,6452387317	8,7206611234	0,0378940585	-0,30882011515985
4	1,1942435141	-0,0502543134	-0,0001874931	0,034195018460462
5	-0,9182984674	0,5132567049	0,0022181066	-0,0024075424013945

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
----------	---

Technical Data Sheet

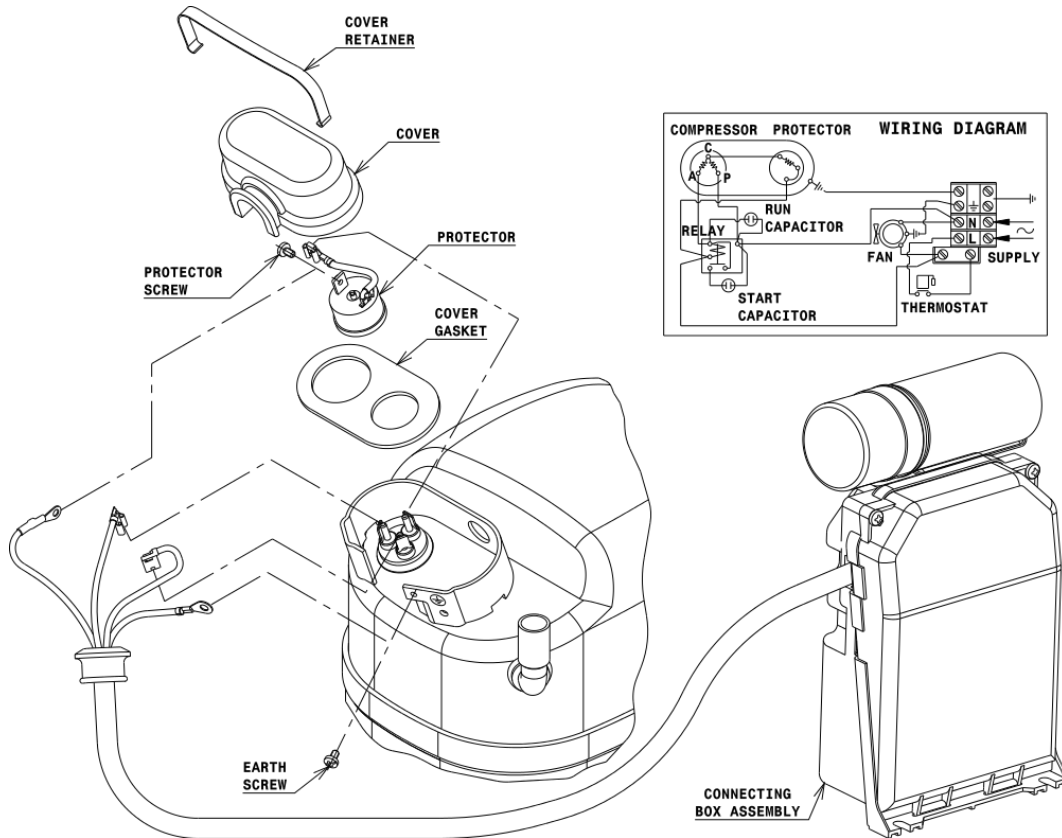
COMPRESSOR DIMENSIONS



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

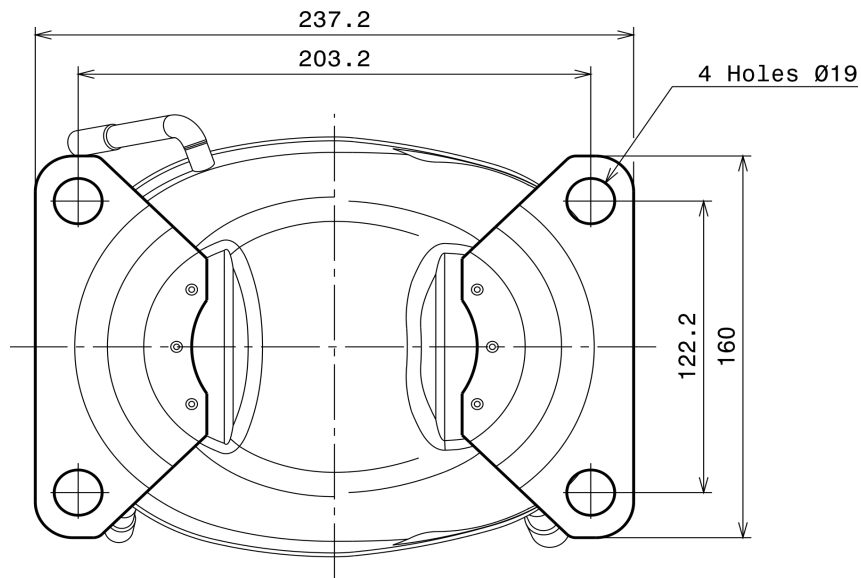
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



Technical Data Sheet

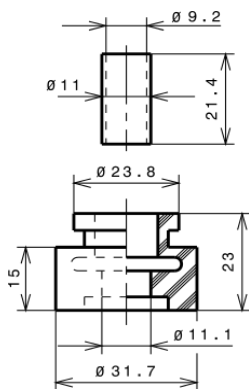
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R134a HMBP

