

Technical Data Sheet

Compressor model **S18TN_V**
Voltage **220-240V 50Hz ~1**
Refrigerant **R22**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	18,10 cm ³	Nominal Power	3/4 hp
Refrigerant	R22	Diameter	38,10 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,87 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	21,80 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 MINER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	887 cm ³	Locked Rotor Amps (LRA)	24,20 A
				Max. Cont. Current (MCC)	8,00 A
				Main W. resist. at 25°C	2,40 Ω
				Start W. resist. at 25°C	6,63 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	2.050 kCal/h	2.020 W
COP	2,46 W/W	2,14 W/W
EER	2,11 kCal/Wh	1,85 kCal/Wh
Input Power	970 W	943 W
Current	4,70 A	4,58 A

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	47- 56 µF 330 V			
Run capacitor	16 µF 420 V			
Relay	Option 1	Option 2		
Reference	3ARR3 3AP3	RVA 2E..		
Pick-Up	162-175 V	162-175 V		
Drop-Out	40-90 V	40-90 V		
Protector	Option 1	Option 2		
Reference	MRT00ALK	T0535		
Current	17,00 A	17,00 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 °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	578	480	2,56	1,40	1,20
40	-20	776	533	2,79	1,69	1,46
40	-15	1.018	585	3,01	2,03	1,74
40	-10	1.304	635	3,22	2,39	2,05
40	-5	1.633	682	3,42	2,78	2,39
40	0	2.005	728	3,62	3,20	2,75
40	5	2.420	771	3,81	3,65	3,14
40	7,2	2.617	790	3,89	3,85	3,31
40	10	2.879	813	4,00	4,12	3,54

45	-25	509	468	2,52	1,26	1,09
45	-20	689	533	2,79	1,50	1,29
45	-15	912	596	3,05	1,78	1,53
45	-10	1.179	656	3,31	2,09	1,80
45	-5	1.489	715	3,57	2,42	2,08
45	0	1.843	772	3,81	2,78	2,39
45	5	2.240	827	4,06	3,15	2,71
45	7,2	2.428	850	4,16	3,32	2,86
45	10	2.680	879	4,29	3,54	3,05

50	-25	441	457	2,47	1,12	0,96
50	-20	602	532	2,78	1,31	1,13
50	-15	807	606	3,10	1,55	1,33
50	-10	1.055	678	3,41	1,81	1,56
50	-5	1.346	748	3,71	2,09	1,80
50	0	1.681	816	4,01	2,40	2,06
50	5	2.059	882	4,30	2,72	2,34
50	7,2	2.239	910	4,43	2,86	2,46
50	10	2.480	945	4,59	3,05	2,62

55	-25	372	445	2,42	0,97	0,84
55	-20	515	532	2,78	1,13	0,97
55	-15	701	617	3,14	1,32	1,14
55	-10	930	700	3,50	1,55	1,33
55	-5	1.203	781	3,85	1,79	1,54
55	0	1.519	860	4,20	2,05	1,77
55	5	1.878	937	4,55	2,33	2,00
55	7,2	2.050	970	4,70	2,46	2,11
55	10	2.281	1.012	4,89	2,62	2,25

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	631	482	2,57	1,31	1,13
40	-20	850	536	2,80	1,59	1,37
40	-15	1.116	588	3,02	1,90	1,64
40	-10	1.428	638	3,23	2,24	1,93
40	-5	1.787	686	3,44	2,60	2,25
40	0	2.192	732	3,64	2,99	2,59
40	5	2.644	777	3,83	3,41	2,94
40	7,2	2.858	795	3,92	3,59	3,10
40	10	3.142	819	4,02	3,84	3,32

45	-25	554	471	2,53	1,18	1,02
45	-20	752	536	2,80	1,40	1,21
45	-15	996	599	3,07	1,66	1,44
45	-10	1.286	660	3,33	1,95	1,68
45	-5	1.623	719	3,58	2,26	1,95
45	0	2.006	777	3,83	2,58	2,23
45	5	2.436	832	4,08	2,93	2,53
45	7,2	2.640	856	4,18	3,08	2,67
45	10	2.912	885	4,32	3,29	2,84

50	-25	477	459	2,48	1,04	0,90
50	-20	653	535	2,80	1,22	1,05
50	-15	875	610	3,11	1,44	1,24
50	-10	1.144	682	3,42	1,68	1,45
50	-5	1.459	753	3,73	1,94	1,67
50	0	1.820	821	4,03	2,22	1,92
50	5	2.228	887	4,33	2,51	2,17
50	7,2	2.422	916	4,46	2,64	2,28
50	10	2.682	952	4,62	2,82	2,43

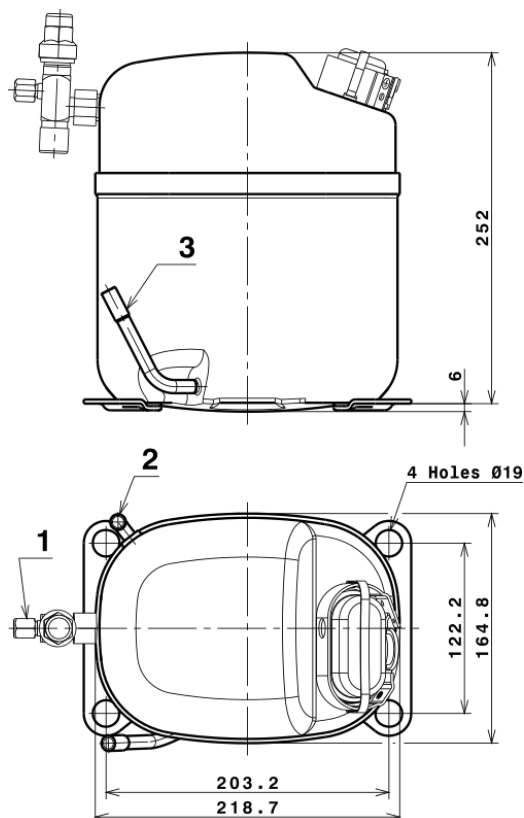
55	-25	401	447	2,43	0,90	0,77
55	-20	554	535	2,79	1,04	0,90
55	-15	755	620	3,16	1,22	1,05
55	-10	1.001	704	3,52	1,42	1,23
55	-5	1.294	786	3,87	1,65	1,42
55	0	1.634	865	4,23	1,89	1,63
55	5	2.020	943	4,58	2,14	1,85
55	7,2	2.204	977	4,73	2,26	1,95
55	10	2.452	1.019	4,92	2,41	2,08

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X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.728,9713432379	387,0052988913	2,0478103141	65,331643595761
2	122,6182076084	-8,8861200663	-0,0394407053	2,3054491954293
3	-38,2024818426	9,1258553877	0,0415442465	-0,47152129545956
4	0,9349479829	-0,0343545421	-0,0000342522	0,024885335359372
5	-0,9100114474	0,4596399504	0,0020546837	-0,0087110453527861

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

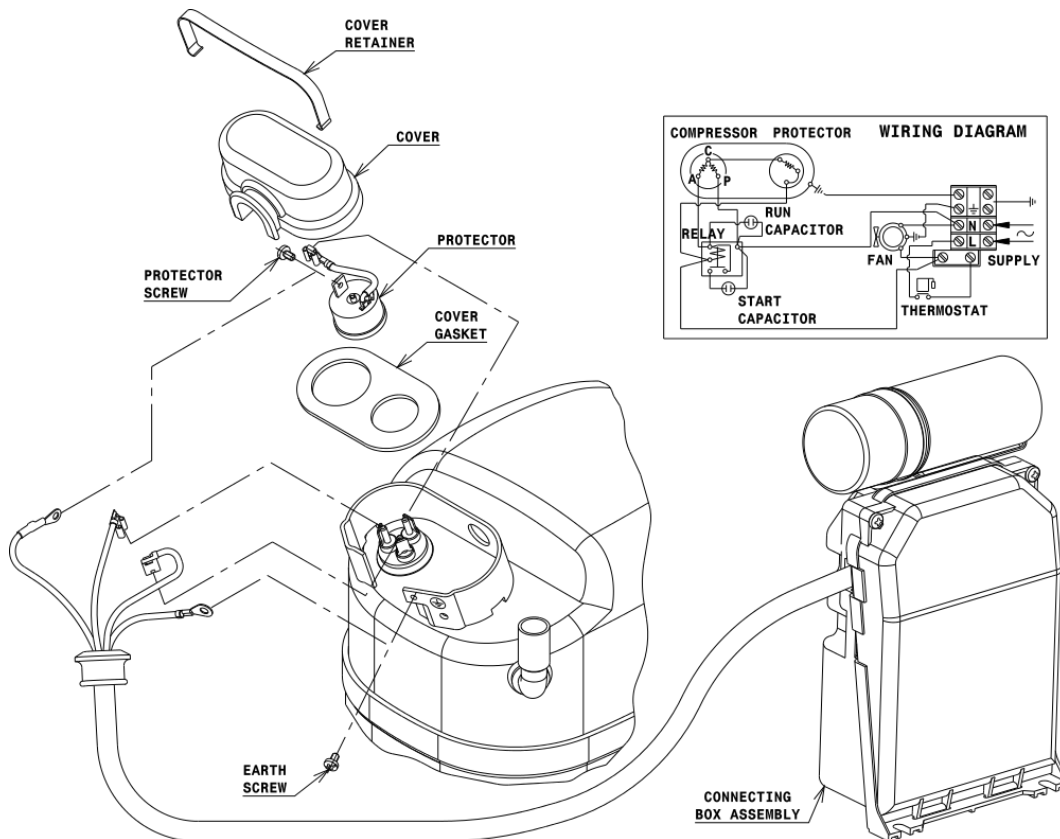


DESIGNATION INTERNAL DIAM.

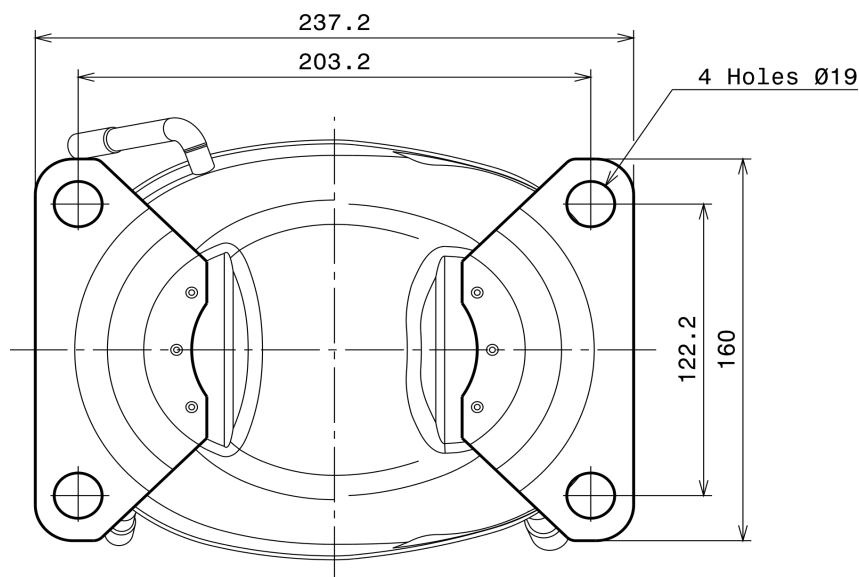
1	Service Valve	1/2" SAE
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



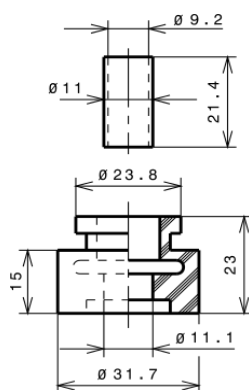
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R22 HMBP

