

# Technical Data Sheet

Compressor model **MS34F3\_V**  
 Voltage **400/440V 50/60Hz ~3**  
 Refrigerant **R404A**

APPLICATION		COMPRESSOR		MOTOR	
Application	Low Back Pressure	Displacement	34,42 cm <sup>3</sup>	Nominal Power	1 hp
Refrigerant	R404A	Diameter	42,86 mm	Voltage/Frequency	400V 50Hz
Evaporating Temp.	-40,0 °C to -10,0 °C	Stroke	23,85 mm	Voltage range	340-440 V
Expansion	Capillar/Valve	Net Weight	22,90 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)	15,70 A
				Max. Cont. Current (MCC)	3,60 A
				Main W. resist. at 25°C	10,18 Ω
				Start W. resist. at 25°C	14,03 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.400 kCal/h	1.085 W
COP	1,40 W/W	0,99 W/W
EER	1,21 kCal/Wh	0,86 kCal/Wh
Input Power	1.160 W	1.094 W
Current	2,40 A	2,31 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °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	-40	520	585	1,74	1,03	0,89
40	-35	831	736	1,90	1,31	1,13
40	-30	1.192	893	2,07	1,55	1,33
40	-25	1.605	1.056	2,27	1,77	1,52
40	-23,3	1.757	1.113	2,34	1,84	1,58
40	-20	2.069	1.225	2,49	1,96	1,69
40	-15	2.584	1.400	2,73	2,15	1,85
40	-10	3.150	1.580	3,01	2,32	1,99

45	-40	440	570	1,73	0,90	0,77
45	-35	739	731	1,89	1,18	1,01
45	-30	1.089	897	2,07	1,41	1,21
45	-25	1.490	1.069	2,28	1,62	1,39
45	-23,3	1.638	1.129	2,36	1,69	1,45
45	-20	1.942	1.247	2,52	1,81	1,56
45	-15	2.446	1.431	2,78	1,99	1,71
45	-10	3.000	1.620	3,07	2,15	1,85

50	-40	360	555	1,71	0,75	0,65
50	-35	647	725	1,88	1,04	0,89
50	-30	985	900	2,08	1,27	1,09
50	-25	1.375	1.081	2,30	1,48	1,27
50	-23,3	1.519	1.144	2,38	1,54	1,33
50	-20	1.815	1.268	2,55	1,66	1,43
50	-15	2.307	1.461	2,82	1,84	1,58
50	-10	2.850	1.660	3,13	2,00	1,72

55	-40	280	540	1,70	0,60	0,52
55	-35	556	719	1,88	0,90	0,77
55	-30	882	903	2,08	1,14	0,98
55	-25	1.260	1.094	2,31	1,34	1,15
55	-23,3	1.400	1.160	2,40	1,40	1,21
55	-20	1.689	1.290	2,58	1,52	1,31
55	-15	2.169	1.492	2,87	1,69	1,45
55	-10	2.700	1.700	3,20	1,85	1,59

60	-40	200	525	1,69	0,44	0,38
60	-35	464	713	1,87	0,76	0,65
60	-30	779	907	2,09	1,00	0,86
60	-25	1.145	1.106	2,33	1,20	1,03
60	-23,3	1.281	1.176	2,42	1,27	1,09
60	-20	1.562	1.312	2,61	1,38	1,19
60	-15	2.031	1.523	2,92	1,55	1,33
60	-10	2.550	1.740	3,27	1,70	1,47

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	540	585	1,74	0,92	0,80
40	-35	899	736	1,90	1,22	1,05
40	-30	1.300	893	2,07	1,46	1,26
40	-25	1.744	1.056	2,27	1,65	1,43
40	-23,3	1.904	1.113	2,34	1,71	1,48
40	-20	2.230	1.225	2,49	1,82	1,57
40	-15	2.759	1.400	2,73	1,97	1,70
40	-10	3.330	1.580	3,01	2,11	1,82

45	-40	441	570	1,73	0,77	0,67
45	-35	759	731	1,89	1,04	0,90
45	-30	1.121	897	2,07	1,25	1,08
45	-25	1.524	1.069	2,28	1,43	1,23
45	-23,3	1.671	1.129	2,36	1,48	1,28
45	-20	1.970	1.247	2,52	1,58	1,37
45	-15	2.459	1.431	2,78	1,72	1,49
45	-10	2.990	1.620	3,07	1,85	1,59

50	-40	341	555	1,71	0,62	0,53
50	-35	620	725	1,88	0,86	0,74
50	-30	941	900	2,08	1,05	0,90
50	-25	1.305	1.081	2,30	1,21	1,04
50	-23,3	1.438	1.144	2,38	1,26	1,09
50	-20	1.711	1.268	2,55	1,35	1,17
50	-15	2.159	1.461	2,82	1,48	1,28
50	-10	2.650	1.660	3,13	1,60	1,38

55	-40	242	540	1,70	0,45	0,39
55	-35	481	719	1,88	0,67	0,58
55	-30	762	903	2,08	0,84	0,73
55	-25	1.085	1.094	2,31	0,99	0,86
55	-23,3	1.205	1.160	2,40	1,04	0,90
55	-20	1.451	1.290	2,58	1,12	0,97
55	-15	1.860	1.492	2,87	1,25	1,08
55	-10	2.311	1.700	3,20	1,36	1,17

60	-40	143	525	1,69	0,27	0,23
60	-35	341	713	1,87	0,48	0,41
60	-30	582	907	2,09	0,64	0,55
60	-25	866	1.106	2,33	0,78	0,68
60	-23,3	972	1.176	2,42	0,83	0,71
60	-20	1.192	1.312	2,61	0,91	0,78
60	-15	1.560	1.523	2,92	1,02	0,88
60	-10	1.971	1.740	3,27	1,13	0,98

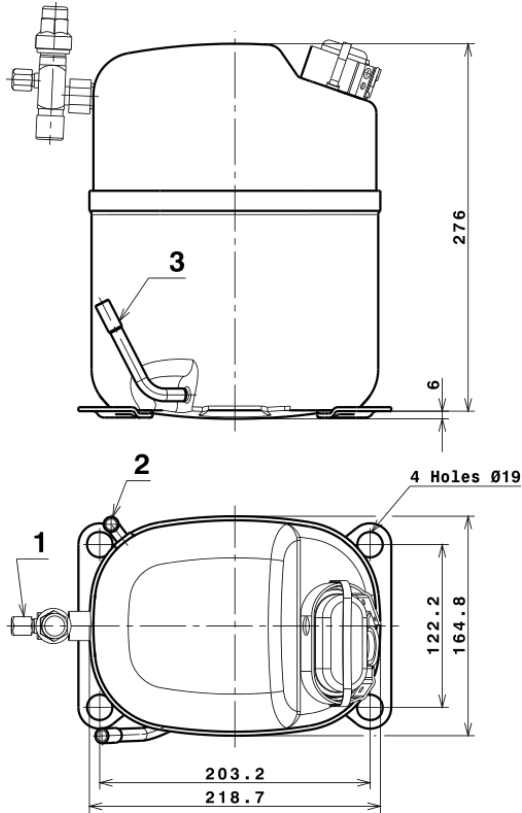
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	7.861,8677329691	1.536,2670538409	3,0118238288	170,56745256564
2	196,2330980202	25,5285545245	0,0546178438	4,7658916367332
3	-85,3332911288	11,9751509228	0,0190325504	-1,0261018992897
4	0,8035045463	0,1284278469	0,0006535131	0,032722340264668
5	-1,6477686049	0,3760393505	0,0005491961	-0,014504446980782

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

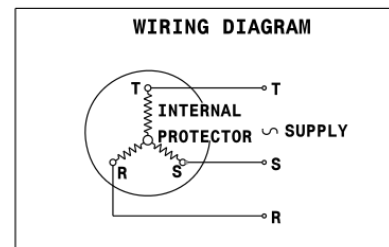
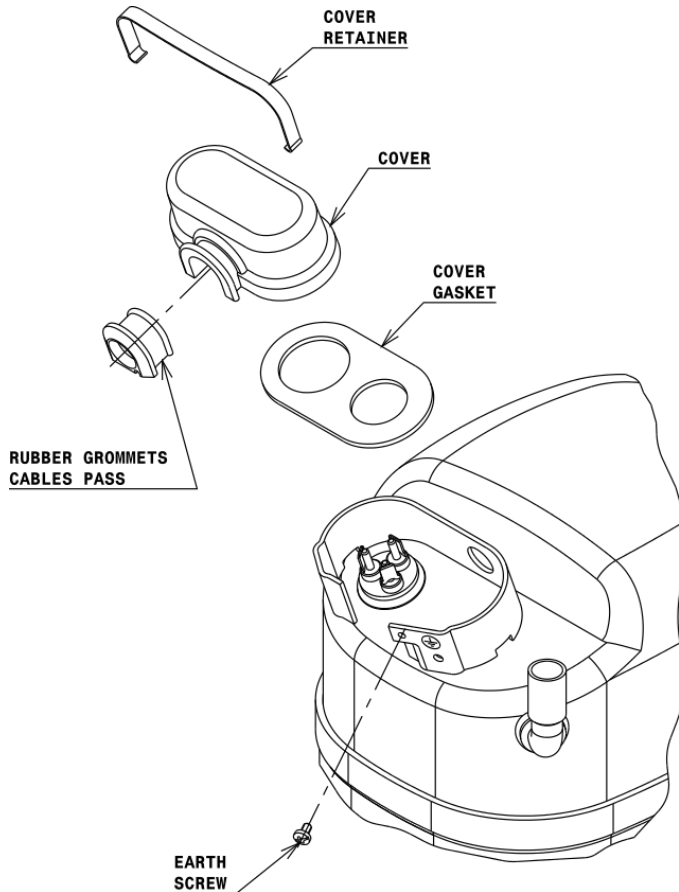
## COMPRESSOR DIMENSIONS



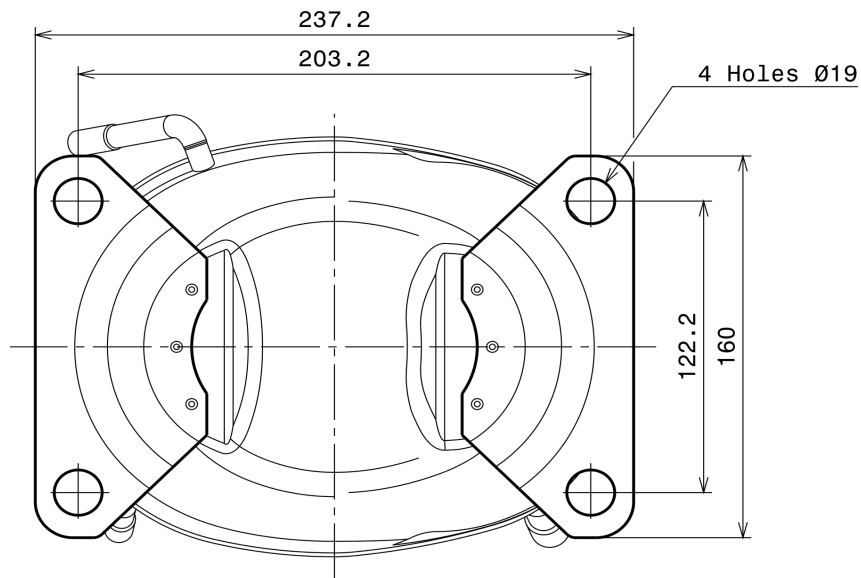
	DESIGNATION	INTERNAL DIAM.
1	Service Valve	5/8" SAE
2	Service	9,7 mm
3	Discharge	8,0 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### 3PH CONNECTION (S range)



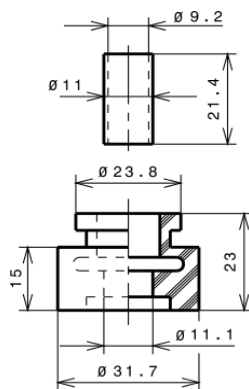
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø19 holes (203.2x122.2 net)



## SOA

SOA R404A LBP

