

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **MS34TG_T**
Voltage **200-220/230V 50/60Hz ~1**
Refrigerant **R404A**

APPLICATION

COMPRESSOR

MOTOR

Application	High Back Pressure	Displacement	34,42 cm ³	Nominal Power	1 5/8 hp
Refrigerant	R404A	Diameter	42,86 mm	Voltage/Frequency	230V 60Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	23,85 mm	Voltage range	196-253 V
Expansion	Capillar/Valve	Net Weight	22,33 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	700 cm ³	Locked Rotor Amps (LRA)	53,00 A
				Max. Cont. Current (MCC)	17,30 A
				Main W. resist. at 25°C	0,99 Ω
				Start W. resist. at 25°C	4,35 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	5.320 kCal/h	4.917 W
COP	2,10 W/W	1,71 W/W
EER	1,81 kCal/Wh	1,48 kCal/Wh
Input Power	2.945 W	2.873 W
Current	13,76 A	12,82 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	88-108 μF 330 V		
Run capacitor	30 μF 420 V		
Relay	Option 1	Option 2	
Reference	3ARR3 10S3	RVA 3AG..	
Pick-Up	180-195 V	180-195 V	
Drop-Out	40-105 V	40-105 V	
Protector	Option 1		
Reference	GA3LMV81		
Current	49,00 A		
Time check	6,0-16 seg		
Disc temp. (Open/Close)	120,00 / 57,00 °C		

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ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-15	2.735	1.563	6,66	2,04	1,75
40	-10	3.534	1.820	6,24	2,26	1,94
40	-5	4.400	2.062	6,57	2,48	2,13
40	0	5.332	2.290	7,53	2,71	2,33
40	5	6.330	2.503	8,99	2,94	2,53
40	7,2	6.790	2.593	9,77	3,05	2,62
40	10	7.394	2.702	10,85	3,18	2,74

45	-15	2.544	1.666	6,39	1,78	1,53
45	-10	3.276	1.926	6,30	1,98	1,70
45	-5	4.074	2.172	6,96	2,18	1,88
45	0	4.939	2.403	8,24	2,39	2,06
45	5	5.869	2.619	10,02	2,61	2,24
45	7,2	6.300	2.710	10,93	2,70	2,32
45	10	6.866	2.821	12,19	2,83	2,43

50	-15	2.354	1.770	6,26	1,55	1,33
50	-10	3.018	2.033	6,49	1,73	1,48
50	-5	3.749	2.282	7,48	1,91	1,64
50	0	4.546	2.516	9,10	2,10	1,81
50	5	5.409	2.736	11,21	2,30	1,98
50	7,2	5.810	2.828	12,26	2,39	2,05
50	10	6.339	2.940	13,70	2,51	2,16

55	-15	2.163	1.873	6,25	1,34	1,15
55	-10	2.760	2.140	6,83	1,50	1,29
55	-5	3.423	2.392	8,16	1,66	1,43
55	0	4.153	2.629	10,11	1,84	1,58
55	5	4.949	2.852	12,56	2,02	1,74
55	7,2	5.320	2.945	13,76	2,10	1,81
55	10	5.811	3.060	15,38	2,21	1,90

60	-15	1.973	1.977	6,37	1,16	1,00
60	-10	2.502	2.246	7,30	1,30	1,11
60	-5	3.098	2.501	8,98	1,44	1,24
60	0	3.760	2.742	11,28	1,59	1,37
60	5	4.489	2.968	14,07	1,76	1,51
60	7,2	4.830	3.063	15,42	1,83	1,58
60	10	5.283	3.179	17,24	1,93	1,66

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-15	2.865	1.572	6,63	1,82	1,58
40	-10	3.710	1.831	6,24	2,03	1,75
40	-5	4.617	2.076	6,61	2,22	1,92
40	0	5.586	2.306	7,62	2,42	2,09
40	5	6.618	2.522	9,15	2,62	2,27
40	7,2	7.092	2.612	9,95	2,71	2,35
40	10	7.713	2.724	11,08	2,83	2,45

45	-15	2.631	1.676	6,37	1,57	1,36
45	-10	3.393	1.938	6,31	1,75	1,51
45	-5	4.216	2.186	7,02	1,93	1,67
45	0	5.103	2.420	8,35	2,11	1,82
45	5	6.051	2.639	10,21	2,29	1,98
45	7,2	6.489	2.731	11,15	2,38	2,05
45	10	7.063	2.844	12,46	2,48	2,15

50	-15	2.397	1.780	6,25	1,35	1,16
50	-10	3.075	2.046	6,53	1,50	1,30
50	-5	3.816	2.297	7,57	1,66	1,44
50	0	4.619	2.533	9,24	1,82	1,58
50	5	5.484	2.756	11,43	1,99	1,72
50	7,2	5.885	2.849	12,53	2,07	1,78
50	10	6.412	2.964	14,02	2,16	1,87

55	-15	2.163	1.884	6,26	1,15	0,99
55	-10	2.758	2.153	6,88	1,28	1,11
55	-5	3.415	2.407	8,27	1,42	1,23
55	0	4.135	2.647	10,29	1,56	1,35
55	5	4.917	2.873	12,82	1,71	1,48
55	7,2	5.282	2.968	14,07	1,78	1,54
55	10	5.762	3.084	15,75	1,87	1,61

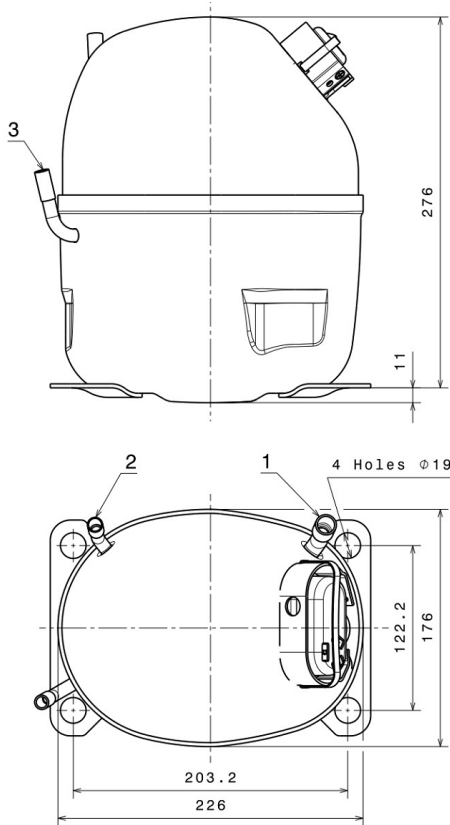
60	-15	1.929	1.988	6,39	0,97	0,84
60	-10	2.440	2.260	7,37	1,08	0,93
60	-5	3.015	2.518	9,11	1,20	1,03
60	0	3.651	2.761	11,49	1,32	1,14
60	5	4.351	2.990	14,38	1,46	1,26
60	7,2	4.678	3.086	15,78	1,52	1,31
60	10	5.112	3.204	17,65	1,60	1,38

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	9.456,6386934372	1.436,7412195769	-1,1388581505	184,59001134236
2	334,6091353780	41,4788151303	-0,3004889086	7,2846087171718
3	-100,6126378922	23,4773484858	0,2229666549	-0,74799954231829
4	1,1810708215	-0,2515999732	0,0130745383	0,069305400853017
5	-3,4950320876	0,1410999039	0,0148707687	-0,026816407745086

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

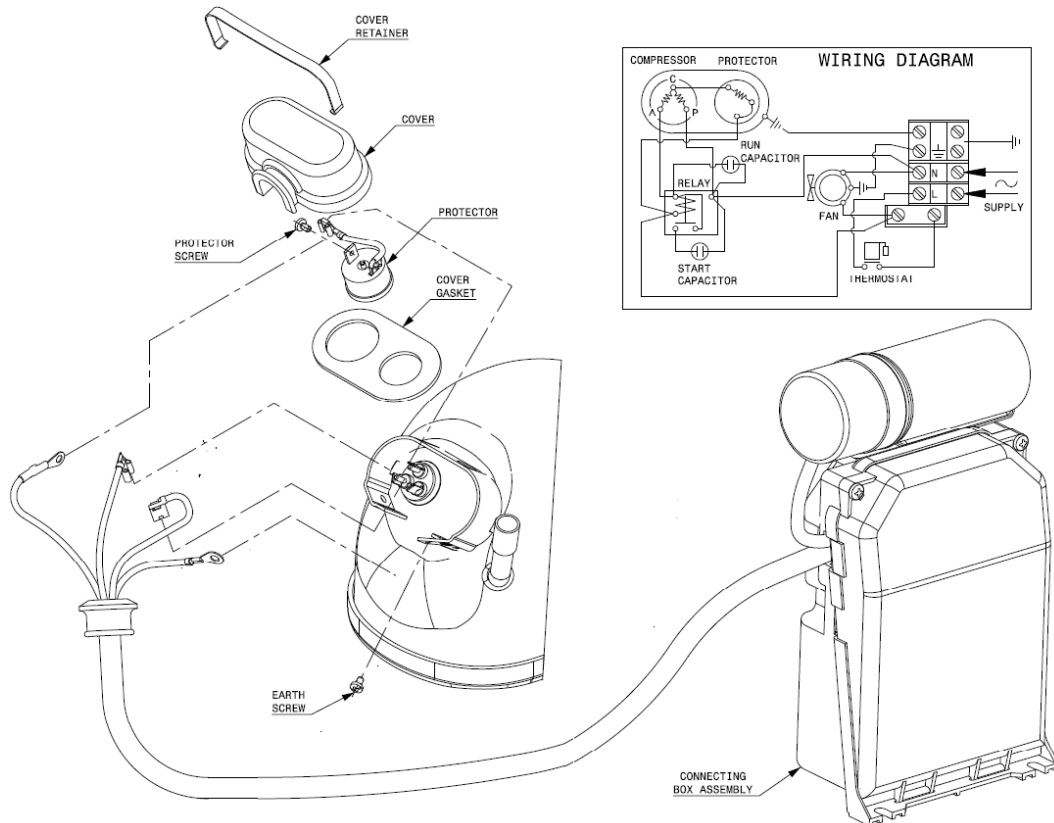


DESIGNATION INTERNAL DIAM.

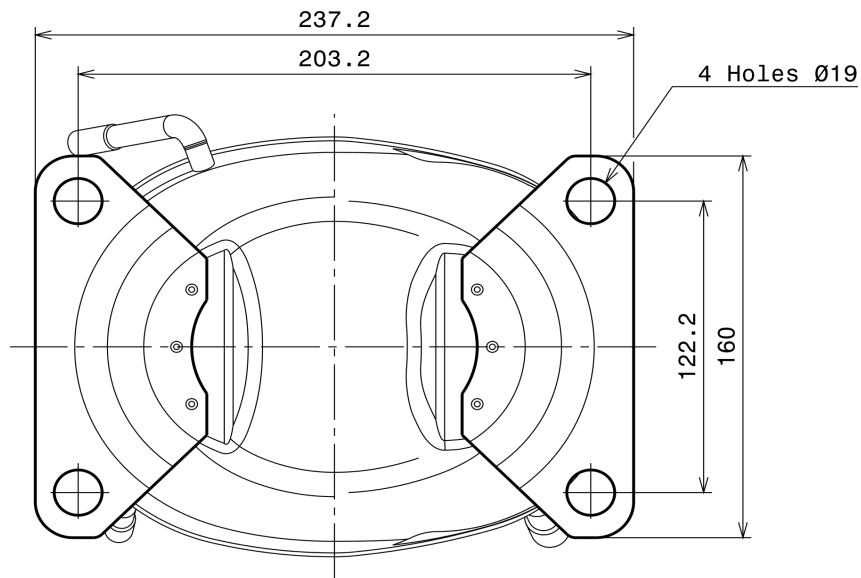
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (NS Range)



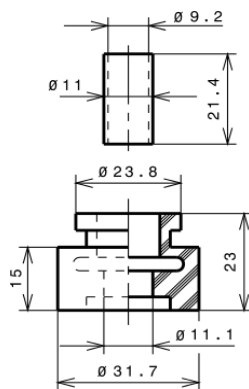
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A HBP

