Technical Data Sheet

cubigel compressors

Compressor model **S22TN_T**

Voltage **220-240V 50Hz ~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	21,77 cm³
Diameter	39,98 mm
Stroke	19,07 mm
Net Weight	22,70 Kg
Oil type	ISO VG 46 MINER
Oil charge	887 cm³

MOTOR

Nominal Power	7/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	198-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	32,00 A
Max. Cont. Current (MCC)	8,00 A
Main W. resist. at 25ºC	1,84 Ω
Start W. resist. at 25ºC	5,71 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	2.500 kCal/h	2.458 W
COP	2,60 W/W	2,26 W/W
EER	2,23 kCal/Wh	1,96 kCal/Wh
Input Power	1.120 W	1.086 W
Current	5,55 A	5,40 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	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 ºC	105,00 / 52,00 ºC		

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ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	620	504	2,89	1,43	1,23
40	-20	876	567	3,15	1,80	1,55
40	-15	1.187	628	3,41	2,20	1,89
40	-10	1.554	689	3,67	2,62	2,26
40	-5	1.975	748	3,92	3,07	2,64
40	0	2.452	806	4,17	3,54	3,04
40	5	2.984	863	4,42	4,02	3,46
40	7,2	3.235	888	4,52	4,24	3,65
40	10	3.570	918	4,66	4,52	3,89
45	-25	556	499	2,87	1,30	1,11
45	-20	784	575	3,18	1,59	1,36
45	-15	1.067	649	3,50	1,91	1,64
45	-10	1.405	723	3,81	2,26	1,94
45	-5	1.799	795	4,12	2,63	2,26
45	0	2.247	865	4,43	3,02	2,60
45	5	2.751	935	4,73	3,42	2,94
45	7,2	2.990	965	4,86	3,60	3,10
45	10	3.310	1.003	5,03	3,84	3,30
50	-25	492	495	2,85	1,16	0,99
50	-20	691	583	3,22	1,38	1,19
50	-15	946	670	3,59	1,64	1,41
50	-10	1.257	756	3,96	1,93	1,66
50	-5	1.622	841	4,32	2,24	1,93
50	0	2.042	925	4,68	2,57	2,21
50	5	2.518	1.007	5,05	2,91	2,50
50	7,2	2.745	1.043	5,20	3,06	2,63
50	10	3.049	1.088	5,41	3,26	2,80
55	-25	427	490	2,83	1,01	0,87
55	-20	599	591	3,25	1,18	1,01
55	-15	826	691	3,68	1,39	1,19
55	-10	1.108	790	4,10	1,63	1,40
55	-5	1.445	887	4,52	1,89	1,63
55	0	1.838	984	4,94	2,17	1,87
55	5	2.286	1.079	5,37	2,46	2,12
55	7,2	2.500	1.120	5,55	2,60	2,23
55	10	2.788	1.172	5,78	2,77	2,38

CECOMAF

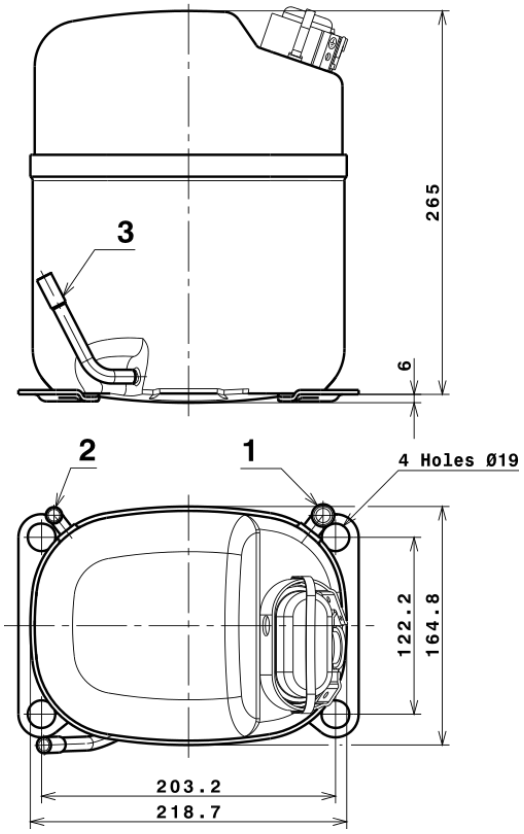
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	678	506	2,90	1,34	1,16
40	-20	960	570	3,16	1,69	1,46
40	-15	1.302	632	3,42	2,06	1,78
40	-10	1.702	693	3,68	2,46	2,12
40	-5	2.162	753	3,94	2,87	2,48
40	0	2.681	811	4,19	3,31	2,86
40	5	3.259	869	4,44	3,75	3,24
40	7,2	3.532	893	4,55	3,95	3,42
40	10	3.896	925	4,69	4,21	3,64
45	-25	605	502	2,88	1,21	1,04
45	-20	855	578	3,20	1,48	1,28
45	-15	1.164	653	3,51	1,78	1,54
45	-10	1.532	727	3,83	2,11	1,82
45	-5	1.960	799	4,14	2,45	2,12
45	0	2.446	871	4,45	2,81	2,43
45	5	2.992	941	4,76	3,18	2,75
45	7,2	3.251	971	4,89	3,35	2,89
45	10	3.597	1.010	5,06	3,56	3,08
50	-25	533	497	2,86	1,07	0,93
50	-20	750	586	3,23	1,28	1,11
50	-15	1.027	674	3,60	1,52	1,32
50	-10	1.363	761	3,97	1,79	1,55
50	-5	1.758	846	4,34	2,08	1,79
50	0	2.212	930	4,71	2,38	2,05
50	5	2.725	1.013	5,08	2,69	2,32
50	7,2	2.970	1.050	5,24	2,83	2,44
50	10	3.297	1.095	5,44	3,01	2,60
55	-25	460	493	2,84	0,93	0,81
55	-20	645	594	3,27	1,09	0,94
55	-15	889	695	3,69	1,28	1,11
55	-10	1.193	795	4,12	1,50	1,30
55	-5	1.555	893	4,55	1,74	1,51
55	0	1.977	990	4,97	2,00	1,73
55	5	2.458	1.086	5,40	2,26	1,96
55	7,2	2.688	1.128	5,58	2,38	2,06
55	10	2.998	1.180	5,82	2,54	2,19

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.615,9953232889	342,4134692209	2,0806289830	81,298286971028
2	163,8338994358	-8,9312986310	-0,0400027788	3,1175513813074
3	-48,1110678374	12,2637215628	0,0547299401	-0,61120121445377
4	1,1896277180	-0,0174649053	0,0000305816	0,0315434178932
5	-1,3376536329	0,5275684979	0,0023434321	-0,015424452957172

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

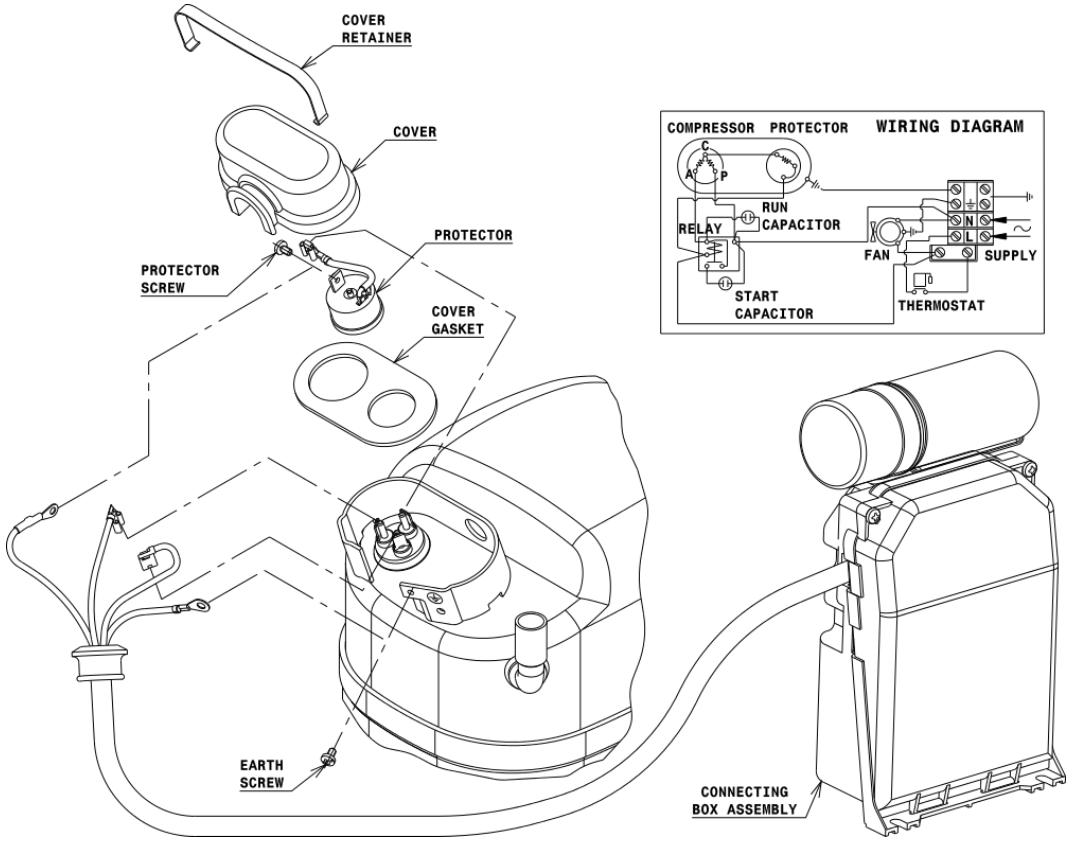
COMPRESSOR DIMENSIONS



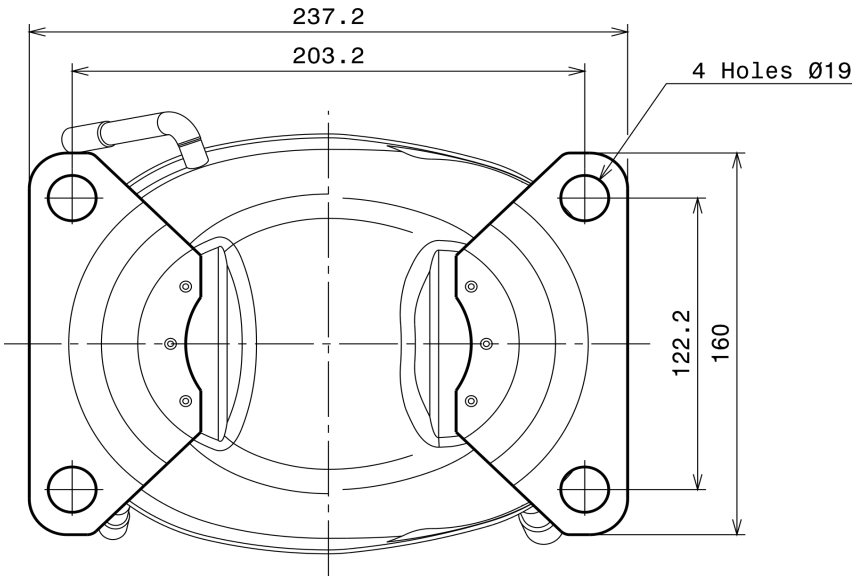
	DESIGNATION	INTERNAL DIAM.
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



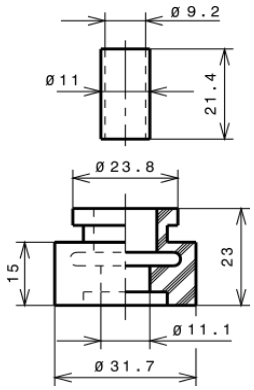
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R22 HMBP

