

Technical Data Sheet

Compressor model **GS34TB_V**
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	21,37 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 ³	Locked Rotor Amps (LRA)	37,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	9,60 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	108-130 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	Option 3	
Reference	MRT18AJN	T0161	T0452	
Current	20,20 A	26,50 A	21,00 A	
Time check	8,5-13 seg	2,8-5,2 seg	7,5-14 seg	
Disc temp. (Open/Close)	120,00 / 69,00 °C	120,00 / 69,00 °C	95,00 / 57,00 °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	1.079	658	3,82	1,91	1,64
40	-15	1.455	751	4,24	2,25	1,94
40	-10	1.879	839	4,63	2,61	2,24
40	-5	2.350	921	4,99	2,97	2,55
40	0	2.869	998	5,33	3,34	2,87
40	5	3.436	1.070	5,64	3,73	3,21
40	7,2	3.700	1.100	5,76	3,91	3,36
40	10	4.050	1.137	5,92	4,14	3,56

45	-25	650	540	3,28	1,40	1,20
45	-20	954	652	3,79	1,70	1,46
45	-15	1.306	758	4,27	2,00	1,72
45	-10	1.706	859	4,72	2,31	1,99
45	-5	2.153	955	5,14	2,62	2,25
45	0	2.648	1.046	5,53	2,95	2,53
45	5	3.190	1.131	5,89	3,28	2,82
45	7,2	3.443	1.167	6,04	3,43	2,95
45	10	3.779	1.211	6,23	3,63	3,12

50	-25	550	520	3,19	1,23	1,06
50	-20	830	645	3,76	1,50	1,29
50	-15	1.158	765	4,30	1,76	1,51
50	-10	1.533	880	4,81	2,03	1,74
50	-5	1.956	989	5,29	2,30	1,98
50	0	2.426	1.093	5,73	2,58	2,22
50	5	2.944	1.192	6,15	2,87	2,47
50	7,2	3.187	1.233	6,32	3,01	2,58
50	10	3.509	1.285	6,54	3,18	2,73

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	581	632	3,71	1,07	0,92
60	-15	860	779	4,37	1,28	1,10
60	-10	1.187	920	4,99	1,50	1,29
60	-5	1.561	1.057	5,58	1,72	1,48
60	0	1.983	1.187	6,13	1,94	1,67
60	5	2.452	1.313	6,65	2,17	1,87
60	7,2	2.673	1.367	6,87	2,28	1,96
60	10	2.969	1.433	7,14	2,41	2,07

65	-25	250	460	2,91	0,63	0,54
65	-20	457	626	3,68	0,85	0,73
65	-15	712	786	4,40	1,05	0,91
65	-10	1.014	941	5,08	1,25	1,08
65	-5	1.364	1.090	5,72	1,45	1,25
65	0	1.761	1.235	6,33	1,66	1,43
65	5	2.206	1.374	6,90	1,87	1,61
65	7,2	2.417	1.433	7,14	1,96	1,69
65	10	2.698	1.508	7,44	2,08	1,79

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	1.165	662	3,84	1,76	1,52
40	-15	1.572	755	4,26	2,08	1,80
40	-10	2.029	844	4,65	2,41	2,08
40	-5	2.536	927	5,02	2,74	2,36
40	0	3.092	1.004	5,35	3,08	2,66
40	5	3.699	1.077	5,66	3,44	2,97
40	7,2	3.982	1.107	5,79	3,60	3,11
40	10	4.356	1.144	5,95	3,81	3,29

45	-25	697	543	3,30	1,28	1,11
45	-20	1.026	655	3,81	1,57	1,35
45	-15	1.404	762	4,29	1,84	1,59
45	-10	1.832	864	4,74	2,12	1,83
45	-5	2.310	961	5,16	2,40	2,08
45	0	2.838	1.052	5,56	2,70	2,33
45	5	3.416	1.138	5,92	3,00	2,59
45	7,2	3.686	1.174	6,08	3,14	2,71
45	10	4.044	1.219	6,26	3,32	2,87

50	-25	587	523	3,21	1,12	0,97
50	-20	886	649	3,78	1,37	1,18
50	-15	1.236	769	4,32	1,61	1,39
50	-10	1.635	885	4,83	1,85	1,60
50	-5	2.084	995	5,31	2,10	1,81
50	0	2.584	1.100	5,76	2,35	2,03
50	5	3.133	1.199	6,18	2,61	2,26
50	7,2	3.390	1.241	6,36	2,73	2,36
50	10	3.732	1.293	6,57	2,89	2,49

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	608	635	3,72	0,96	0,83
60	-15	900	783	4,38	1,15	0,99
60	-10	1.241	926	5,01	1,34	1,16
60	-5	1.633	1.063	5,60	1,54	1,33
60	0	2.075	1.195	6,16	1,74	1,50
60	5	2.567	1.321	6,69	1,94	1,68
60	7,2	2.799	1.375	6,91	2,03	1,76
60	10	3.108	1.443	7,18	2,15	1,86

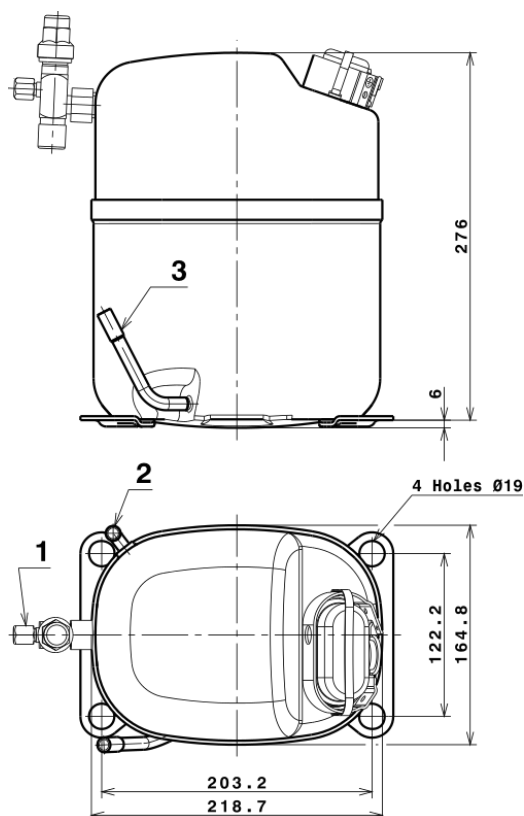
65	-25	255	462	2,93	0,55	0,48
65	-20	468	629	3,69	0,74	0,64
65	-15	732	790	4,42	0,93	0,80
65	-10	1.045	946	5,10	1,10	0,95
65	-5	1.408	1.097	5,75	1,28	1,11
65	0	1.821	1.242	6,36	1,47	1,27
65	5	2.284	1.383	6,94	1,65	1,43
65	7,2	2.503	1.443	7,18	1,74	1,50
65	10	2.796	1.518	7,48	1,84	1,59

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	5.132,4154247227	638,6381803025	3,8723923551	90,030403206836
2	162,8733649526	-6,5480464528	-0,0293426309	3,034776802411
3	-51,9986378774	9,7917540667	0,0403479388	-0,54717645839035
4	0,9836097531	-0,0998450750	-0,0006442019	0,029137804026277
5	-1,1986788924	0,5561004226	0,0023698163	-0,006969165028115

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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COMPRESSOR DIMENSIONS

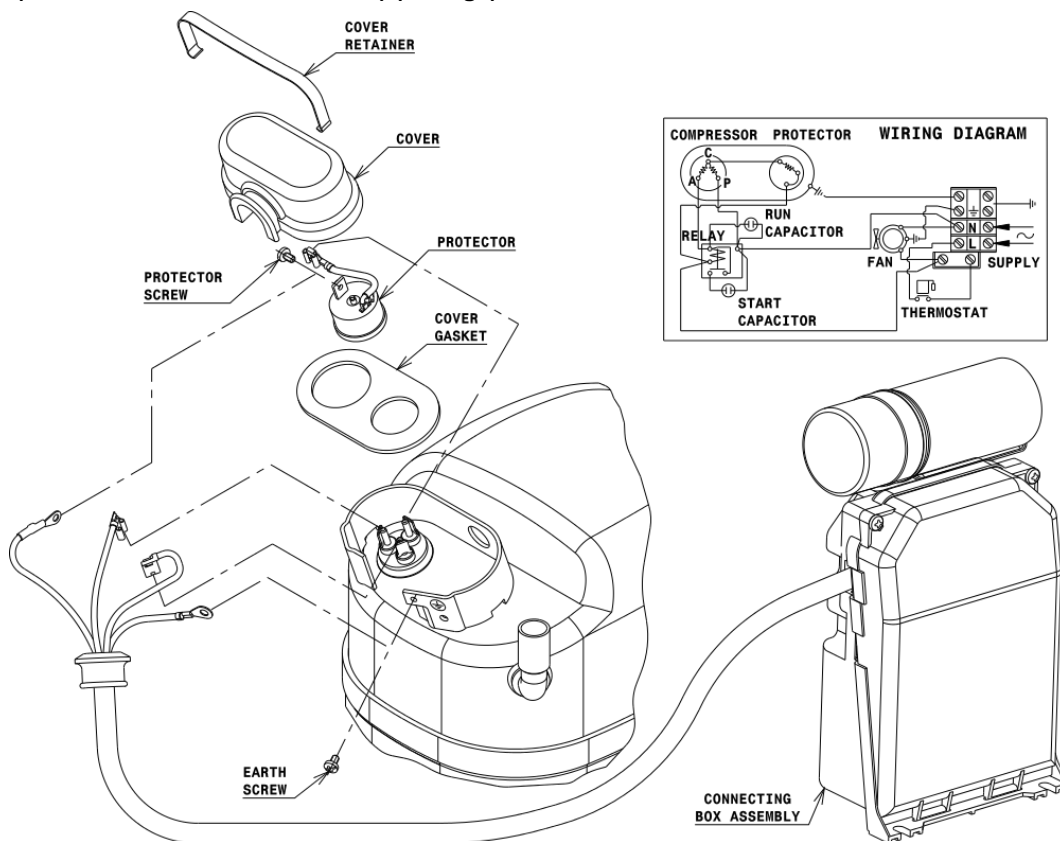


DESIGNATION INTERNAL DIAM.

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

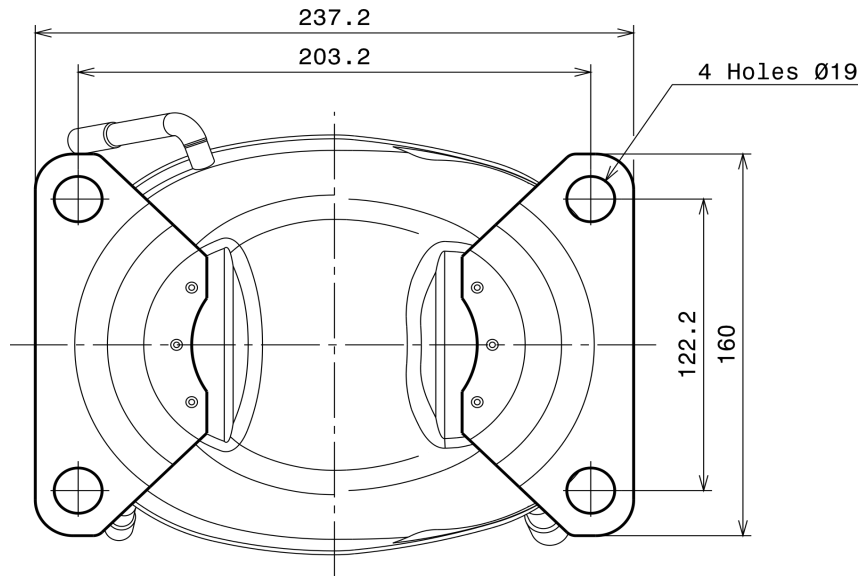
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



Technical Data Sheet

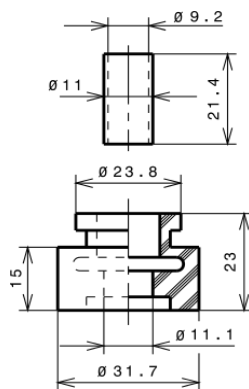
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R134a HMBP

