

Technical Data Sheet

Compressor model **MS22T3_T**
 Voltage **400/440V 50/60Hz ~3**
 Refrigerant **R404A**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	21,75 cm ³	Nominal Power	1 hp
Refrigerant	R404A	Diameter	38,10 mm	Voltage/Frequency	400V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	19,07 mm	Voltage range	340-440 V
Expansion	Capillar/Valve	Net Weight	19,68 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	700 cm ³	Locked Rotor Amps (LRA)	10,50 A
				Max. Cont. Current (MCC)	3,00 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	2.800 kCal/h	2.560 W
COP	2,45 W/W	1,98 W/W
EER	2,11 kCal/Wh	1,71 kCal/Wh
Input Power	1.330 W	1.290 W
Current	2,40 A	2,34 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	400 V 50 Hz	400 V 50 Hz

ELECTRICAL COMPONENTS

Relay				
Reference				
Voltage				
Resistance				
Protector				
Reference				
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	825	598	1,39	1,60	1,38
40	-20	1.142	680	1,49	1,95	1,68
40	-15	1.507	758	1,58	2,31	1,99
40	-10	1.920	831	1,68	2,69	2,31
40	-5	2.379	900	1,77	3,07	2,64
40	0	2.886	965	1,86	3,48	2,99
40	5	3.441	1.025	1,94	3,91	3,36
40	7,2	3.700	1.050	1,98	4,10	3,53
40	10	4.043	1.080	2,02	4,35	3,74

45	-25	700	573	1,36	1,42	1,22
45	-20	990	674	1,48	1,71	1,47
45	-15	1.328	770	1,60	2,01	1,72
45	-10	1.713	862	1,72	2,31	1,99
45	-5	2.146	949	1,84	2,63	2,26
45	0	2.626	1.032	1,95	2,96	2,55
45	5	3.153	1.110	2,07	3,30	2,84
45	7,2	3.400	1.143	2,11	3,46	2,97
45	10	3.728	1.184	2,17	3,66	3,15

50	-25	575	548	1,33	1,22	1,05
50	-20	838	667	1,47	1,46	1,26
50	-15	1.149	782	1,61	1,71	1,47
50	-10	1.507	892	1,76	1,96	1,69
50	-5	1.912	997	1,90	2,23	1,92
50	0	2.365	1.099	2,05	2,50	2,15
50	5	2.865	1.195	2,19	2,79	2,40
50	7,2	3.100	1.237	2,25	2,92	2,51
50	10	3.413	1.288	2,33	3,08	2,65

55	-25	450	523	1,30	1,00	0,86
55	-20	686	660	1,46	1,21	1,04
55	-15	969	793	1,63	1,42	1,22
55	-10	1.300	922	1,80	1,64	1,41
55	-5	1.678	1.046	1,97	1,87	1,60
55	0	2.104	1.166	2,15	2,10	1,80
55	5	2.577	1.281	2,32	2,34	2,01
55	7,2	2.800	1.330	2,40	2,45	2,11
55	10	3.097	1.391	2,50	2,59	2,23

60	-25	325	498	1,27	0,76	0,65
60	-20	534	654	1,45	0,95	0,82
60	-15	790	805	1,64	1,14	0,98
60	-10	1.093	952	1,84	1,34	1,15
60	-5	1.444	1.095	2,04	1,53	1,32
60	0	1.843	1.233	2,25	1,74	1,50
60	5	2.289	1.366	2,46	1,95	1,68
60	7,2	2.500	1.424	2,55	2,04	1,76
60	10	2.782	1.495	2,67	2,16	1,86

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	862	601	1,39	1,43	1,24
40	-20	1.203	684	1,49	1,76	1,52
40	-15	1.590	762	1,59	2,08	1,80
40	-10	2.022	836	1,69	2,42	2,09
40	-5	2.501	906	1,78	2,76	2,39
40	0	3.026	971	1,87	3,12	2,69
40	5	3.597	1.032	1,95	3,48	3,01
40	7,2	3.863	1.058	1,99	3,65	3,16
40	10	4.214	1.089	2,03	3,87	3,34

45	-25	725	576	1,36	1,26	1,09
45	-20	1.031	677	1,48	1,52	1,31
45	-15	1.383	774	1,60	1,79	1,54
45	-10	1.781	867	1,73	2,05	1,78
45	-5	2.225	955	1,85	2,33	2,01
45	0	2.715	1.039	1,96	2,61	2,26
45	5	3.251	1.118	2,08	2,91	2,51
45	7,2	3.502	1.152	2,13	3,04	2,63
45	10	3.833	1.193	2,19	3,21	2,78

50	-25	588	551	1,33	1,07	0,92
50	-20	859	671	1,48	1,28	1,11
50	-15	1.176	786	1,62	1,50	1,29
50	-10	1.540	897	1,77	1,72	1,48
50	-5	1.949	1.004	1,91	1,94	1,68
50	0	2.404	1.106	2,06	2,17	1,88
50	5	2.906	1.204	2,21	2,41	2,08
50	7,2	3.141	1.246	2,27	2,52	2,18
50	10	3.453	1.298	2,35	2,66	2,30

55	-25	451	526	1,30	0,86	0,74
55	-20	687	664	1,47	1,03	0,89
55	-15	970	798	1,64	1,22	1,05
55	-10	1.298	928	1,81	1,40	1,21
55	-5	1.673	1.053	1,98	1,59	1,37
55	0	2.093	1.174	2,16	1,78	1,54
55	5	2.560	1.290	2,34	1,98	1,71
55	7,2	2.780	1.340	2,42	2,07	1,79
55	10	3.072	1.402	2,52	2,19	1,89

60	-25	314	501	1,27	0,63	0,54
60	-20	515	658	1,46	0,78	0,68
60	-15	763	810	1,65	0,94	0,81
60	-10	1.057	958	1,85	1,10	0,95
60	-5	1.397	1.102	2,05	1,27	1,10
60	0	1.782	1.241	2,26	1,44	1,24
60	5	2.214	1.376	2,47	1,61	1,39
60	7,2	2.419	1.434	2,57	1,69	1,46
60	10	2.692	1.507	2,69	1,79	1,54

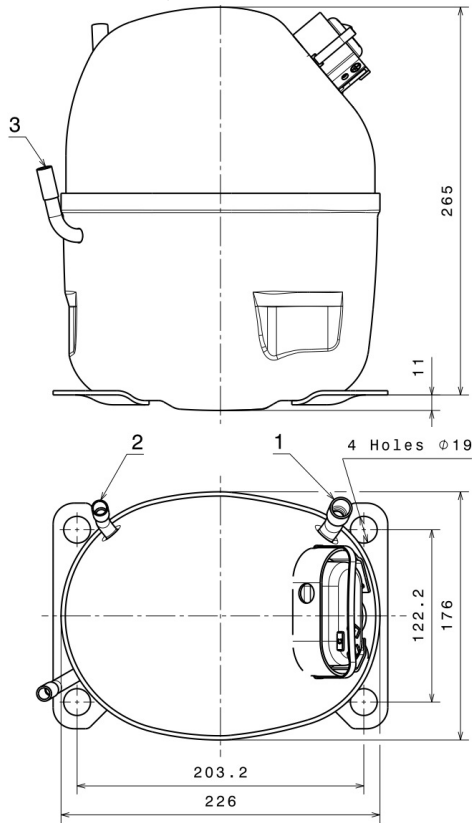
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	5.502,4265124179	441,2538342541	0,9896453780	112,63786053216
2	165,3574303080	-17,0986357574	-0,0242684239	3,6776844684356
3	-63,9358735134	13,9810759504	0,0222362624	-0,71799484490731
4	0,8706393886	-0,0752361563	0,0000835204	0,040672403825452
5	-1,4777144424	0,7651821685	0,0011299587	-0,0058819145959985

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

COMPRESSOR DIMENSIONS

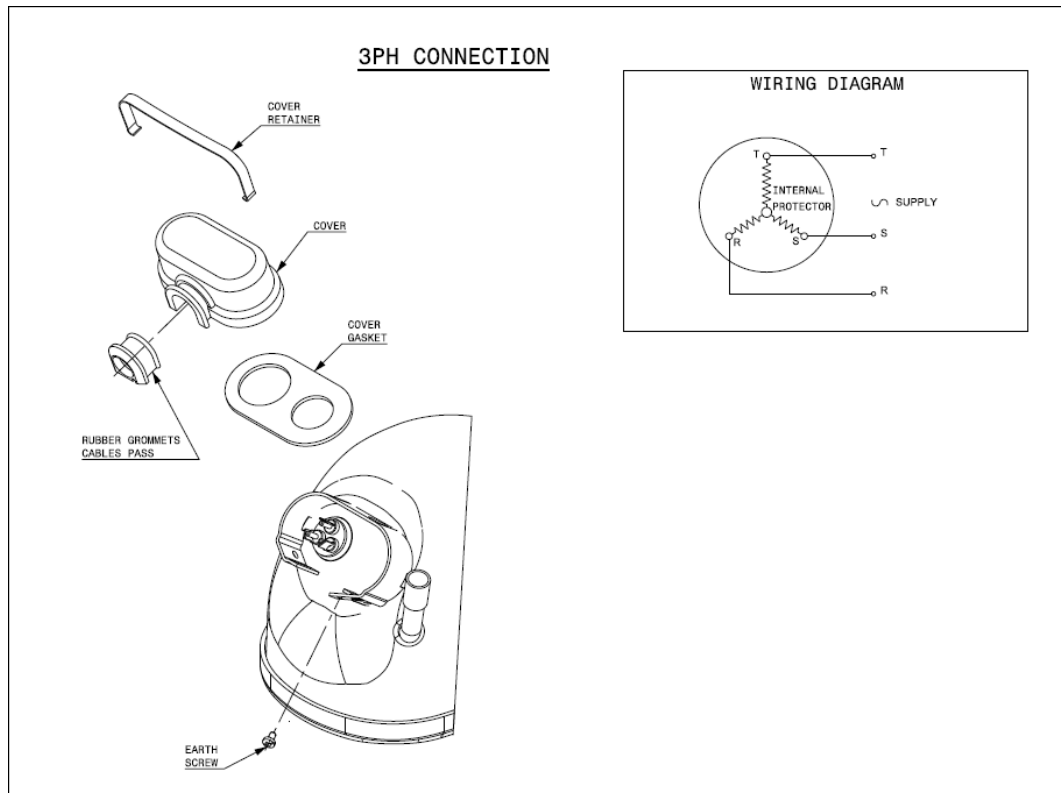


DESIGNATION INTERNAL DIAM.

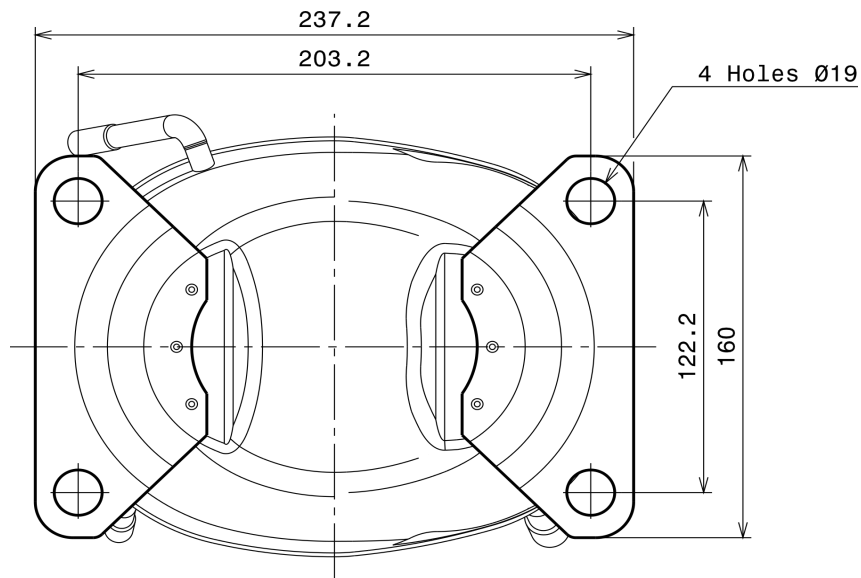
DESIGNATION	INTERNAL DIAM.
1 Suction	12,7 mm
2 Service	9,7 mm
3 Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

3PH CONNECTION (NS Range)



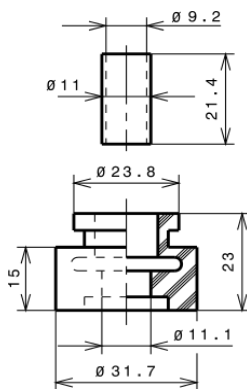
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A HMBP

