

Technical Data Sheet

Compressor model **GS30TG_V**
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	220-230V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	23,85 mm	Voltage range	187-253 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)	38,00 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	2.980 kCal/h	2.865 W
COP	2,61 W/W	2,23 W/W
EER	2,24 kCal/Wh	1,93 kCal/Wh
Input Power	1.330 W	1.285 W
Current	6,10 A	5,90 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	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	585	540	2,68	1,26	1,08
40	-20	876	650	3,15	1,57	1,35
40	-15	1.234	756	3,60	1,90	1,63
40	-10	1.658	858	4,04	2,25	1,93
40	-5	2.150	955	4,46	2,62	2,25
40	0	2.708	1.048	4,86	3,01	2,58
40	5	3.334	1.137	5,25	3,41	2,93
40	7,2	3.630	1.175	5,42	3,59	3,09
40	10	4.026	1.222	5,62	3,83	3,29

45	-25	507	518	2,58	1,14	0,98
45	-20	776	640	3,10	1,41	1,21
45	-15	1.112	757	3,60	1,71	1,47
45	-10	1.516	870	4,09	2,03	1,74
45	-5	1.986	979	4,56	2,36	2,03
45	0	2.523	1.083	5,02	2,71	2,33
45	5	3.126	1.184	5,46	3,07	2,64
45	7,2	3.413	1.227	5,65	3,24	2,78
45	10	3.797	1.280	5,88	3,45	2,97

50	-25	428	497	2,49	1,00	0,86
50	-20	676	629	3,06	1,25	1,07
50	-15	991	758	3,61	1,52	1,31
50	-10	1.373	883	4,15	1,81	1,56
50	-5	1.821	1.003	4,67	2,11	1,82
50	0	2.337	1.119	5,17	2,43	2,09
50	5	2.919	1.230	5,66	2,76	2,37
50	7,2	3.197	1.278	5,87	2,91	2,50
50	10	3.568	1.338	6,14	3,10	2,67

55	-25	350	475	2,40	0,86	0,74
55	-20	576	619	3,01	1,08	0,93
55	-15	870	759	3,61	1,33	1,15
55	-10	1.230	895	4,20	1,60	1,37
55	-5	1.657	1.027	4,77	1,88	1,61
55	0	2.151	1.154	5,33	2,17	1,86
55	5	2.712	1.277	5,87	2,47	2,12
55	7,2	2.980	1.330	6,10	2,61	2,24
55	10	3.340	1.396	6,39	2,78	2,39

60	-25	272	453	2,31	0,70	0,60
60	-20	477	609	2,97	0,91	0,78
60	-15	748	760	3,62	1,14	0,98
60	-10	1.087	907	4,25	1,39	1,20
60	-5	1.493	1.050	4,87	1,65	1,42
60	0	1.965	1.189	5,48	1,92	1,65
60	5	2.505	1.324	6,07	2,20	1,89
60	7,2	2.763	1.382	6,33	2,33	2,00
60	10	3.111	1.454	6,65	2,49	2,14

65	-25	193	432	2,22	0,52	0,45
65	-20	377	599	2,93	0,73	0,63
65	-15	627	761	3,62	0,96	0,82
65	-10	944	920	4,31	1,19	1,03
65	-5	1.329	1.074	4,98	1,44	1,24
65	0	1.780	1.225	5,64	1,69	1,45
65	5	2.298	1.370	6,28	1,95	1,68
65	7,2	2.547	1.433	6,56	2,07	1,78
65	10	2.882	1.512	6,91	2,22	1,91

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	630	543	2,69	1,16	1,00
40	-20	947	653	3,16	1,45	1,25
40	-15	1.335	760	3,62	1,76	1,52
40	-10	1.793	862	4,06	2,08	1,80
40	-5	2.322	960	4,48	2,42	2,09
40	0	2.921	1.054	4,89	2,77	2,39
40	5	3.590	1.144	5,28	3,14	2,71
40	7,2	3.906	1.183	5,45	3,30	2,85
40	10	4.329	1.230	5,66	3,52	3,04

45	-25	544	521	2,60	1,04	0,90
45	-20	835	643	3,12	1,30	1,12
45	-15	1.197	761	3,62	1,57	1,36
45	-10	1.629	875	4,11	1,86	1,61
45	-5	2.132	984	4,59	2,17	1,87
45	0	2.705	1.090	5,05	2,48	2,14
45	5	3.348	1.191	5,49	2,81	2,43
45	7,2	3.653	1.235	5,68	2,96	2,56
45	10	4.062	1.288	5,92	3,15	2,72

50	-25	457	499	2,50	0,92	0,79
50	-20	723	633	3,07	1,14	0,99
50	-15	1.059	762	3,63	1,39	1,20
50	-10	1.465	887	4,17	1,65	1,43
50	-5	1.942	1.009	4,69	1,93	1,66
50	0	2.489	1.125	5,20	2,21	1,91
50	5	3.106	1.238	5,70	2,51	2,17
50	7,2	3.400	1.287	5,91	2,64	2,28
50	10	3.794	1.347	6,17	2,82	2,43

55	-25	370	478	2,41	0,78	0,67
55	-20	610	623	3,03	0,98	0,85
55	-15	920	763	3,63	1,21	1,04
55	-10	1.301	900	4,22	1,45	1,25
55	-5	1.752	1.033	4,80	1,70	1,47
55	0	2.273	1.161	5,36	1,96	1,69
55	5	2.865	1.285	5,90	2,23	1,93
55	7,2	3.147	1.339	6,14	2,35	2,03
55	10	3.527	1.405	6,43	2,51	2,17

60	-25	284	456	2,32	0,62	0,54
60	-20	498	612	2,98	0,81	0,70
60	-15	782	764	3,64	1,02	0,88
60	-10	1.137	913	4,28	1,25	1,08
60	-5	1.562	1.057	4,90	1,48	1,28
60	0	2.057	1.196	5,51	1,72	1,49
60	5	2.623	1.332	6,11	1,97	1,70
60	7,2	2.894	1.391	6,37	2,08	1,80
60	10	3.259	1.464	6,69	2,23	1,92

65	-25	197	434	2,23	0,45	0,39
65	-20	385	602	2,94	0,64	0,55
65	-15	644	766	3,64	0,84	0,73
65	-10	973	925	4,33	1,05	0,91
65	-5	1.372	1.081	5,01	1,27	1,10
65	0	1.841	1.232	5,67	1,49	1,29
65	5	2.381	1.379	6,32	1,73	1,49
65	7,2	2.641	1.443	6,60	1,83	1,58
65	10	2.992	1.522	6,95	1,97	1,70

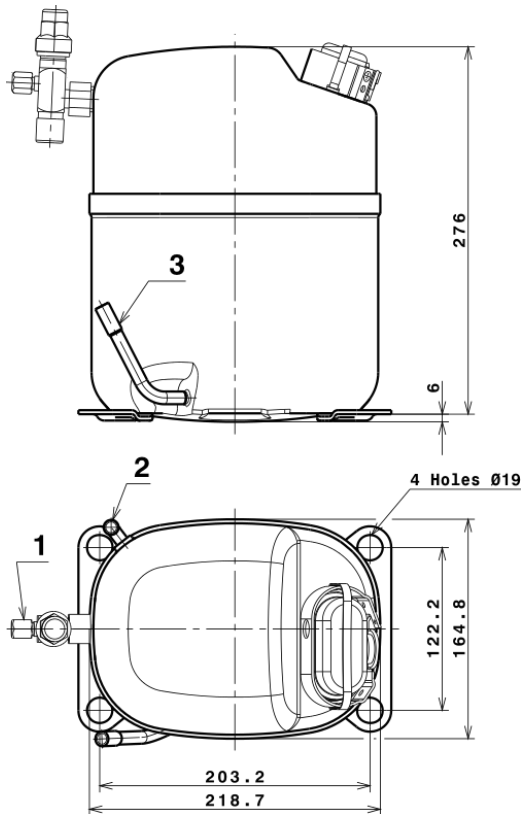
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.660,3280456729	789,6477603067	3,7128708676	78,900437815841
2	168,5983111605	0,3366377374	0,0020877923	3,1338106765662
3	-44,4120738215	7,3051969971	0,0323131976	-0,37044789984384
4	1,3826242192	-0,0770350527	-0,0002604804	0,039624571104911
5	-1,0863477528	0,4703406615	0,0020503625	-0,0031116776887773

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

COMPRESSOR DIMENSIONS

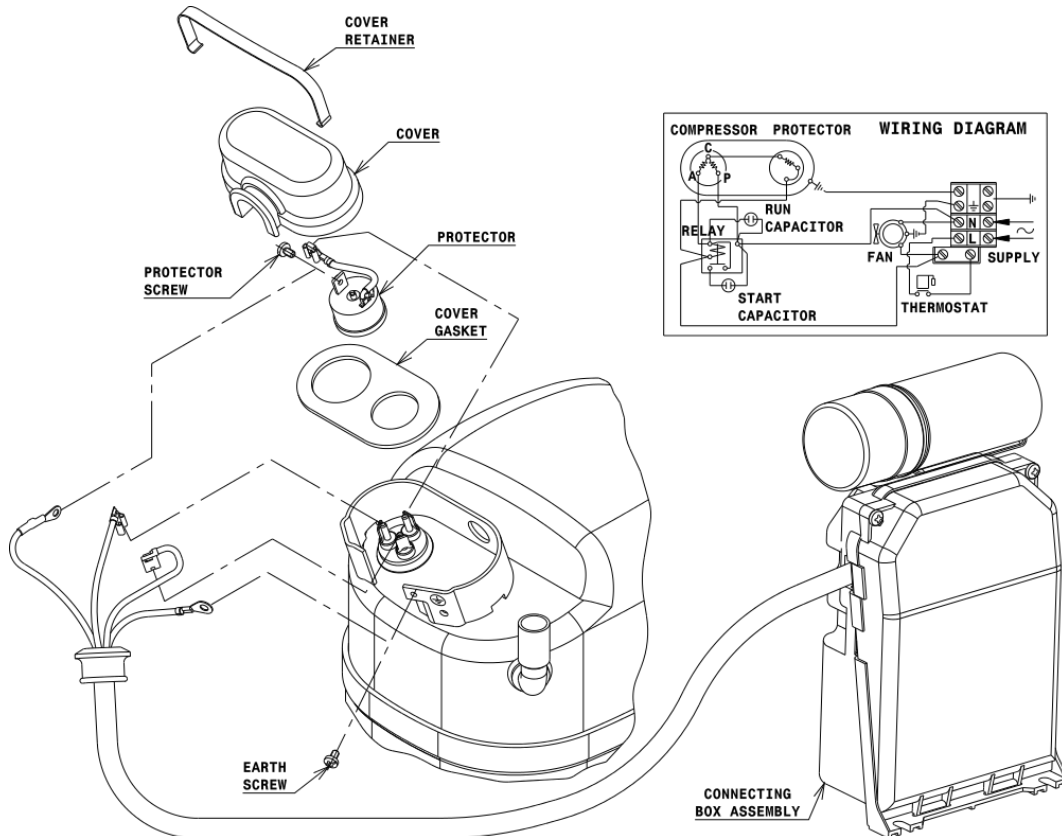


DESIGNATION INTERNAL DIAM.

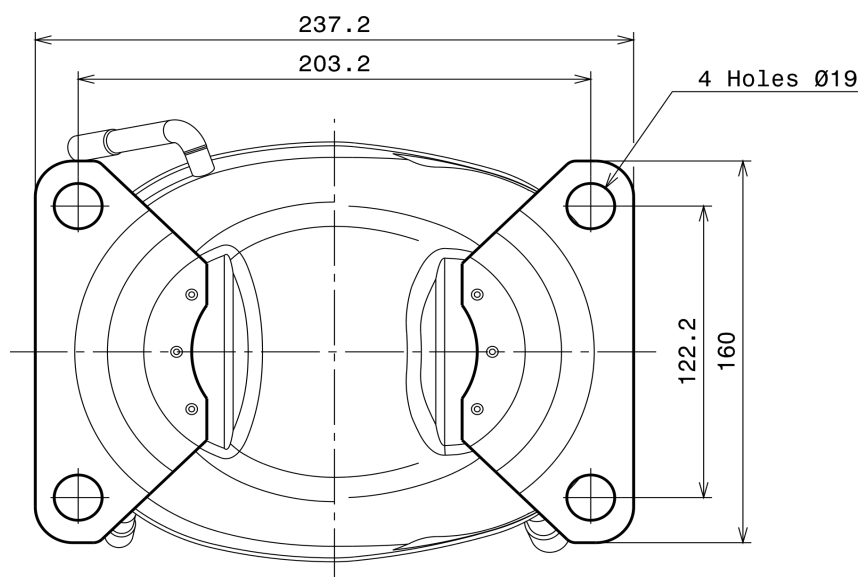
1	Service Valve	5/8" SAE
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



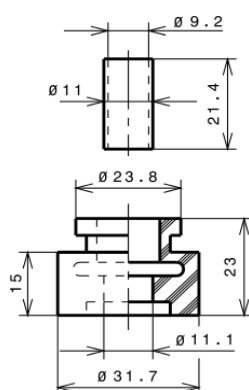
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R134a HMBP

