Technical Data Sheet

Compressor model **S18TN_T**

Voltage **200-220/230V 50/60Hz ~1**

Refrigerant **R22**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R22
Evaporating Temp.	-25,0 ºC to 10,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC

COMPRESSOR

Displacement	18,10 cm³
Diameter	38,10 mm
Stroke	15,87 mm
Net Weight	21,80 Kg
Oil type	ISO VG 46 MINER
Oil charge	887 cm³

MOTOR

Nominal Power	3/4 hp
Voltage/Frequency	230V 60Hz
Voltage range	207-253 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	28,50 A
Max. Cont. Current (MCC)	9,50 A
Main W. resist. at 25ºC	1,99 Ω
Start W. resist. at 25ºC	5,10 Ω

NOMINAL PERFORMANCE

	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

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HMBP (D)	**HMBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
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 ºC	95,00 / 57,00 ºC		

Technical Data Sheet

cubigel compressors

ASHRAE

Tc ºC	Te ºC	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

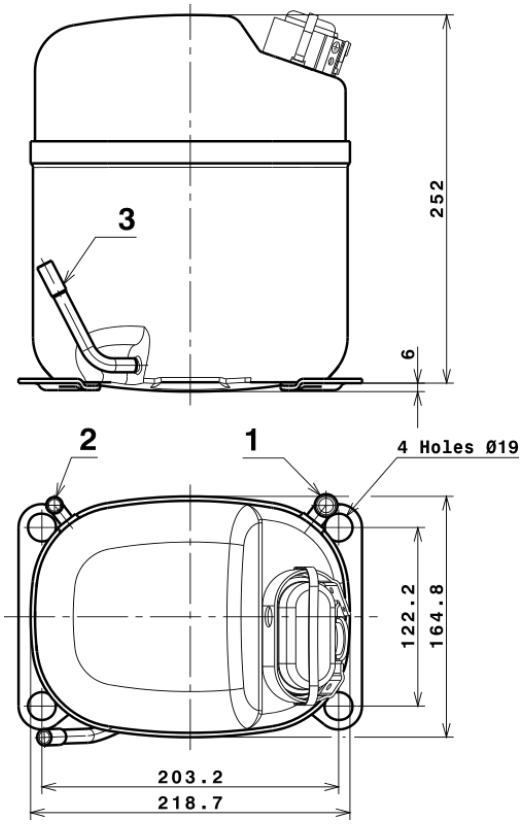
Tc ºC	Te ºC	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	756	603	2,94	1,25	1,08
40	-20	1.019	678	3,26	1,50	1,30
40	-15	1.339	750	3,56	1,78	1,54
40	-10	1.714	820	3,86	2,09	1,81
40	-5	2.145	887	4,15	2,42	2,09
40	0	2.631	952	4,42	2,76	2,39
40	5	3.174	1.014	4,69	3,13	2,70
40	7,2	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	39,996787747951
2	147,2890657132	-7,7489008957	-0,0332802200	1,4124059444751
3	-45,8669784064	11,1257775391	0,0479248932	-0,28883894846005
4	1,1210515671	-0,0433864337	-0,0001542157	0,015218218385938
5	-1,0947355081	0,5272969580	0,0022645509	-0,005359853128968

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

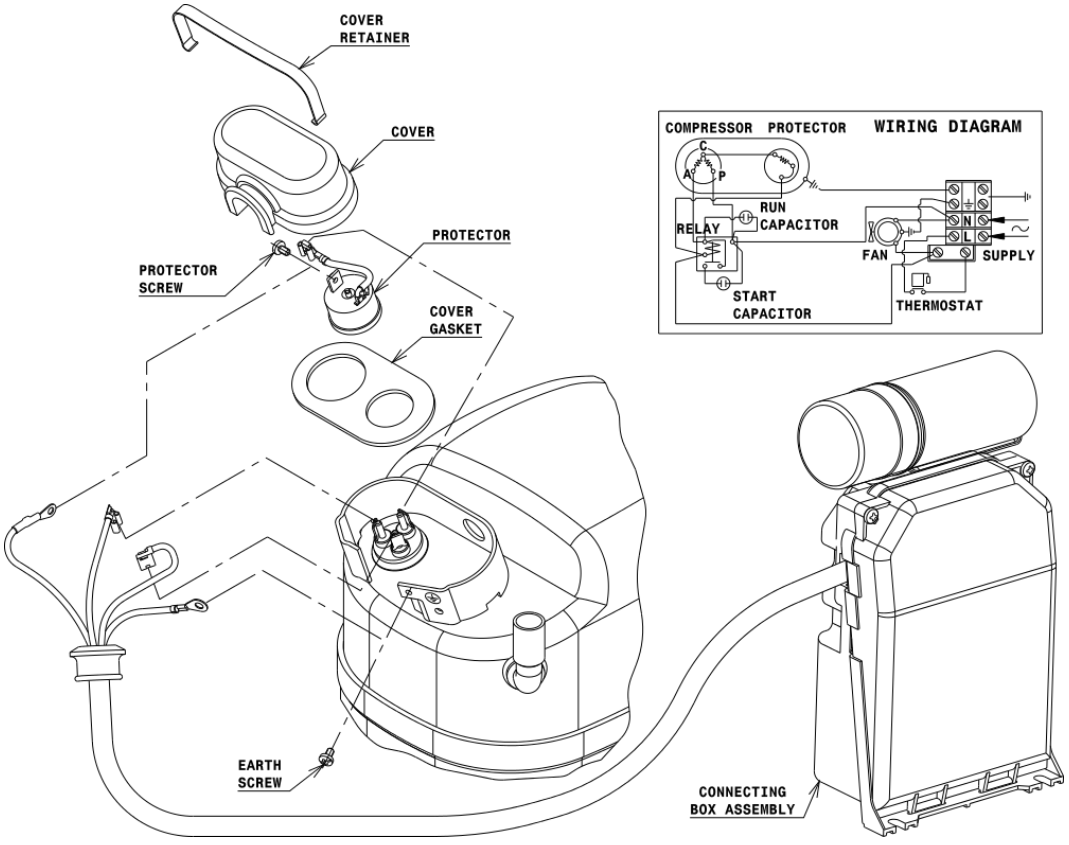
COMPRESSOR DIMENSIONS



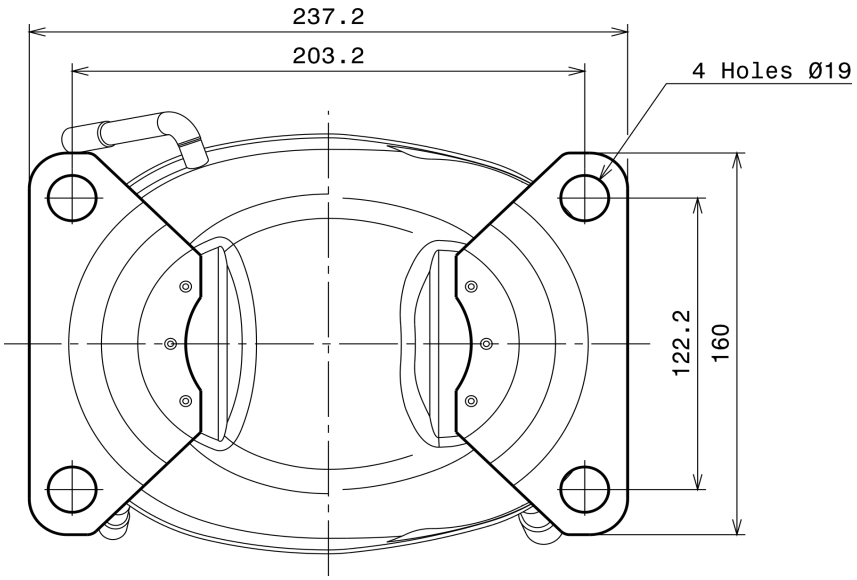
	DESIGNATION	INTERNAL DIAM.
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



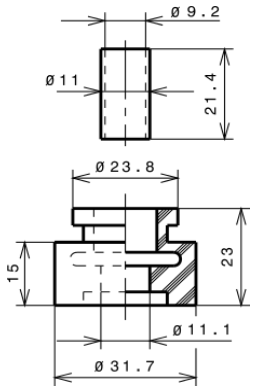
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R22 HMBP

