

# Technical Data Sheet

Compressor model **GS34TG\_V**  
 Voltage **200-220/220-230V 50/60Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	34,42 cm <sup>3</sup>	Nominal Power	1 hp
Refrigerant	R134a	Diameter	42,86 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	22,27 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	887 cm <sup>3</sup>	Locked Rotor Amps (LRA)	41,50 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	2.931 kCal/h	2.829 W
COP	2,64 W/W	2,24 W/W
EER	2,27 kCal/Wh	1,94 kCal/Wh
Input Power	1.289 W	1.261 W
Current	7,20 A	7,10 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (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	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			

# Technical Data Sheet

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	628	576	3,93	1,27	1,09
40	-20	914	695	4,58	1,53	1,32
40	-15	1.262	799	5,12	1,84	1,58
40	-10	1.673	888	5,55	2,19	1,88
40	-5	2.147	963	5,89	2,59	2,23
40	0	2.682	1.022	6,15	3,05	2,62
40	5	3.280	1.067	6,34	3,58	3,07
40	7,2	3.563	1.082	6,40	3,83	3,29
40	10	3.941	1.097	6,47	4,18	3,59

45	-25	566	543	3,74	1,21	1,04
45	-20	829	678	4,49	1,42	1,22
45	-15	1.154	798	5,11	1,68	1,45
45	-10	1.542	903	5,62	1,99	1,71
45	-5	1.992	993	6,03	2,33	2,01
45	0	2.505	1.069	6,35	2,73	2,34
45	5	3.080	1.129	6,60	3,17	2,73
45	7,2	3.352	1.151	6,68	3,39	2,91
45	10	3.717	1.175	6,78	3,68	3,16

50	-25	503	510	3,55	1,15	0,99
50	-20	743	661	4,40	1,31	1,13
50	-15	1.046	797	5,10	1,53	1,31
50	-10	1.410	917	5,68	1,79	1,54
50	-5	1.838	1.024	6,16	2,09	1,80
50	0	2.327	1.115	6,54	2,43	2,09
50	5	2.879	1.191	6,84	2,81	2,42
50	7,2	3.142	1.220	6,95	3,00	2,58
50	10	3.493	1.253	7,07	3,24	2,79

55	-25	441	477	3,36	1,08	0,92
55	-20	658	644	4,31	1,19	1,02
55	-15	937	795	5,10	1,37	1,18
55	-10	1.279	932	5,75	1,60	1,37
55	-5	1.683	1.054	6,29	1,86	1,60
55	0	2.150	1.161	6,72	2,15	1,85
55	5	2.679	1.253	7,07	2,49	2,14
55	7,2	2.931	1.289	7,20	2,64	2,27
55	10	3.270	1.330	7,34	2,86	2,46

60	-25	379	444	3,16	0,99	0,85
60	-20	573	626	4,21	1,06	0,91
60	-15	829	794	5,09	1,21	1,04
60	-10	1.148	947	5,82	1,41	1,21
60	-5	1.529	1.084	6,41	1,64	1,41
60	0	1.972	1.207	6,90	1,90	1,63
60	5	2.478	1.315	7,29	2,19	1,88
60	7,2	2.720	1.358	7,44	2,33	2,00
60	10	3.046	1.408	7,60	2,52	2,16

65	-25	316	411	2,96	0,90	0,77
65	-20	487	609	4,12	0,93	0,80
65	-15	720	793	5,08	1,06	0,91
65	-10	1.016	961	5,88	1,23	1,06
65	-5	1.374	1.115	6,54	1,43	1,23
65	0	1.795	1.253	7,07	1,67	1,43
65	5	2.277	1.377	7,50	1,92	1,65
65	7,2	2.510	1.427	7,66	2,05	1,76
65	10	2.823	1.486	7,84	2,21	1,90

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	676	579	3,95	1,17	1,01
40	-20	988	699	4,60	1,41	1,22
40	-15	1.366	803	5,14	1,70	1,47
40	-10	1.809	893	5,57	2,02	1,75
40	-5	2.318	968	5,91	2,39	2,07
40	0	2.892	1.029	6,18	2,81	2,43
40	5	3.532	1.074	6,37	3,29	2,84
40	7,2	3.834	1.089	6,43	3,52	3,04
40	10	4.238	1.104	6,50	3,84	3,32

45	-25	607	546	3,76	1,11	0,96
45	-20	891	681	4,51	1,31	1,13
45	-15	1.241	802	5,13	1,55	1,34
45	-10	1.657	908	5,64	1,82	1,58
45	-5	2.138	999	6,05	2,14	1,85
45	0	2.685	1.075	6,38	2,50	2,16
45	5	3.298	1.136	6,63	2,90	2,51
45	7,2	3.588	1.158	6,71	3,10	2,68
45	10	3.976	1.183	6,81	3,36	2,91

50	-25	537	513	3,57	1,05	0,90
50	-20	794	664	4,42	1,19	1,03
50	-15	1.116	801	5,12	1,39	1,20
50	-10	1.505	923	5,71	1,63	1,41
50	-5	1.959	1.030	6,18	1,90	1,64
50	0	2.478	1.122	6,57	2,21	1,91
50	5	3.064	1.199	6,87	2,56	2,21
50	7,2	3.342	1.228	6,98	2,72	2,35
50	10	3.714	1.261	7,10	2,95	2,55

55	-25	467	480	3,37	0,97	0,84
55	-20	696	647	4,32	1,08	0,93
55	-15	992	800	5,12	1,24	1,07
55	-10	1.353	937	5,77	1,44	1,25
55	-5	1.779	1.060	6,31	1,68	1,45
55	0	2.271	1.168	6,75	1,94	1,68
55	5	2.829	1.261	7,10	2,24	1,94
55	7,2	3.096	1.297	7,23	2,39	2,06
55	10	3.453	1.339	7,37	2,58	2,23

60	-25	397	446	3,18	0,89	0,77
60	-20	599	630	4,23	0,95	0,82
60	-15	867	798	5,11	1,09	0,94
60	-10	1.201	952	5,84	1,26	1,09
60	-5	1.600	1.091	6,44	1,47	1,27
60	0	2.065	1.215	6,93	1,70	1,47
60	5	2.595	1.324	7,32	1,96	1,69
60	7,2	2.849	1.367	7,47	2,08	1,80
60	10	3.191	1.418	7,63	2,25	1,94

65	-25	327	413	2,98	0,79	0,68
65	-20	502	612	4,14	0,82	0,71
65	-15	742	797	5,10	0,93	0,80
65	-10	1.048	967	5,91	1,08	0,94
65	-5	1.420	1.121	6,57	1,27	1,09
65	0	1.858	1.261	7,10	1,47	1,27
65	5	2.361	1.386	7,53	1,70	1,47
65	7,2	2.603	1.436	7,69	1,81	1,57
65	10	2.930	1.496	7,87	1,96	1,69

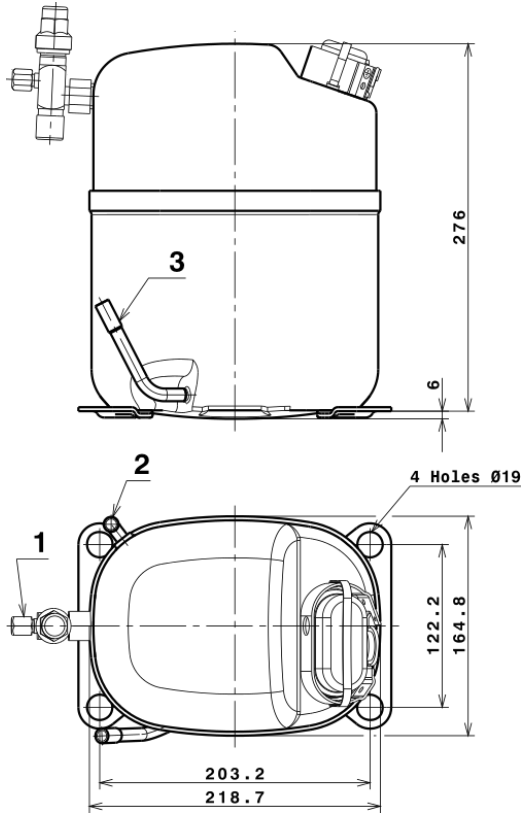
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4,560,4430954665	672,2571734411	5,1167056756	76,923050855382
2	165,6045810193	-15,0665817609	-0,0778322928	3,1002587576869
3	-42,6243027770	9,5691726089	0,0325564877	-0,33544349489746
4	1,2897837342	-0,2970605644	-0,0023778805	0,037084146403378
5	-1,1434306352	0,6540768333	0,0028574606	-0,0054385643795694

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

## COMPRESSOR DIMENSIONS

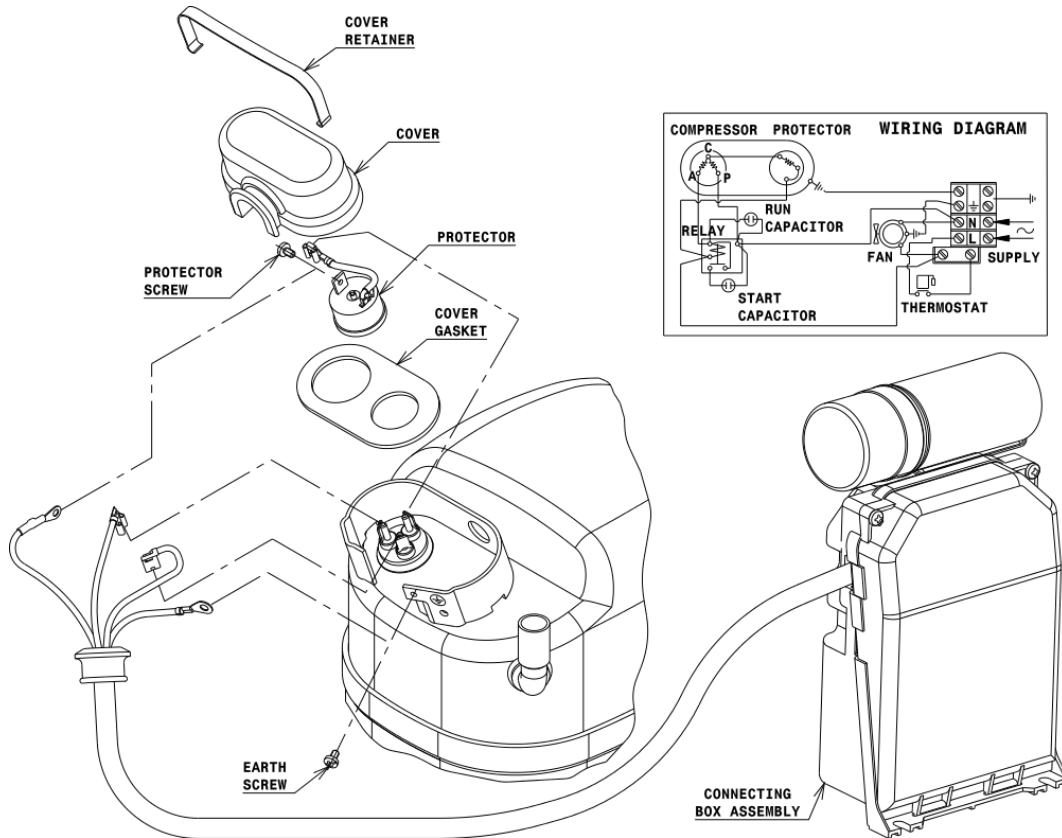


## DESIGNATION INTERNAL DIAM.

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

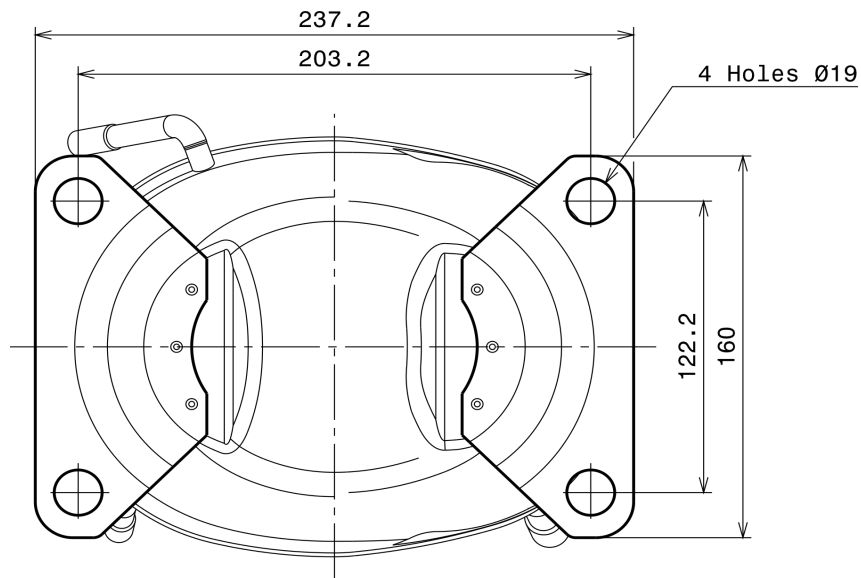
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



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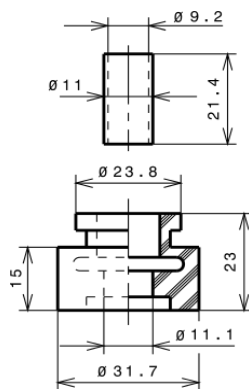
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø19 holes (203.2x122.2 net)



## SOA

SOA R134a HMBP

