

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **MS22T3_V**
 Voltage **400/440V 50/60Hz ~3**
 Refrigerant **R404A**
 Compressor status

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	21,75 cm ³	Voltage/Frequency	440V 60Hz
Refrigerant	R404A	Diameter	38,10 mm	Voltage range	374-484 V
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	19,07 mm	Type	3PHASE
Expansion	Capillar/Valve	Net Weight	19,68 Kg	Phase number	3 PH
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 ESTER	Locked Rotor Amps (LRA)	11,00 A
Max. ambient temp.	43,0 °C	Oil charge	700 cm ³	Max. Cont. Current (MCC)	3,10 A
		HP	1 hp	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	3.276 kCal/h	2.995 W
COP	2,40 W/W	1,94 W/W
EER	2,06 kCal/Wh	1,68 kCal/Wh
Input Power	1.590 W	1.541 W
Current	2,50 A	2,43 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				
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	966	707	1,31	1,59	1,37
40	-20	1.337	818	1,45	1,90	1,64
40	-15	1.764	924	1,58	2,22	1,91
40	-10	2.246	1.026	1,71	2,55	2,19
40	-5	2.784	1.123	1,84	2,88	2,48
40	0	3.377	1.215	1,97	3,23	2,78
40	5	4.026	1.302	2,09	3,60	3,09
40	7,2	4.329	1.340	2,14	3,76	3,23
40	10	4.730	1.385	2,20	3,97	3,41

45	-25	819	675	1,27	1,41	1,21
45	-20	1.159	804	1,43	1,68	1,44
45	-15	1.554	928	1,59	1,95	1,67
45	-10	2.005	1.048	1,74	2,22	1,91
45	-5	2.511	1.163	1,89	2,51	2,16
45	0	3.072	1.273	2,04	2,81	2,41
45	5	3.689	1.378	2,19	3,11	2,68
45	7,2	3.978	1.423	2,26	3,25	2,80
45	10	4.361	1.479	2,34	3,43	2,95

50	-25	673	644	1,24	1,22	1,05
50	-20	980	790	1,41	1,44	1,24
50	-15	1.344	933	1,59	1,68	1,44
50	-10	1.763	1.070	1,77	1,92	1,65
50	-5	2.237	1.203	1,95	2,16	1,86
50	0	2.767	1.331	2,13	2,42	2,08
50	5	3.352	1.454	2,30	2,68	2,31
50	7,2	3.627	1.507	2,38	2,80	2,41
50	10	3.993	1.572	2,47	2,95	2,54

55	-25	526	612	1,20	1,00	0,86
55	-20	802	777	1,40	1,20	1,03
55	-15	1.134	937	1,60	1,41	1,21
55	-10	1.521	1.092	1,80	1,62	1,39
55	-5	1.964	1.243	2,00	1,84	1,58
55	0	2.462	1.388	2,21	2,06	1,77
55	5	3.015	1.529	2,41	2,29	1,97
55	7,2	3.276	1.590	2,50	2,40	2,06
55	10	3.624	1.666	2,61	2,53	2,18

60	-25	380	581	1,16	0,76	0,65
60	-20	624	763	1,38	0,95	0,82
60	-15	924	941	1,60	1,14	0,98
60	-10	1.279	1.114	1,83	1,34	1,15
60	-5	1.690	1.282	2,06	1,53	1,32
60	0	2.156	1.446	2,29	1,73	1,49
60	5	2.678	1.605	2,52	1,94	1,67
60	7,2	2.925	1.674	2,63	2,03	1,75
60	10	3.255	1.759	2,76	2,15	1,85

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	1.009	710	1,32	1,42	1,23
40	-20	1.407	822	1,45	1,71	1,48
40	-15	1.860	929	1,59	2,00	1,73
40	-10	2.367	1.032	1,72	2,29	1,98
40	-5	2.927	1.130	1,85	2,59	2,24
40	0	3.541	1.223	1,98	2,89	2,50
40	5	4.209	1.312	2,10	3,21	2,77
40	7,2	4.519	1.350	2,15	3,35	2,89
40	10	4.930	1.396	2,22	3,53	3,05

45	-25	848	679	1,28	1,25	1,08
45	-20	1.206	809	1,44	1,49	1,29
45	-15	1.618	934	1,59	1,73	1,50
45	-10	2.084	1.054	1,75	1,98	1,71
45	-5	2.604	1.170	1,90	2,22	1,92
45	0	3.177	1.282	2,06	2,48	2,14
45	5	3.804	1.388	2,21	2,74	2,37
45	7,2	4.097	1.434	2,27	2,86	2,47
45	10	4.485	1.491	2,35	3,01	2,60

50	-25	687	647	1,24	1,06	0,92
50	-20	1.005	795	1,42	1,26	1,09
50	-15	1.376	938	1,60	1,47	1,27
50	-10	1.802	1.077	1,78	1,67	1,45
50	-5	2.280	1.211	1,96	1,88	1,63
50	0	2.813	1.340	2,14	2,10	1,81
50	5	3.400	1.465	2,32	2,32	2,01
50	7,2	3.675	1.518	2,39	2,42	2,09
50	10	4.040	1.585	2,49	2,55	2,20

55	-25	527	615	1,20	0,86	0,74
55	-20	804	781	1,40	1,03	0,89
55	-15	1.135	942	1,61	1,20	1,04
55	-10	1.519	1.099	1,81	1,38	1,19
55	-5	1.957	1.251	2,01	1,56	1,35
55	0	2.449	1.398	2,22	1,75	1,51
55	5	2.995	1.541	2,43	1,94	1,68
55	7,2	3.252	1.602	2,52	2,03	1,75
55	10	3.595	1.679	2,63	2,14	1,85

60	-25	366	584	1,17	0,63	0,54
60	-20	603	767	1,39	0,79	0,68
60	-15	893	947	1,61	0,94	0,81
60	-10	1.237	1.121	1,84	1,10	0,95
60	-5	1.634	1.291	2,07	1,27	1,09
60	0	2.085	1.456	2,30	1,43	1,24
60	5	2.591	1.617	2,54	1,60	1,38
60	7,2	2.830	1.686	2,64	1,68	1,45
60	10	3.150	1.773	2,78	1,78	1,53

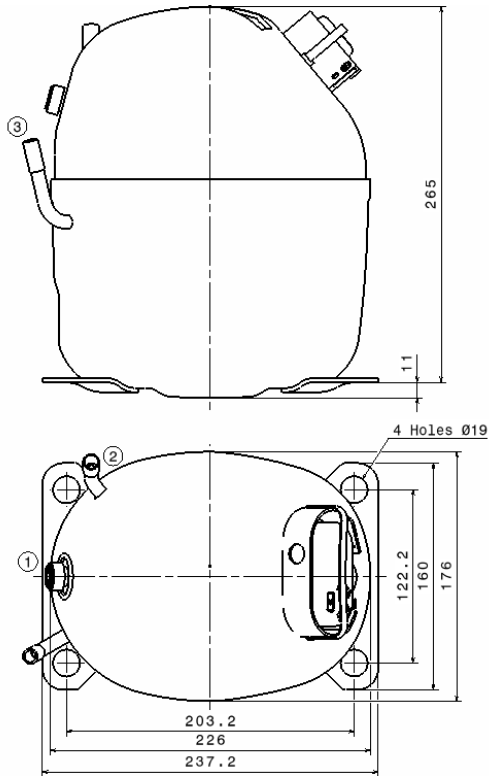


EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	6.438,4947923424	777,9615221106	1,2774906568	131,80883988435
2	193,3842033387	-10,2888700475	-0,0132625924	4,3000035560506
3	-74,8156061644	12,0633341170	0,0182552769	-0,84041953170458
4	1,0176634408	-0,0771519850	0,0000588933	0,047552864034758
5	-1,7274489319	0,7420166690	0,0010389254	-0,0068310674157868

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

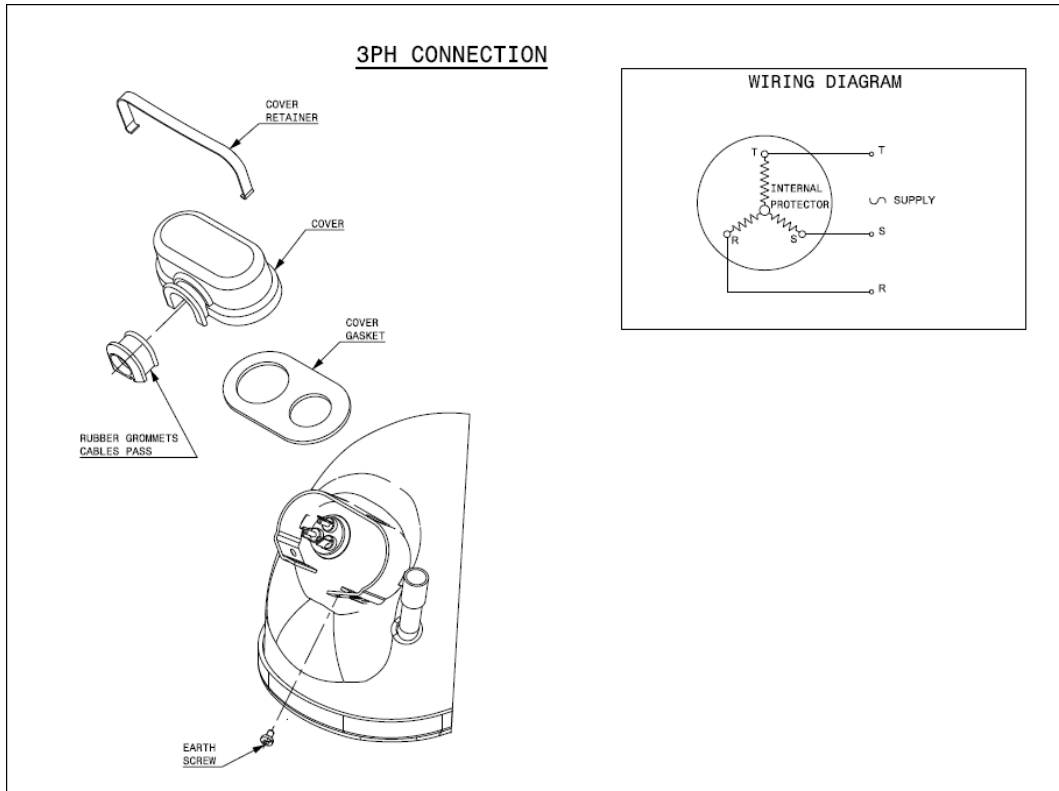


DESIGNATION INTERNAL DIAM.

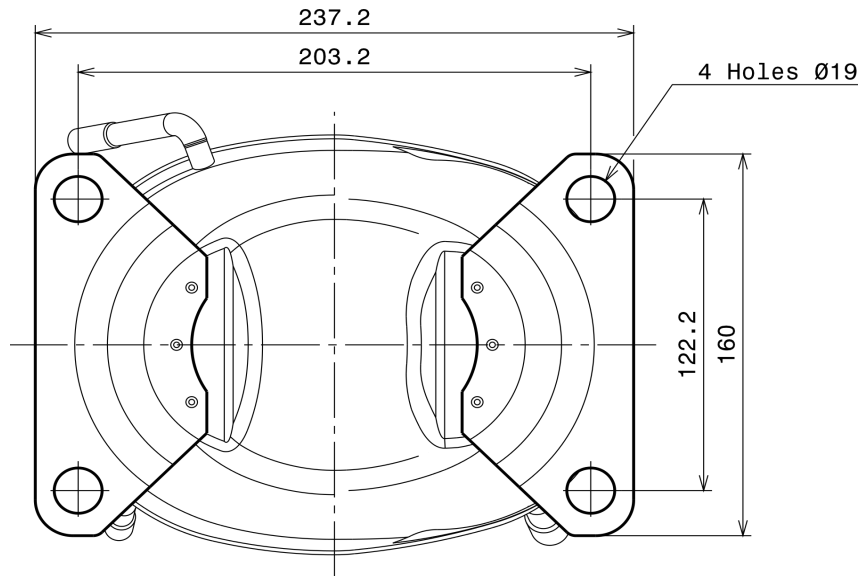
1	Service Valve	1/2" SAE
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

3PH CONNECTION (NS Range)



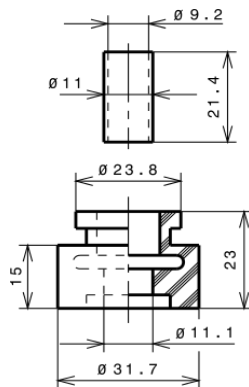
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 19$ holes (203.2x122.2 net)



SOA

SOA R404A HMBP

