

# Technical Data Sheet

Compressor model **MS34T3\_T**  
 Voltage **400/440V 50/60Hz ~3**  
 Refrigerant **R404A**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	34,42 cm <sup>3</sup>	Nominal Power	1 5/8 hp
Refrigerant	R404A	Diameter	42,86 mm	Voltage/Frequency	400V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	23,85 mm	Voltage range	340-440 V
Expansion	Capillar/Valve	Net Weight	22,80 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 <sup>3</sup>	Locked Rotor Amps (LRA)	20,00 A
				Max. Cont. Current (MCC)	6,40 A
				Main W. resist. at 25°C	7,40 Ω
				Start W. resist. at 25°C	10,10 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	4.550 kCal/h	4.205 W
COP	2,20 W/W	1,79 W/W
EER	1,89 kCal/Wh	1,55 kCal/Wh
Input Power	2.405 W	2.345 W
Current	4,60 A	4,50 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	400 V 50 Hz	400 V 50 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	1.150	895	2,40	1,49	1,28
40	-20	1.721	1.072	2,63	1,87	1,61
40	-15	2.349	1.243	2,85	2,20	1,89
40	-10	3.034	1.409	3,08	2,50	2,15
40	-5	3.776	1.570	3,31	2,80	2,41
40	0	4.575	1.725	3,53	3,08	2,65
40	5	5.430	1.876	3,76	3,37	2,90
40	7,2	5.825	1.940	3,86	3,49	3,00
40	10	6.343	2.020	3,98	3,65	3,14

45	-25	1.100	985	2,52	1,30	1,12
45	-20	1.613	1.172	2,76	1,60	1,38
45	-15	2.183	1.353	3,00	1,88	1,61
45	-10	2.809	1.529	3,25	2,14	1,84
45	-5	3.493	1.700	3,50	2,39	2,05
45	0	4.234	1.866	3,74	2,64	2,27
45	5	5.031	2.026	3,99	2,89	2,48
45	7,2	5.400	2.095	4,10	3,00	2,58
45	10	5.885	2.181	4,23	3,14	2,70

50	-25	1.050	1.075	2,63	1,14	0,98
50	-20	1.505	1.272	2,89	1,38	1,18
50	-15	2.016	1.463	3,16	1,60	1,38
50	-10	2.585	1.650	3,42	1,82	1,57
50	-5	3.210	1.831	3,69	2,04	1,75
50	0	3.892	2.006	3,96	2,26	1,94
50	5	4.632	2.177	4,23	2,47	2,13
50	7,2	4.975	2.250	4,35	2,57	2,21
50	10	5.428	2.342	4,50	2,70	2,32

55	-25	1.000	1.165	2,75	1,00	0,86
55	-20	1.396	1.372	3,03	1,18	1,02
55	-15	1.850	1.574	3,31	1,37	1,18
55	-10	2.360	1.770	3,60	1,55	1,33
55	-5	2.927	1.961	3,89	1,74	1,49
55	0	3.551	2.147	4,18	1,92	1,65
55	5	4.232	2.327	4,47	2,12	1,82
55	7,2	4.550	2.405	4,60	2,20	1,89
55	10	4.970	2.502	4,76	2,31	1,99

60	-25	950	1.255	2,87	0,88	0,76
60	-20	1.288	1.472	3,17	1,02	0,88
60	-15	1.683	1.684	3,47	1,16	1,00
60	-10	2.135	1.890	3,78	1,31	1,13
60	-5	2.644	2.091	4,09	1,47	1,26
60	0	3.210	2.287	4,41	1,63	1,40
60	5	3.833	2.478	4,72	1,80	1,55
60	7,2	4.125	2.560	4,86	1,87	1,61
60	10	4.513	2.663	5,04	1,97	1,69

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	1.208	900	2,41	1,34	1,16
40	-20	1.816	1.078	2,64	1,69	1,46
40	-15	2.479	1.250	2,86	1,98	1,71
40	-10	3.197	1.418	3,09	2,25	1,95
40	-5	3.969	1.580	3,32	2,51	2,17
40	0	4.797	1.737	3,55	2,76	2,39
40	5	5.678	1.890	3,78	3,01	2,60
40	7,2	6.084	1.955	3,88	3,11	2,69
40	10	6.615	2.037	4,01	3,25	2,81

45	-25	1.139	991	2,52	1,15	0,99
45	-20	1.677	1.178	2,77	1,42	1,23
45	-15	2.270	1.361	3,01	1,67	1,44
45	-10	2.917	1.539	3,26	1,90	1,64
45	-5	3.619	1.711	3,51	2,11	1,83
45	0	4.376	1.879	3,76	2,33	2,01
45	5	5.187	2.041	4,01	2,54	2,20
45	7,2	5.562	2.111	4,12	2,63	2,28
45	10	6.053	2.199	4,26	2,75	2,38

50	-25	1.070	1.081	2,64	0,99	0,86
50	-20	1.538	1.279	2,90	1,20	1,04
50	-15	2.060	1.472	3,17	1,40	1,21
50	-10	2.637	1.660	3,44	1,59	1,37
50	-5	3.269	1.843	3,71	1,77	1,53
50	0	3.955	2.020	3,98	1,96	1,69
50	5	4.696	2.193	4,25	2,14	1,85
50	7,2	5.039	2.267	4,37	2,22	1,92
50	10	5.492	2.360	4,53	2,33	2,01

55	-25	1.002	1.172	2,76	0,86	0,74
55	-20	1.399	1.380	3,04	1,01	0,88
55	-15	1.850	1.583	3,33	1,17	1,01
55	-10	2.357	1.781	3,62	1,32	1,14
55	-5	2.918	1.974	3,91	1,48	1,28
55	0	3.534	2.162	4,20	1,63	1,41
55	5	4.205	2.345	4,50	1,79	1,55
55	7,2	4.517	2.423	4,63	1,86	1,61
55	10	4.930	2.522	4,80	1,95	1,69

60	-25	933	1.262	2,88	0,74	0,64
60	-20	1.260	1.481	3,18	0,85	0,74
60	-15	1.641	1.694	3,49	0,97	0,84
60	-10	2.077	1.902	3,80	1,09	0,94
60	-5	2.568	2.105	4,11	1,22	1,05
60	0	3.113	2.303	4,43	1,35	1,17
60	5	3.713	2.496	4,75	1,49	1,29
60	7,2	3.995	2.580	4,89	1,55	1,34
60	10	4.368	2.684	5,07	1,63	1,41

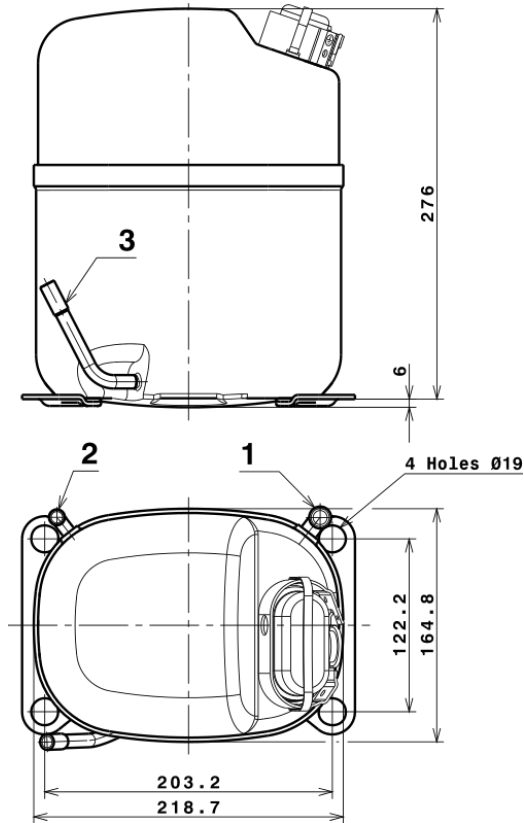
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	8.175,6637182683	621,1868047576	1,7420469034	94,430209825679
2	282,8128334190	15,6333436289	0,0137369364	3,8524602038697
3	-87,6896021455	29,2299770298	0,0466884256	-0,38131492241815
4	1,0347743591	-0,0802503598	0,0001052150	0,031000295025718
5	-2,9251034425	0,4278182116	0,0008991593	-0,016690588931804

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

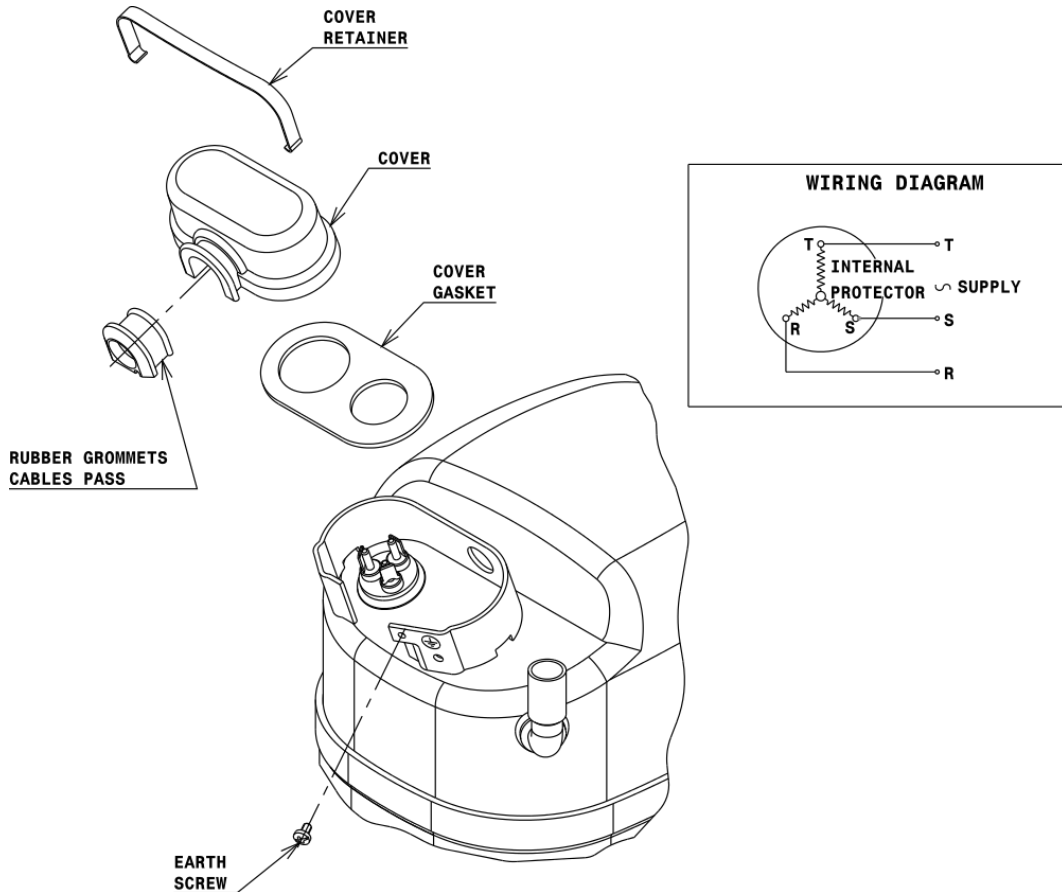
## COMPRESSOR DIMENSIONS



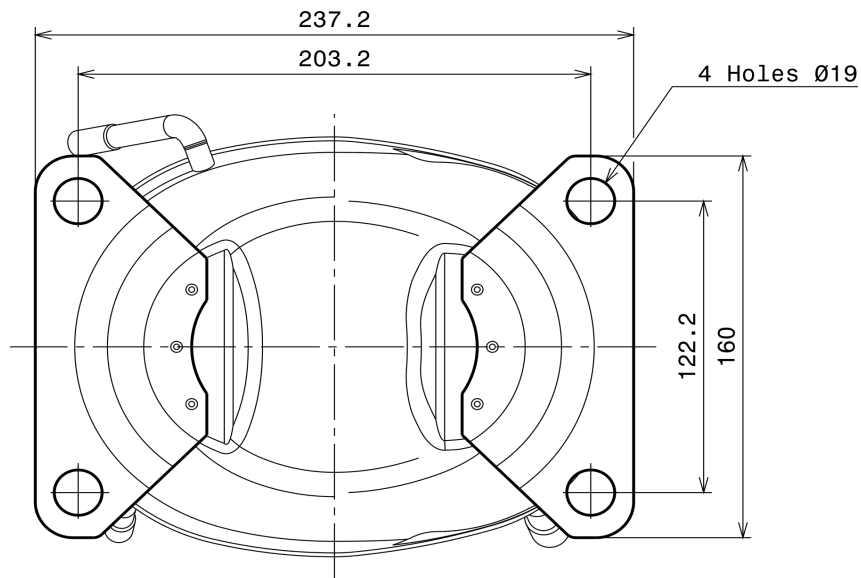
	DESIGNATION	INTERNAL DIAM.
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### 3PH CONNECTION (S range)



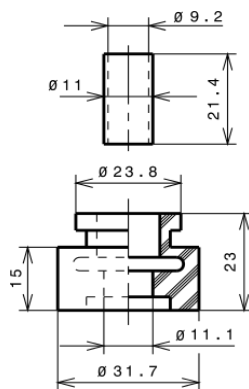
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

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



## SOA

SOA R404A HMBP

