

# 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 <sup>3</sup>	Nominal Power	3/4 hp
Refrigerant	R22	Diameter	38,10 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,87 mm	Voltage range	180-242 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 <sup>3</sup>	Locked Rotor Amps (LRA)	27,00 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

	ASHRAE	CECOMAF
Cooling Capacity	2.050 kCal/h	2.020 W
COP	2,38 W/W	2,07 W/W
EER	2,05 kCal/Wh	1,79 kCal/Wh
Input Power	1.000 W	976 W
Current	5,70 A	5,57 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	200 V 50 Hz	200 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 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	578	500	3,41	1,34	1,16
40	-20	776	562	3,65	1,61	1,38
40	-15	1.018	620	3,88	1,91	1,64
40	-10	1.304	673	4,10	2,25	1,94
40	-5	1.633	722	4,32	2,63	2,26
40	0	2.005	766	4,52	3,05	2,62
40	5	2.420	805	4,70	3,50	3,01
40	7,2	2.617	822	4,78	3,71	3,19
40	10	2.879	841	4,88	3,98	3,42

45	-25	509	490	3,37	1,21	1,04
45	-20	689	563	3,65	1,42	1,22
45	-15	912	631	3,93	1,68	1,45
45	-10	1.179	695	4,20	1,97	1,70
45	-5	1.489	755	4,47	2,30	1,97
45	0	1.843	810	4,73	2,65	2,28
45	5	2.240	860	4,97	3,03	2,60
45	7,2	2.428	881	5,08	3,21	2,76
45	10	2.680	906	5,20	3,44	2,96

50	-25	441	480	3,34	1,07	0,92
50	-20	602	564	3,65	1,24	1,07
50	-15	807	643	3,98	1,46	1,25
50	-10	1.055	718	4,30	1,71	1,47
50	-5	1.346	788	4,62	1,99	1,71
50	0	1.681	854	4,94	2,29	1,97
50	5	2.059	915	5,25	2,62	2,25
50	7,2	2.239	941	5,38	2,77	2,38
50	10	2.480	972	5,55	2,97	2,55

55	-25	372	470	3,30	0,92	0,79
55	-20	515	564	3,66	1,06	0,91
55	-15	701	654	4,02	1,25	1,07
55	-10	930	740	4,40	1,46	1,26
55	-5	1.203	821	4,78	1,70	1,46
55	0	1.519	898	5,16	1,97	1,69
55	5	1.878	970	5,54	2,25	1,94
55	7,2	2.050	1.000	5,70	2,38	2,05
55	10	2.281	1.037	5,91	2,56	2,20

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	631	503	3,42	1,25	1,08
40	-20	850	565	3,66	1,50	1,30
40	-15	1.116	623	3,89	1,79	1,55
40	-10	1.428	677	4,12	2,11	1,82
40	-5	1.787	726	4,34	2,46	2,13
40	0	2.192	770	4,54	2,85	2,46
40	5	2.644	811	4,73	3,26	2,82
40	7,2	2.858	827	4,81	3,46	2,99
40	10	3.142	847	4,90	3,71	3,21

45	-25	554	493	3,38	1,12	0,97
45	-20	752	566	3,66	1,33	1,15
45	-15	996	635	3,94	1,57	1,35
45	-10	1.286	699	4,22	1,84	1,59
45	-5	1.623	759	4,49	2,14	1,85
45	0	2.006	815	4,75	2,46	2,13
45	5	2.436	866	5,00	2,81	2,43
45	7,2	2.640	887	5,11	2,98	2,57
45	10	2.912	912	5,24	3,19	2,76

50	-25	477	483	3,35	0,99	0,85
50	-20	653	567	3,66	1,15	1,00
50	-15	875	646	3,99	1,35	1,17
50	-10	1.144	722	4,32	1,58	1,37
50	-5	1.459	793	4,64	1,84	1,59
50	0	1.820	859	4,97	2,12	1,83
50	5	2.228	921	5,28	2,42	2,09
50	7,2	2.422	947	5,41	2,56	2,21
50	10	2.682	978	5,58	2,74	2,37

55	-25	401	473	3,31	0,85	0,73
55	-20	554	568	3,67	0,98	0,84
55	-15	755	658	4,04	1,15	0,99
55	-10	1.001	744	4,42	1,35	1,16
55	-5	1.294	826	4,80	1,57	1,35
55	0	1.634	903	5,19	1,81	1,56
55	5	2.020	976	5,57	2,07	1,79
55	7,2	2.204	1.007	5,74	2,19	1,89
55	10	2.452	1.044	5,95	2,35	2,03

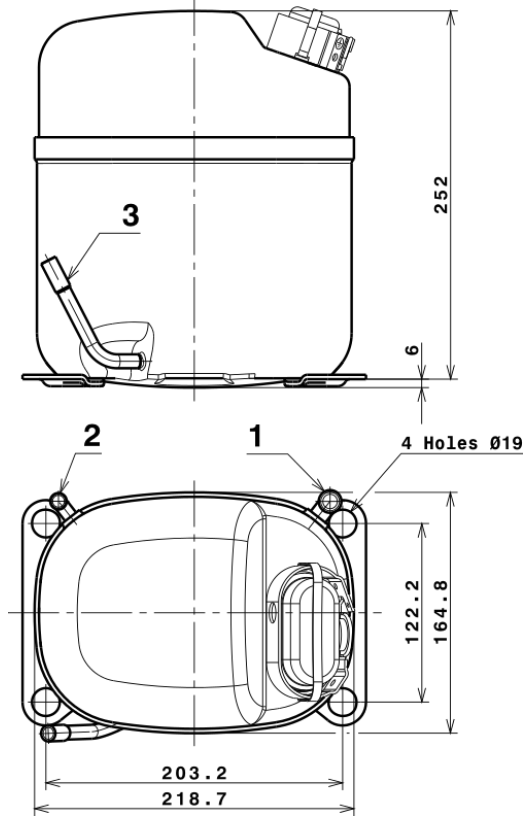
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.728,9713432379	426,6033372952	2,5746189840	65,331643595761
2	122,6182076084	-8,9131816297	-0,0444639615	2,3054491954293
3	-38,2024818426	9,1143801804	0,0496763594	-0,47152129545956
4	0,9349479829	-0,0848086705	0,0001261702	0,024885335359372
5	-0,9100114474	0,4468410636	0,0022901891	-0,0087110453527861

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

## COMPRESSOR DIMENSIONS

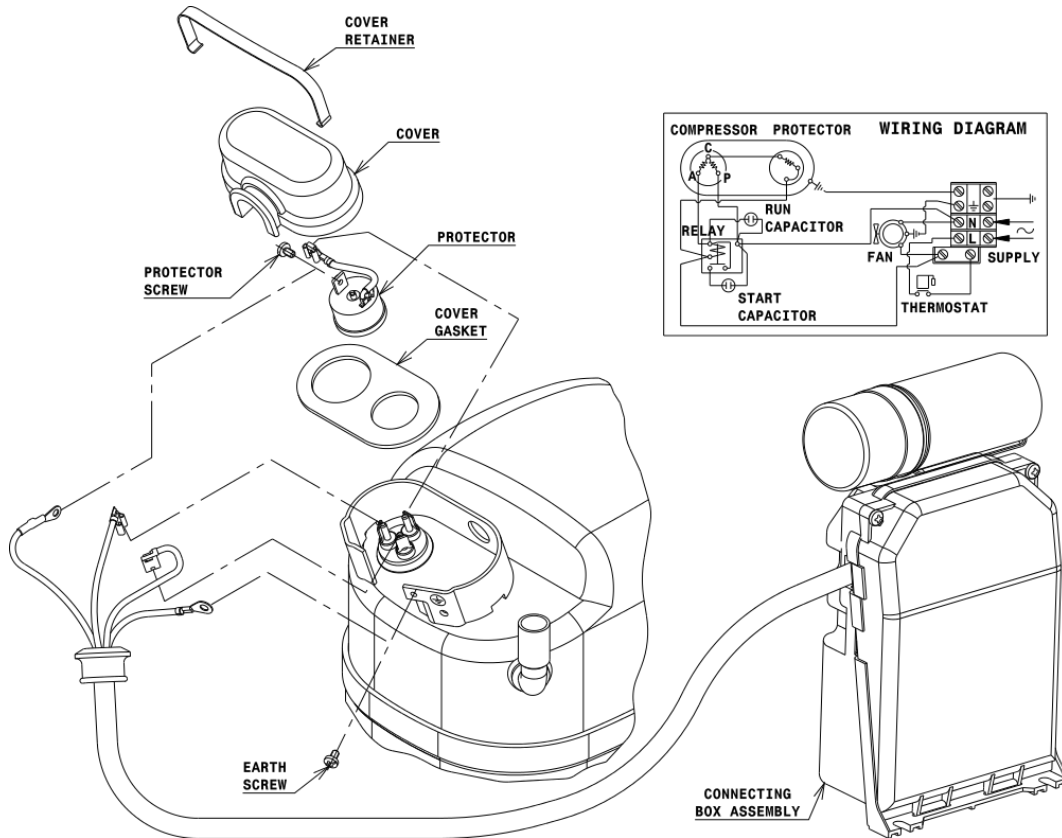


## DESIGNATION INTERNAL DIAM.

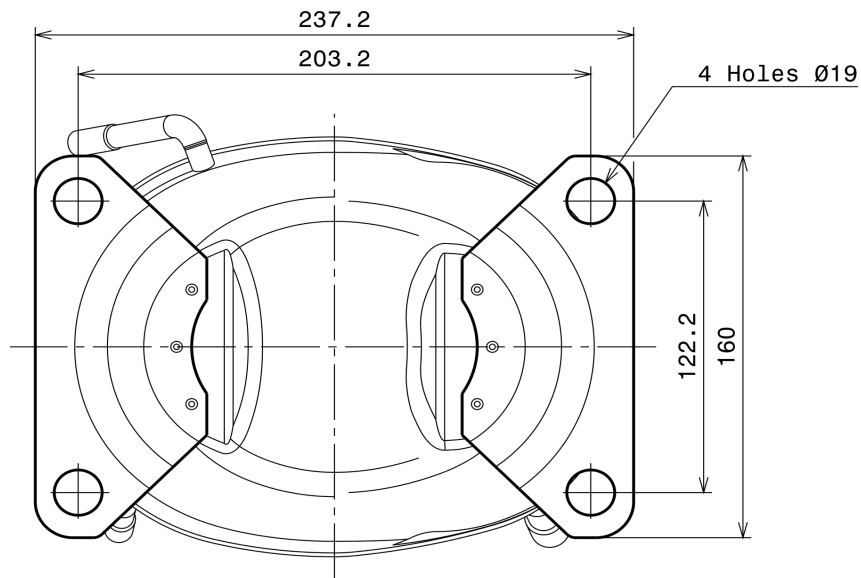
DESIGNATION	INTERNAL DIAM.
1 Suction	12,7 mm
2 Service	9,7 mm
3 Discharge	8,0 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



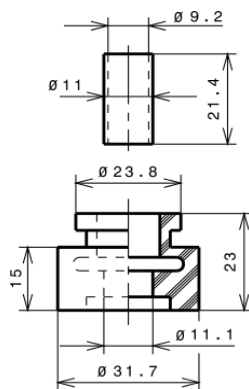
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

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



## SOA

SOA R22 HMBP

