

Technical Data Sheet

Compressor model **MS18T3_T**
Voltage **400/440V 50/60Hz ~3**
Refrigerant **R404A**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	18,10 cm ³	Nominal Power	7/8 hp
Refrigerant	R404A	Diameter	38,10 mm	Voltage/Frequency	440V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,87 mm	Voltage range	374-484 V
Expansion	Capillar/Valve	Net Weight	20,00 Kg	Type	3PHASE
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 ESTER	Phase number	3 PH
Max. ambient temp.	43,0 °C	Oil charge	887 cm ³	Locked Rotor Amps (LRA)	11,00 A
				Max. Cont. Current (MCC)	3,10 A
				Main W. resist. at 25°C	16,05 Ω
				Start W. resist. at 25°C	21,80 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	2.700 kCal/h	2.471 W
COP	2,25 W/W	1,82 W/W
EER	1,94 kCal/Wh	1,58 kCal/Wh
Input Power	1.395 W	1.355 W
Current	2,20 A	2,15 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	440 V 60 Hz	440 V 60 Hz

ELECTRICAL COMPONENTS

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

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	805	695	1,32	1,35	1,16
40	-20	1.106	780	1,43	1,65	1,42
40	-15	1.453	862	1,54	1,96	1,69
40	-10	1.847	940	1,64	2,28	1,96
40	-5	2.287	1.015	1,73	2,62	2,25
40	0	2.773	1.087	1,82	2,97	2,55
40	5	3.306	1.156	1,91	3,33	2,86
40	7,2	3.555	1.185	1,94	3,49	3,00
40	10	3.885	1.221	1,99	3,70	3,18

45	-25	700	665	1,28	1,22	1,05
45	-20	973	766	1,41	1,48	1,27
45	-15	1.292	863	1,54	1,74	1,50
45	-10	1.658	957	1,66	2,01	1,73
45	-5	2.070	1.048	1,77	2,30	1,98
45	0	2.528	1.135	1,88	2,59	2,23
45	5	3.033	1.219	1,99	2,89	2,49
45	7,2	3.270	1.255	2,03	3,03	2,61
45	10	3.584	1.300	2,08	3,21	2,76

50	-25	595	635	1,24	1,09	0,94
50	-20	840	751	1,39	1,30	1,12
50	-15	1.131	864	1,54	1,52	1,31
50	-10	1.469	973	1,68	1,76	1,51
50	-5	1.853	1.080	1,81	2,00	1,72
50	0	2.283	1.183	1,94	2,25	1,93
50	5	2.760	1.282	2,06	2,50	2,15
50	7,2	2.985	1.325	2,12	2,62	2,25
50	10	3.284	1.379	2,18	2,77	2,38

55	-25	490	605	1,20	0,94	0,81
55	-20	707	737	1,37	1,12	0,96
55	-15	970	865	1,54	1,30	1,12
55	-10	1.280	990	1,70	1,50	1,29
55	-5	1.636	1.112	1,85	1,71	1,47
55	0	2.039	1.230	2,00	1,93	1,66
55	5	2.488	1.345	2,14	2,15	1,85
55	7,2	2.700	1.395	2,20	2,25	1,94
55	10	2.983	1.457	2,27	2,38	2,05

60	-25	385	575	1,16	0,78	0,67
60	-20	574	722	1,35	0,92	0,79
60	-15	809	866	1,54	1,09	0,93
60	-10	1.091	1.007	1,72	1,26	1,08
60	-5	1.419	1.144	1,89	1,44	1,24
60	0	1.794	1.278	2,06	1,63	1,40
60	5	2.215	1.409	2,22	1,83	1,57
60	7,2	2.415	1.465	2,28	1,92	1,65
60	10	2.682	1.536	2,37	2,03	1,75

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	842	699	1,32	1,20	1,04
40	-20	1.165	784	1,44	1,48	1,28
40	-15	1.533	867	1,54	1,77	1,53
40	-10	1.946	946	1,64	2,06	1,78
40	-5	2.404	1.022	1,74	2,35	2,03
40	0	2.908	1.095	1,83	2,66	2,29
40	5	3.456	1.164	1,92	2,97	2,56
40	7,2	3.712	1.194	1,96	3,11	2,69
40	10	4.049	1.231	2,00	3,29	2,84

45	-25	725	669	1,28	1,08	0,94
45	-20	1.013	770	1,42	1,32	1,14
45	-15	1.346	868	1,54	1,55	1,34
45	-10	1.724	963	1,67	1,79	1,55
45	-5	2.147	1.054	1,78	2,04	1,76
45	0	2.615	1.143	1,89	2,29	1,98
45	5	3.128	1.228	2,00	2,55	2,20
45	7,2	3.368	1.265	2,04	2,66	2,30
45	10	3.686	1.310	2,10	2,81	2,43

50	-25	608	639	1,24	0,95	0,82
50	-20	860	755	1,40	1,14	0,98
50	-15	1.158	869	1,55	1,33	1,15
50	-10	1.501	979	1,69	1,53	1,32
50	-5	1.889	1.087	1,82	1,74	1,50
50	0	2.322	1.191	1,95	1,95	1,68
50	5	2.800	1.292	2,08	2,17	1,87
50	7,2	3.024	1.335	2,13	2,27	1,96
50	10	3.323	1.390	2,19	2,39	2,07

55	-25	491	608	1,20	0,81	0,70
55	-20	708	741	1,38	0,96	0,83
55	-15	971	870	1,55	1,12	0,96
55	-10	1.278	996	1,71	1,28	1,11
55	-5	1.631	1.119	1,86	1,46	1,26
55	0	2.029	1.239	2,01	1,64	1,41
55	5	2.471	1.355	2,15	1,82	1,58
55	7,2	2.680	1.406	2,21	1,91	1,65
55	10	2.959	1.469	2,29	2,01	1,74

60	-25	374	578	1,16	0,65	0,56
60	-20	556	726	1,36	0,77	0,66
60	-15	783	871	1,55	0,90	0,78
60	-10	1.056	1.013	1,73	1,04	0,90
60	-5	1.373	1.151	1,90	1,19	1,03
60	0	1.736	1.287	2,07	1,35	1,17
60	5	2.143	1.419	2,23	1,51	1,30
60	7,2	2.337	1.476	2,30	1,58	1,37
60	10	2.596	1.548	2,38	1,68	1,45

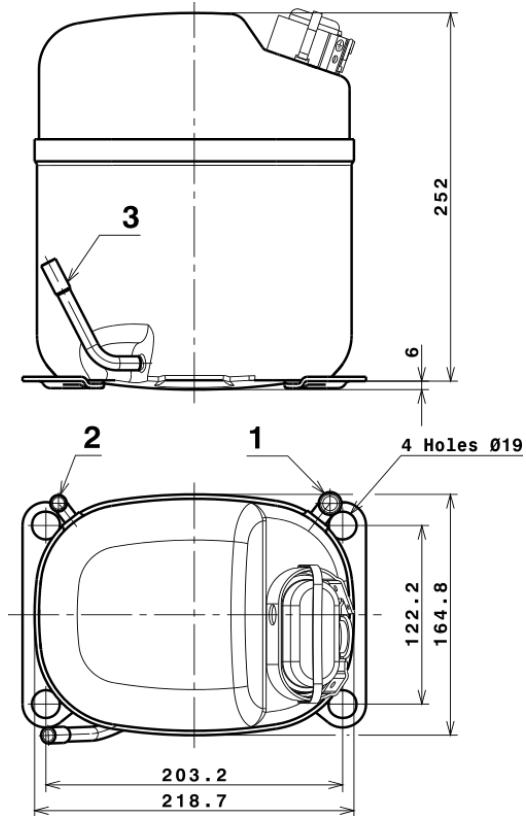
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	5.244,0928461162	730,1209527639	1,4080008440	106,45153183335
2	161,4283220729	-10,5677104953	-0,0135492860	3,6382019834728
3	-60,3552705963	9,9475309919	0,0118133515	-0,64672144480533
4	0,8528731252	-0,0504772485	-0,0001178277	0,039574323265504
5	-1,4866768814	0,6450281962	0,0007992417	-0,0082625936361056

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

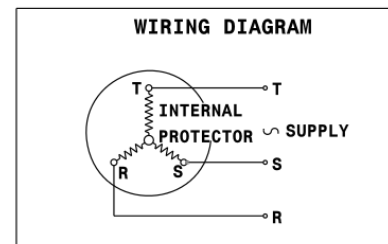
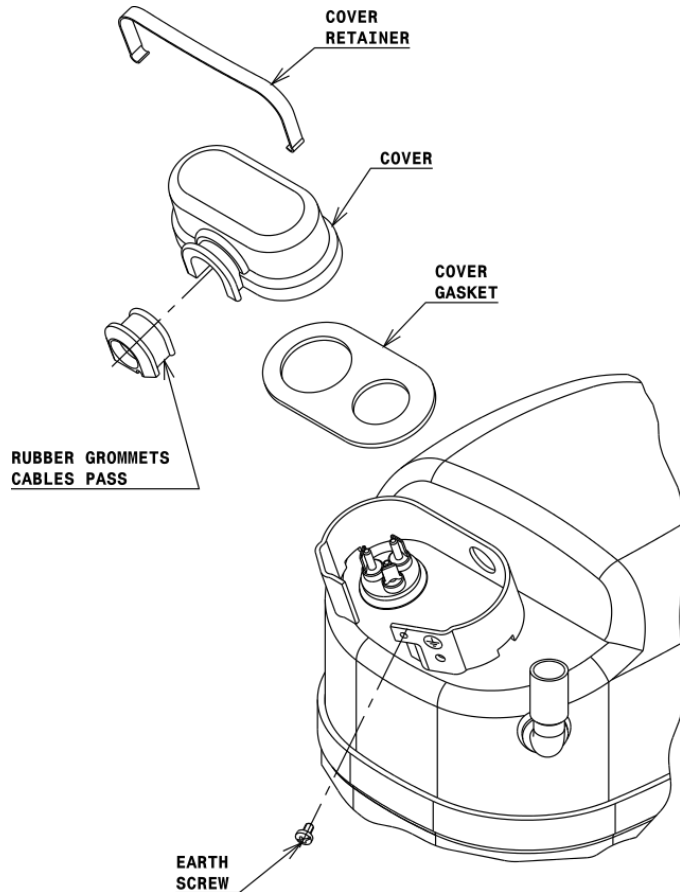
COMPRESSOR DIMENSIONS



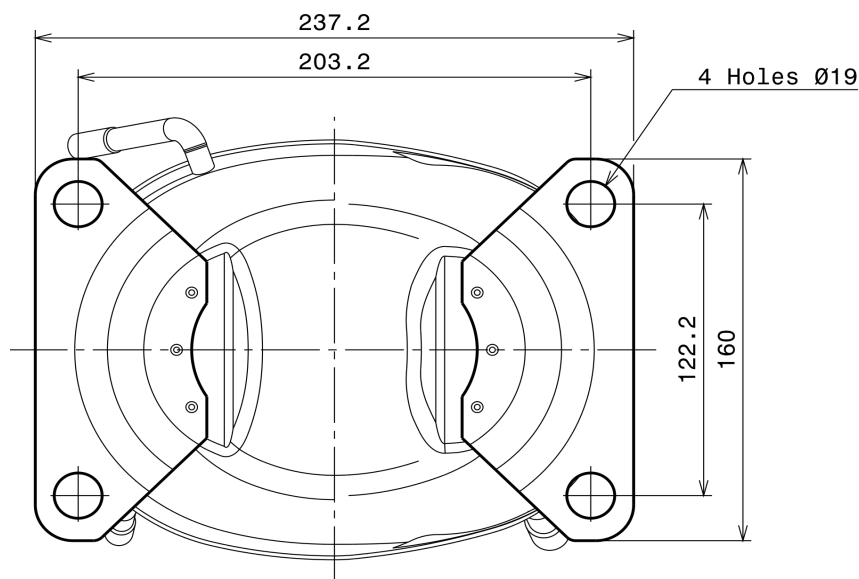
	DESIGNATION	INTERNAL DIAM.
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

3PH CONNECTION (S range)



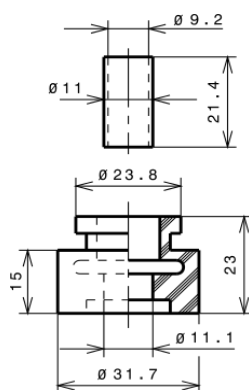
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A HMBP

