Technical Data Sheet

Compressor model **MS18T3_V**

Voltage **400/440V 50/60Hz ~3**

Refrigerant **R404A**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R404A
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	20,00 Kg
Oil type	ISO VG 46 ESTER
Oil charge	887 cm³

MOTOR

Nominal Power	7/8 hp
Voltage/Frequency	400V 50Hz
Voltage range	340-440 V
Type	3PHASE
Phase number	3 PH
Locked Rotor Amps (LRA)	10,50 A
Max. Cont. Current (MCC)	3,00 A
Main W. resist. at 25ºC	16,05 Ω
Start W. resist. at 25ºC	21,80 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	2.320 kCal/h	2.124 W
COP	2,35 W/W	1,89 W/W
EER	2,02 kCal/Wh	1,64 kCal/Wh
Input Power	1.150 W	1.121 W
Current	2,10 A	2,07 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	400 V 50 Hz	400 V 50 Hz

ELECTRICAL COMPONENTS

Relay Reference Voltage Resistance				
Protector Reference Current Time check Disc temp. (Open/Close)	Option 1 INTERNAL			

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	690	570	1,34	1,41	1,21
40	-20	947	637	1,43	1,73	1,49
40	-15	1.243	699	1,52	2,07	1,78
40	-10	1.580	755	1,59	2,43	2,09
40	-5	1.956	807	1,66	2,82	2,42
40	0	2.371	853	1,72	3,23	2,78
40	5	2.827	894	1,78	3,68	3,16
40	7,2	3.040	910	1,80	3,89	3,34
40	10	3.322	929	1,82	4,16	3,57
45	-25	600	550	1,31	1,27	1,09
45	-20	834	632	1,42	1,53	1,32
45	-15	1.107	710	1,53	1,81	1,56
45	-10	1.420	782	1,63	2,11	1,82
45	-5	1.772	849	1,72	2,43	2,09
45	0	2.165	910	1,80	2,77	2,38
45	5	2.597	967	1,87	3,12	2,69
45	7,2	2.800	990	1,90	3,29	2,83
45	10	3.069	1.018	1,94	3,51	3,01
50	-25	510	530	1,28	1,12	0,96
50	-20	720	628	1,42	1,33	1,15
50	-15	970	721	1,55	1,57	1,35
50	-10	1.260	808	1,66	1,81	1,56
50	-5	1.589	891	1,77	2,08	1,78
50	0	1.959	968	1,87	2,35	2,02
50	5	2.367	1.040	1,96	2,65	2,28
50	7,2	2.560	1.070	2,00	2,78	2,39
50	10	2.816	1.107	2,05	2,96	2,54
55	-25	420	510	1,25	0,96	0,82
55	-20	607	624	1,41	1,13	0,97
55	-15	834	732	1,56	1,32	1,14
55	-10	1.100	835	1,70	1,53	1,32
55	-5	1.406	933	1,83	1,75	1,51
55	0	1.752	1.026	1,95	1,99	1,71
55	5	2.138	1.113	2,06	2,23	1,92
55	7,2	2.320	1.150	2,10	2,35	2,02
55	10	2.563	1.195	2,15	2,49	2,14
60	-25	330	490	1,22	0,78	0,67
60	-20	494	619	1,41	0,93	0,80
60	-15	697	743	1,58	1,09	0,94
60	-10	940	862	1,74	1,27	1,09
60	-5	1.223	975	1,88	1,46	1,25
60	0	1.546	1.083	2,02	1,66	1,43
60	5	1.908	1.186	2,14	1,87	1,61
60	7,2	2.080	1.230	2,20	1,97	1,69
60	10	2.310	1.284	2,26	2,09	1,80

CECOMAF

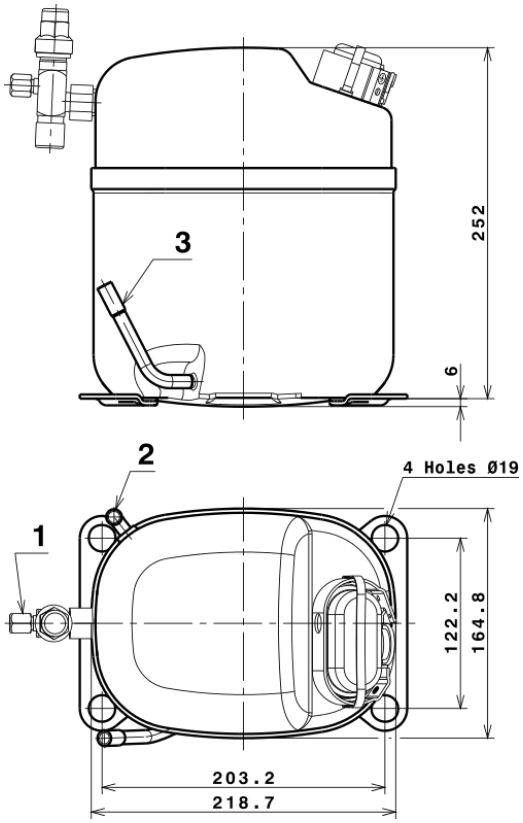
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	722	573	1,34	1,26	1,09
40	-20	997	641	1,44	1,56	1,35
40	-15	1.312	703	1,52	1,87	1,61
40	-10	1.665	760	1,60	2,19	1,89
40	-5	2.057	812	1,67	2,53	2,19
40	0	2.487	859	1,73	2,90	2,50
40	5	2.956	900	1,79	3,28	2,84
40	7,2	3.174	917	1,81	3,46	2,99
40	10	3.463	937	1,83	3,70	3,19
45	-25	621	553	1,31	1,12	0,97
45	-20	868	636	1,43	1,36	1,18
45	-15	1.153	714	1,54	1,61	1,39
45	-10	1.476	787	1,64	1,88	1,62
45	-5	1.838	854	1,73	2,15	1,86
45	0	2.239	917	1,81	2,44	2,11
45	5	2.678	974	1,88	2,75	2,38
45	7,2	2.884	998	1,91	2,89	2,50
45	10	3.156	1.026	1,95	3,08	2,66
50	-25	521	533	1,28	0,98	0,84
50	-20	738	632	1,42	1,17	1,01
50	-15	993	725	1,55	1,37	1,18
50	-10	1.287	813	1,67	1,58	1,37
50	-5	1.620	897	1,78	1,81	1,56
50	0	1.991	975	1,88	2,04	1,76
50	5	2.401	1.048	1,97	2,29	1,98
50	7,2	2.594	1.078	2,01	2,41	2,08
50	10	2.849	1.116	2,06	2,55	2,21
55	-25	421	513	1,25	0,82	0,71
55	-20	608	627	1,42	0,97	0,84
55	-15	834	736	1,57	1,13	0,98
55	-10	1.099	840	1,71	1,31	1,13
55	-5	1.402	939	1,84	1,49	1,29
55	0	1.743	1.033	1,96	1,69	1,46
55	5	2.124	1.121	2,07	1,89	1,64
55	7,2	2.303	1.159	2,11	1,99	1,72
55	10	2.543	1.205	2,17	2,11	1,82
60	-25	320	493	1,23	0,65	0,56
60	-20	478	623	1,41	0,77	0,66
60	-15	675	747	1,58	0,90	0,78
60	-10	910	867	1,74	1,05	0,91
60	-5	1.183	982	1,89	1,21	1,04
60	0	1.496	1.091	2,03	1,37	1,18
60	5	1.846	1.195	2,15	1,54	1,33
60	7,2	2.013	1.239	2,21	1,62	1,40
60	10	2.236	1.294	2,27	1,73	1,49

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	4.464,1419628616	403,3419913849	1,1960728983	90,152421281888
2	137,1158060693	-16,2636242576	-0,0210264633	3,0746453916707
3	-51,0946727556	12,0264425796	0,0145541807	-0,53160011383645
4	0,7302526417	-0,0932076347	-0,0002015403	0,03391510863862
5	-1,2487578167	0,6458090075	0,0008177749	-0,0061729209910803

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

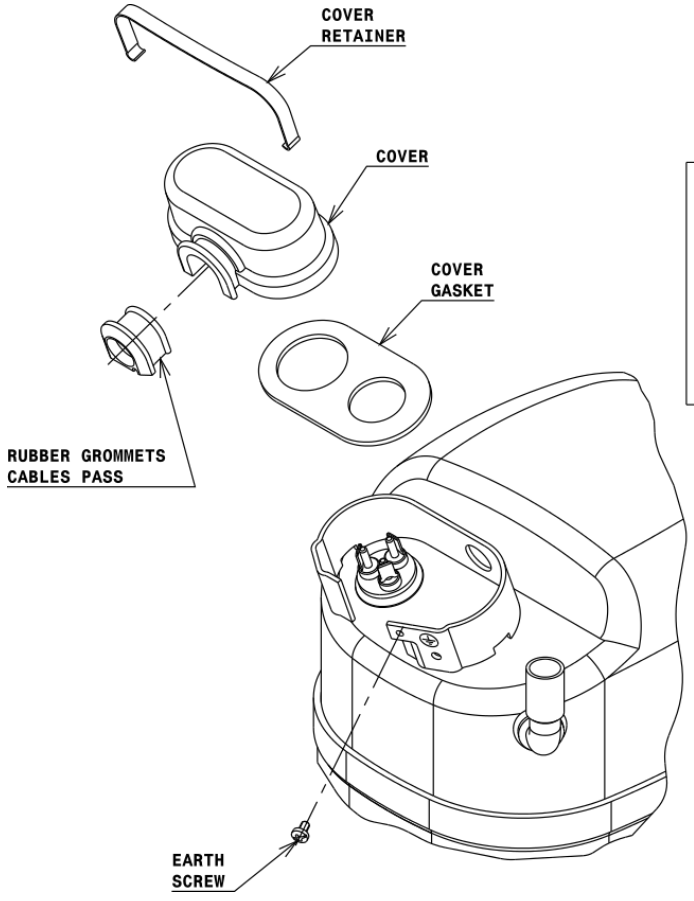
COMPRESSOR DIMENSIONS

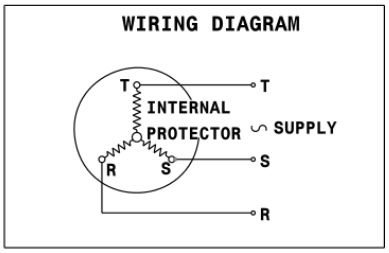


	DESIGNATION	INTERNAL DIAM.
1	Service Valve	1/2" SAE
2	Service	9,7 mm
3	Discharge	8,0 mm

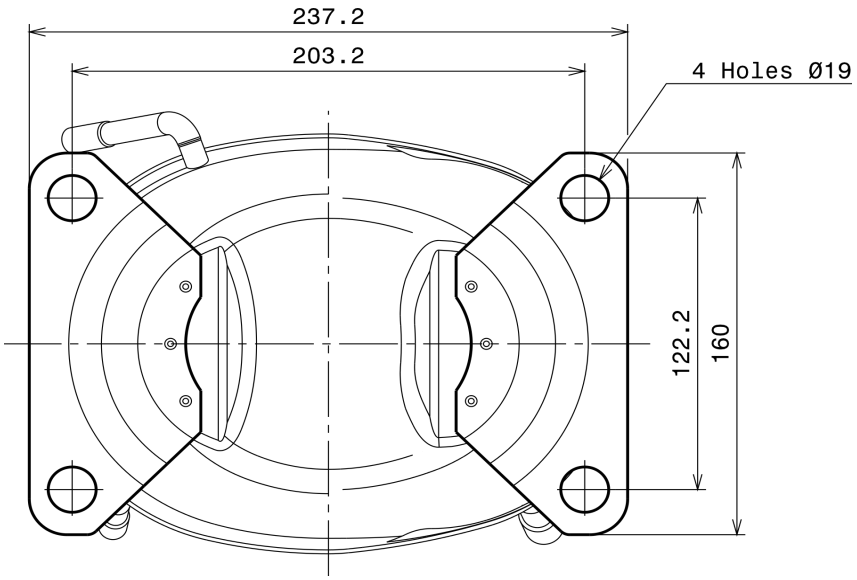
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

3PH CONNECTION (S range)





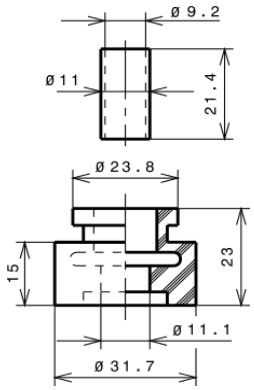
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A HMBP