

Technical Data Sheet

Compressor model **GS34TB_T**
 Voltage **220-240V 50Hz ~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	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	23,85 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	21,35 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	887 cm ³	Locked Rotor Amps (LRA)	32,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	9,00 A
				Main W. resist. at 25°C	2,24 Ω
				Start W. resist. at 25°C	7,38 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	2.930 kCal/h	2.850 W
COP	2,62 W/W	2,26 W/W
EER	2,25 kCal/Wh	1,95 kCal/Wh
Input Power	1.300 W	1.260 W
Current	6,60 A	6,44 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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	88-108 μF 330 V		
Run capacitor	16 μF 420 V		
Relay	Option 1	Option 2	
Reference	3ARR3 3AV3	RVA 2L..	
Pick-Up	224-252 V	224-252 V	
Drop-Out	40-90 V	40-105 V	
Protector	Option 1	Option 2	
Reference	MRT18AJN	T0161	
Current	20,20 A	26,50 A	
Time check	8,5-13 seg	2,8-5,2 seg	
Disc temp. (Open/Close)	120,00 / 69,00 °C	120,00 / 69,00 °C	

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	750	560	3,38	1,56	1,34
40	-20	1.038	654	3,80	1,85	1,59
40	-15	1.373	742	4,20	2,15	1,85
40	-10	1.756	825	4,57	2,48	2,13
40	-5	2.186	903	4,91	2,82	2,42
40	0	2.664	975	5,23	3,18	2,73
40	5	3.190	1.042	5,52	3,56	3,06
40	7,2	3.436	1.070	5,63	3,73	3,21
40	10	3.763	1.104	5,78	3,96	3,41

45	-25	650	540	3,28	1,40	1,20
45	-20	927	649	3,78	1,66	1,43
45	-15	1.252	752	4,25	1,94	1,66
45	-10	1.624	850	4,68	2,22	1,91
45	-5	2.044	943	5,09	2,52	2,17
45	0	2.511	1.030	5,46	2,84	2,44
45	5	3.026	1.112	5,81	3,16	2,72
45	7,2	3.267	1.147	5,96	3,31	2,85
45	10	3.588	1.189	6,14	3,51	3,02

50	-25	550	520	3,19	1,23	1,06
50	-20	816	644	3,76	1,48	1,27
50	-15	1.130	762	4,29	1,73	1,48
50	-10	1.492	875	4,79	1,98	1,71
50	-5	1.901	983	5,26	2,25	1,93
50	0	2.358	1.085	5,70	2,53	2,17
50	5	2.862	1.182	6,11	2,82	2,42
50	7,2	3.099	1.223	6,28	2,95	2,53
50	10	3.413	1.274	6,49	3,12	2,68

55	-25	450	500	3,10	1,05	0,90
55	-20	706	639	3,74	1,29	1,11
55	-15	1.009	772	4,33	1,52	1,31
55	-10	1.360	900	4,90	1,76	1,51
55	-5	1.758	1.023	5,43	2,00	1,72
55	0	2.204	1.140	5,93	2,25	1,93
55	5	2.698	1.252	6,40	2,51	2,15
55	7,2	2.930	1.300	6,60	2,62	2,25
55	10	3.239	1.359	6,84	2,77	2,38

60	-25	350	480	3,01	0,85	0,73
60	-20	595	634	3,71	1,09	0,94
60	-15	888	782	4,38	1,32	1,14
60	-10	1.228	925	5,01	1,54	1,33
60	-5	1.616	1.063	5,60	1,77	1,52
60	0	2.051	1.195	6,16	2,00	1,72
60	5	2.534	1.322	6,69	2,23	1,92
60	7,2	2.761	1.377	6,91	2,33	2,01
60	10	3.064	1.444	7,19	2,47	2,12

65	-25	250	460	2,91	0,63	0,54
65	-20	484	629	3,69	0,90	0,77
65	-15	766	792	4,42	1,13	0,97
65	-10	1.096	950	5,12	1,34	1,15
65	-5	1.473	1.103	5,77	1,55	1,34
65	0	1.898	1.250	6,39	1,77	1,52
65	5	2.370	1.392	6,98	1,98	1,70
65	7,2	2.593	1.453	7,23	2,07	1,78
65	10	2.890	1.529	7,53	2,20	1,89

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	808	563	3,39	1,44	1,24
40	-20	1.121	657	3,82	1,71	1,47
40	-15	1.484	746	4,22	1,99	1,72
40	-10	1.896	829	4,59	2,29	1,98
40	-5	2.359	908	4,93	2,60	2,25
40	0	2.872	981	5,25	2,93	2,53
40	5	3.434	1.049	5,54	3,27	2,83
40	7,2	3.698	1.077	5,66	3,43	2,97
40	10	4.047	1.111	5,81	3,64	3,15

45	-25	697	543	3,30	1,28	1,11
45	-20	996	652	3,80	1,53	1,32
45	-15	1.345	756	4,26	1,78	1,54
45	-10	1.744	855	4,70	2,04	1,76
45	-5	2.192	948	5,11	2,31	2,00
45	0	2.691	1.036	5,49	2,60	2,24
45	5	3.239	1.119	5,84	2,89	2,50
45	7,2	3.497	1.154	5,99	3,03	2,62
45	10	3.838	1.197	6,17	3,21	2,77

50	-25	587	523	3,21	1,12	0,97
50	-20	872	647	3,77	1,35	1,16
50	-15	1.206	766	4,31	1,57	1,36
50	-10	1.591	880	4,81	1,81	1,56
50	-5	2.026	988	5,28	2,05	1,77
50	0	2.510	1.092	5,73	2,30	1,99
50	5	3.045	1.190	6,14	2,56	2,21
50	7,2	3.296	1.231	6,31	2,68	2,31
50	10	3.629	1.283	6,53	2,83	2,44

55	-25	476	503	3,11	0,95	0,82
55	-20	747	642	3,75	1,16	1,01
55	-15	1.068	776	4,35	1,38	1,19
55	-10	1.438	905	4,92	1,59	1,37
55	-5	1.859	1.029	5,46	1,81	1,56
55	0	2.329	1.147	5,96	2,03	1,75
55	5	2.850	1.260	6,44	2,26	1,95
55	7,2	3.095	1.308	6,63	2,37	2,04
55	10	3.420	1.368	6,88	2,50	2,16

60	-25	366	483	3,02	0,76	0,65
60	-20	622	637	3,73	0,98	0,84
60	-15	929	786	4,40	1,18	1,02
60	-10	1.286	930	5,03	1,38	1,19
60	-5	1.692	1.069	5,63	1,58	1,37
60	0	2.148	1.203	6,19	1,79	1,54
60	5	2.655	1.331	6,73	1,99	1,72
60	7,2	2.893	1.386	6,95	2,09	1,80
60	10	3.211	1.454	7,23	2,21	1,91

65	-25	255	462	2,93	0,55	0,48
65	-20	498	632	3,71	0,79	0,68
65	-15	790	796	4,44	0,99	0,86
65	-10	1.133	955	5,14	1,19	1,02
65	-5	1.525	1.109	5,80	1,37	1,19
65	0	1.968	1.258	6,43	1,56	1,35
65	5	2.460	1.401	7,01	1,76	1,52
65	7,2	2.692	1.463	7,26	1,84	1,59
65	10	3.002	1.539	7,57	1,95	1,69

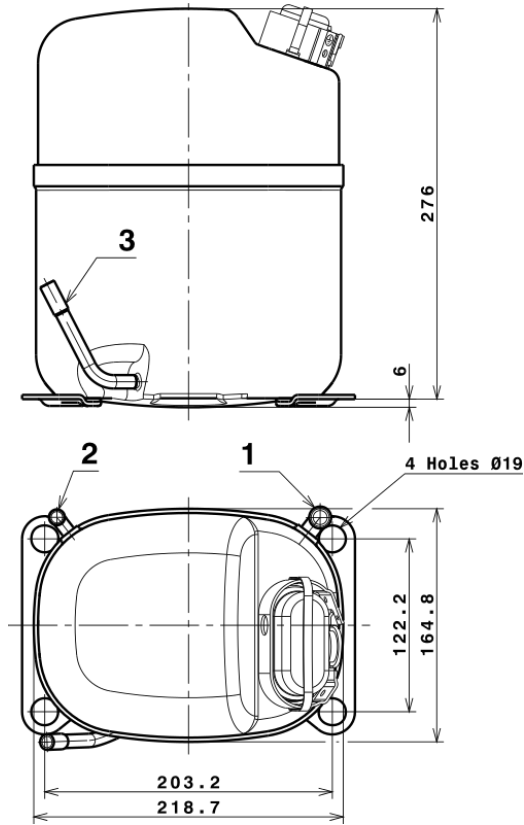
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.333,9557932773	550,2730124810	3,4980898325	71,851535031872
2	130,9349796948	-10,0826531656	-0,0443147319	2,3076220754125
3	-37,4811900330	11,3983934817	0,0471534392	-0,21665158248192
4	0,9836097531	-0,0998450750	-0,0006442019	0,029137804026277
5	-0,6179809786	0,6203659992	0,0026420363	0,0062518300082223

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

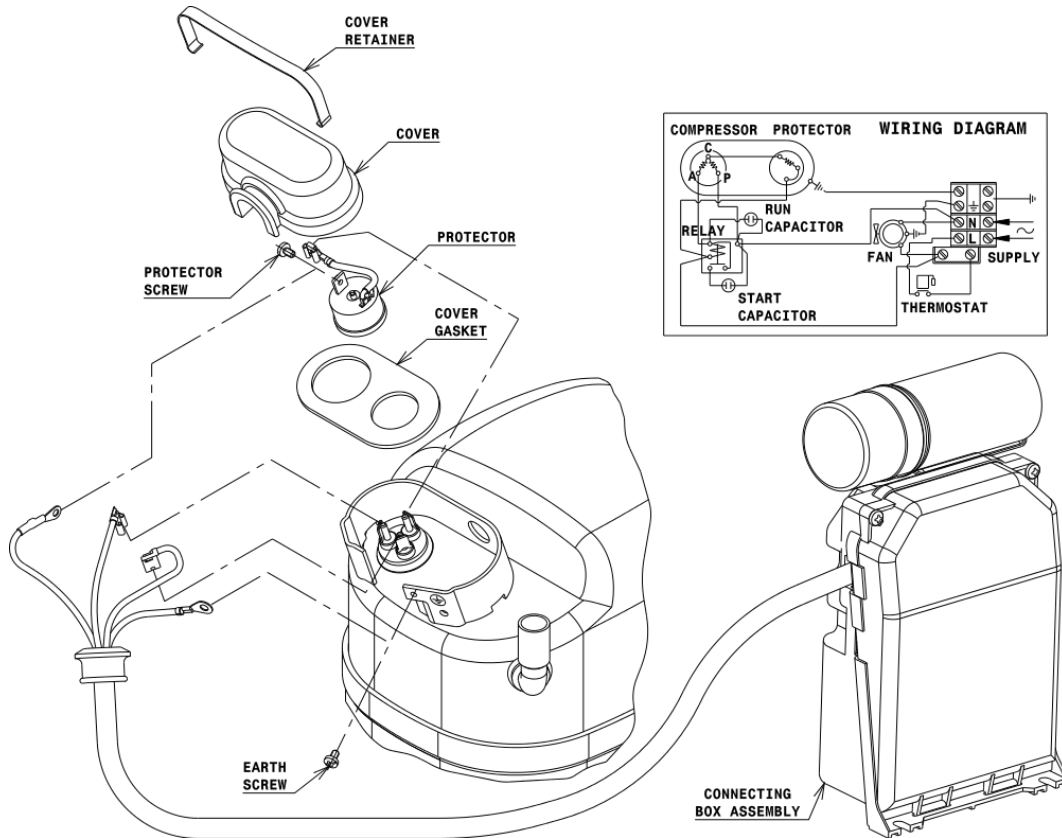
COMPRESSOR DIMENSIONS



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

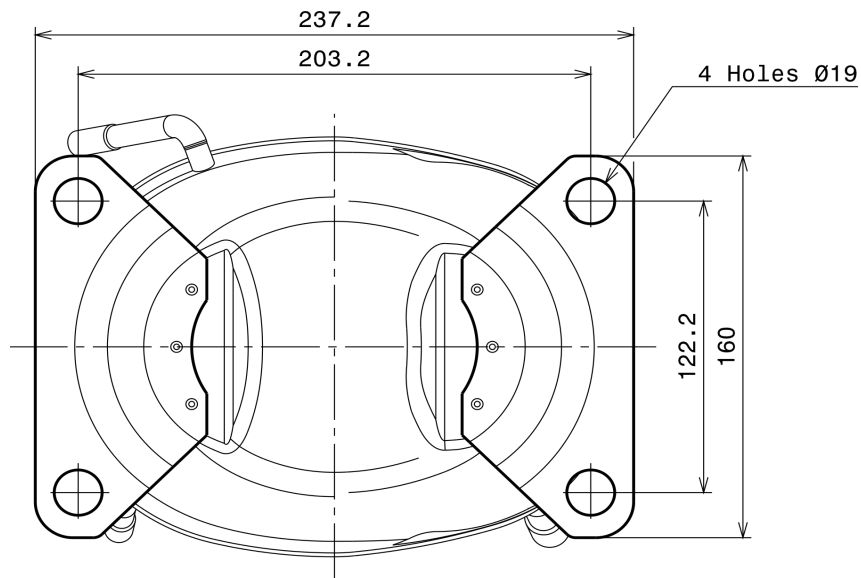
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



Technical Data Sheet

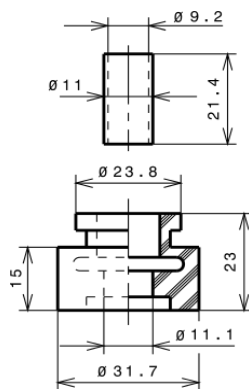
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 19$ holes (203.2x122.2 net)



SOA

SOA R134a HMBP

