

Technical Data Sheet

Compressor model **S18TN_T**
Voltage **200-220/230V 50/60Hz ~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	230V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,87 mm	Voltage range	207-253 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)	28,50 A
				Max. Cont. Current (MCC)	9,50 A
				Main W. resist. at 25°C	1,99 Ω
				Start W. resist. at 25°C	5,10 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	2.460 kCal/h	2.424 W
COP	2,29 W/W	2,00 W/W
EER	1,97 kCal/Wh	1,72 kCal/Wh
Input Power	1.250 W	1.215 W
Current	5,70 A	5,55 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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Run capacitor	16 µF 420 V			
Relay	Option 1	Option 2		
Reference	3ARR3 10S3	RVA 3AG..		
Pick-Up	180-195 V	180-195 V		
Drop-Out	40-105 V	40-105 V		
Protector	Option 1	Option 2		
Reference	MRA38088	T0452		
Current	22,00 A	21,00 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 57,00 °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	692	600	2,93	1,34	1,15
40	-20	931	674	3,24	1,61	1,38
40	-15	1.222	746	3,55	1,90	1,64
40	-10	1.565	815	3,84	2,23	1,92
40	-5	1.959	882	4,12	2,58	2,22
40	0	2.406	946	4,40	2,96	2,54
40	5	2.905	1.008	4,66	3,35	2,88
40	7,2	3.141	1.034	4,77	3,53	3,04
40	10	3.456	1.067	4,91	3,77	3,24

45	-25	610	590	2,88	1,20	1,03
45	-20	826	677	3,25	1,42	1,22
45	-15	1.095	762	3,61	1,67	1,44
45	-10	1.415	844	3,96	1,95	1,68
45	-5	1.787	923	4,30	2,25	1,94
45	0	2.212	1.000	4,63	2,57	2,21
45	5	2.688	1.074	4,94	2,91	2,50
45	7,2	2.914	1.106	5,08	3,06	2,63
45	10	3.216	1.146	5,25	3,26	2,81

50	-25	528	580	2,84	1,06	0,91
50	-20	722	680	3,26	1,23	1,06
50	-15	968	777	3,68	1,45	1,25
50	-10	1.266	872	4,08	1,69	1,45
50	-5	1.615	964	4,47	1,95	1,68
50	0	2.017	1.054	4,86	2,23	1,91
50	5	2.471	1.141	5,23	2,52	2,17
50	7,2	2.687	1.178	5,39	2,65	2,28
50	10	2.977	1.225	5,59	2,83	2,43

55	-25	446	570	2,80	0,91	0,78
55	-20	617	683	3,28	1,05	0,90
55	-15	841	793	3,74	1,23	1,06
55	-10	1.116	900	4,20	1,44	1,24
55	-5	1.443	1.005	4,65	1,67	1,44
55	0	1.823	1.107	5,09	1,91	1,65
55	5	2.254	1.207	5,51	2,17	1,87
55	7,2	2.460	1.250	5,70	2,29	1,97
55	10	2.737	1.304	5,93	2,44	2,10

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	756	603	2,94	1,25	1,08
40	-20	1.019	678	3,26	1,50	1,30
40	-15	1.339	750	3,56	1,78	1,54
40	-10	1.714	820	3,86	2,09	1,81
40	-5	2.145	887	4,15	2,42	2,09
40	0	2.631	952	4,42	2,76	2,39
40	5	3.174	1.014	4,69	3,13	2,70
40	7,2	3.430	1.041	4,80	3,29	2,85
40	10	3.771	1.074	4,94	3,51	3,03

45	-25	664	593	2,90	1,12	0,97
45	-20	901	681	3,27	1,32	1,14
45	-15	1.194	766	3,63	1,56	1,35
45	-10	1.543	848	3,98	1,82	1,57
45	-5	1.948	929	4,32	2,10	1,81
45	0	2.408	1.006	4,65	2,39	2,07
45	5	2.924	1.081	4,97	2,70	2,34
45	7,2	3.168	1.113	5,11	2,85	2,46
45	10	3.495	1.154	5,29	3,03	2,62

50	-25	572	583	2,86	0,98	0,85
50	-20	783	684	3,28	1,15	0,99
50	-15	1.050	781	3,70	1,34	1,16
50	-10	1.372	877	4,10	1,57	1,35
50	-5	1.750	970	4,50	1,81	1,56
50	0	2.184	1.060	4,88	2,06	1,78
50	5	2.674	1.148	5,26	2,33	2,01
50	7,2	2.907	1.186	5,42	2,45	2,12
50	10	3.219	1.233	5,63	2,61	2,25

55	-25	480	573	2,81	0,84	0,72
55	-20	665	686	3,29	0,97	0,84
55	-15	905	797	3,76	1,14	0,98
55	-10	1.201	905	4,22	1,33	1,15
55	-5	1.553	1.011	4,67	1,54	1,33
55	0	1.961	1.114	5,12	1,76	1,52
55	5	2.424	1.215	5,55	2,00	1,72
55	7,2	2.645	1.258	5,74	2,10	1,82
55	10	2.943	1.313	5,97	2,24	1,94

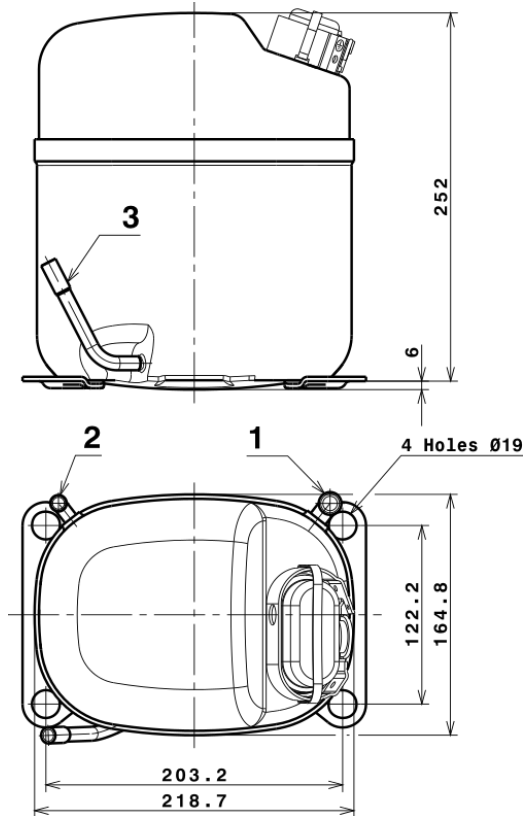
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.476,1494155115	532,6537781661	2,6104358054	78,430516295946
2	147,2890657132	-7,7489008957	-0,0332802200	2,7696156037011
3	-45,8669784064	11,1257775391	0,0479248932	-0,56639018105298
4	1,1210515671	-0,0433864337	-0,0001542157	0,029841714605561
5	-1,0947355081	0,5272969580	0,0022645509	-0,010510245243305

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

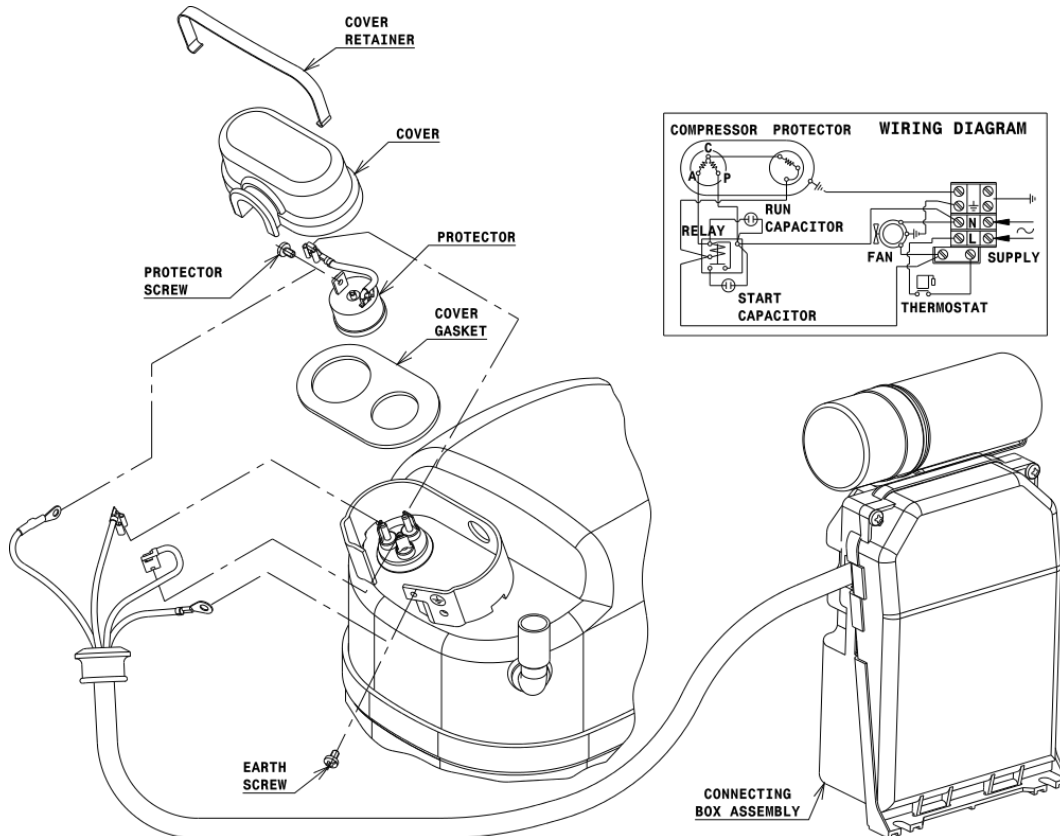
COMPRESSOR DIMENSIONS



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

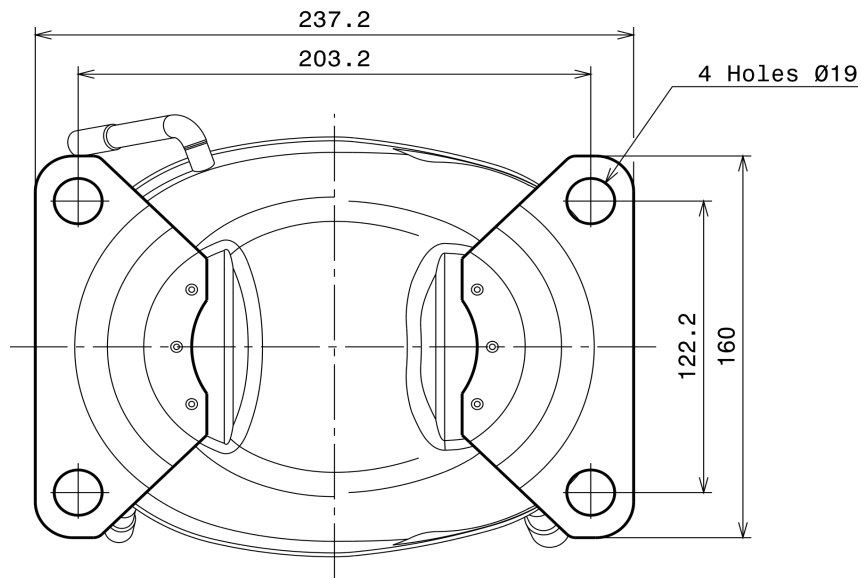
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



Technical Data Sheet

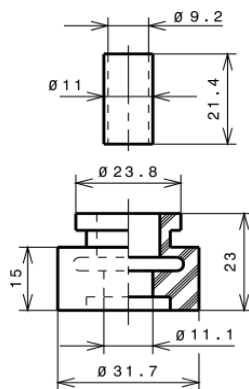
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R22 HMBP

