

Technical Data Sheet

Compressor model **MS30F3_T**
 Voltage **400/440V 50/60Hz ~3**
 Refrigerant **R404A**

APPLICATION

Application Low Back Pressure
 Refrigerant R404A
 Evaporating Temp. -40,0 °C to -10,0 °C
 Expansion Capillar/Valve
 Comp. Cooling Fan cooled
 Max. ambient temp. 43,0 °C

COMPRESSOR

Displacement 29,95 cm³
 Diameter 39,98 mm
 Stroke 23,85 mm
 Net Weight 24,00 Kg
 Oil type ISO VG 46 ESTER
 Oil charge 887 cm³

MOTOR

Nominal Power 7/8 hp
 Voltage/Frequency 400V 50Hz
 Voltage range 340-440 V
 Type 3PHASE
 Phase number 3 PH
 Locked Rotor Amps (LRA) 15,70 A
 Max. Cont. Current (MCC) 3,60 A
 Main W. resist. at 25°C 10,50 Ω
 Start W. resist. at 25°C 14,70 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.200 kCal/h	931 W
COP	1,32 W/W	0,93 W/W
EER	1,13 kCal/Wh	0,80 kCal/Wh
Input Power	1.060 W	1.000 W
Current	2,40 A	2,33 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	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	450	563	1,82	0,93	0,80
40	-35	728	711	2,00	1,19	1,02
40	-30	1.049	859	2,17	1,42	1,22
40	-25	1.411	1.007	2,34	1,63	1,40
40	-23,3	1.544	1.057	2,40	1,70	1,46
40	-20	1.815	1.154	2,50	1,83	1,57
40	-15	2.262	1.301	2,66	2,02	1,74
40	-10	2.750	1.448	2,82	2,21	1,90

45	-40	380	530	1,78	0,83	0,72
45	-35	645	689	1,97	1,09	0,94
45	-30	952	847	2,16	1,31	1,12
45	-25	1.301	1.005	2,34	1,51	1,29
45	-23,3	1.429	1.058	2,40	1,57	1,35
45	-20	1.692	1.162	2,51	1,69	1,46
45	-15	2.125	1.319	2,68	1,87	1,61
45	-10	2.600	1.475	2,84	2,05	1,76

50	-40	310	498	1,74	0,72	0,62
50	-35	562	666	1,95	0,98	0,84
50	-30	855	834	2,14	1,19	1,02
50	-25	1.191	1.002	2,34	1,38	1,19
50	-23,3	1.315	1.059	2,40	1,44	1,24
50	-20	1.569	1.169	2,52	1,56	1,34
50	-15	1.988	1.336	2,70	1,73	1,49
50	-10	2.450	1.503	2,87	1,90	1,63

55	-40	240	465	1,70	0,60	0,52
55	-35	478	644	1,92	0,86	0,74
55	-30	759	822	2,13	1,07	0,92
55	-25	1.081	1.000	2,33	1,26	1,08
55	-23,3	1.200	1.060	2,40	1,32	1,13
55	-20	1.445	1.177	2,53	1,43	1,23
55	-15	1.852	1.354	2,72	1,59	1,37
55	-10	2.300	1.530	2,90	1,75	1,50

60	-40	170	433	1,66	0,46	0,39
60	-35	395	621	1,89	0,74	0,64
60	-30	662	809	2,11	0,95	0,82
60	-25	971	997	2,33	1,13	0,97
60	-23,3	1.085	1.061	2,40	1,19	1,02
60	-20	1.322	1.184	2,54	1,30	1,12
60	-15	1.715	1.371	2,74	1,45	1,25
60	-10	2.150	1.558	2,93	1,61	1,38

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	467	563	1,82	0,83	0,72
40	-35	786	711	2,00	1,11	0,95
40	-30	1.140	859	2,17	1,33	1,15
40	-25	1.528	1.007	2,34	1,52	1,31
40	-23,3	1.668	1.057	2,40	1,58	1,36
40	-20	1.952	1.154	2,50	1,69	1,46
40	-15	2.410	1.301	2,66	1,85	1,60
40	-10	2.903	1.448	2,82	2,01	1,73

45	-40	381	530	1,78	0,72	0,62
45	-35	662	689	1,97	0,96	0,83
45	-30	978	847	2,16	1,15	1,00
45	-25	1.329	1.005	2,34	1,32	1,14
45	-23,3	1.456	1.058	2,40	1,38	1,19
45	-20	1.715	1.162	2,51	1,48	1,28
45	-15	2.136	1.319	2,68	1,62	1,40
45	-10	2.591	1.475	2,84	1,76	1,52

50	-40	294	498	1,74	0,59	0,51
50	-35	538	666	1,95	0,81	0,70
50	-30	817	834	2,14	0,98	0,85
50	-25	1.130	1.002	2,34	1,13	0,97
50	-23,3	1.245	1.059	2,40	1,18	1,02
50	-20	1.479	1.169	2,52	1,26	1,09
50	-15	1.862	1.336	2,70	1,39	1,20
50	-10	2.280	1.503	2,87	1,52	1,31

55	-40	207	465	1,70	0,45	0,39
55	-35	414	644	1,92	0,64	0,56
55	-30	655	822	2,13	0,80	0,69
55	-25	931	1.000	2,33	0,93	0,80
55	-23,3	1.033	1.060	2,40	0,97	0,84
55	-20	1.242	1.177	2,53	1,06	0,91
55	-15	1.588	1.354	2,72	1,17	1,01
55	-10	1.968	1.530	2,90	1,29	1,11

60	-40	121	433	1,66	0,28	0,24
60	-35	290	621	1,89	0,47	0,40
60	-30	494	809	2,11	0,61	0,53
60	-25	732	997	2,33	0,73	0,63
60	-23,3	821	1.061	2,40	0,77	0,67
60	-20	1.005	1.184	2,54	0,85	0,73
60	-15	1.314	1.371	2,74	0,96	0,83
60	-10	1.657	1.558	2,93	1,06	0,92

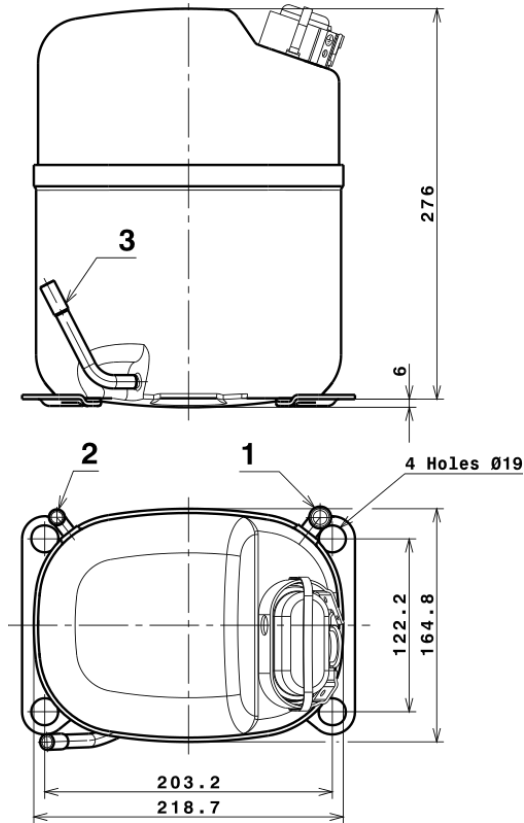
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	6.992,9163821283	1.399,9538772665	2,7254215562	154,15389679949
2	173,0122855149	13,9399141484	0,0083886110	4,2317428503136
3	-78,2568873576	9,7448332034	0,0103405167	-1,041584863498
4	0,6596398129	-0,0010289450	-0,0001422470	0,027017066720032
5	-1,5333394173	0,4097187479	0,0004628460	-0,016285714816439

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

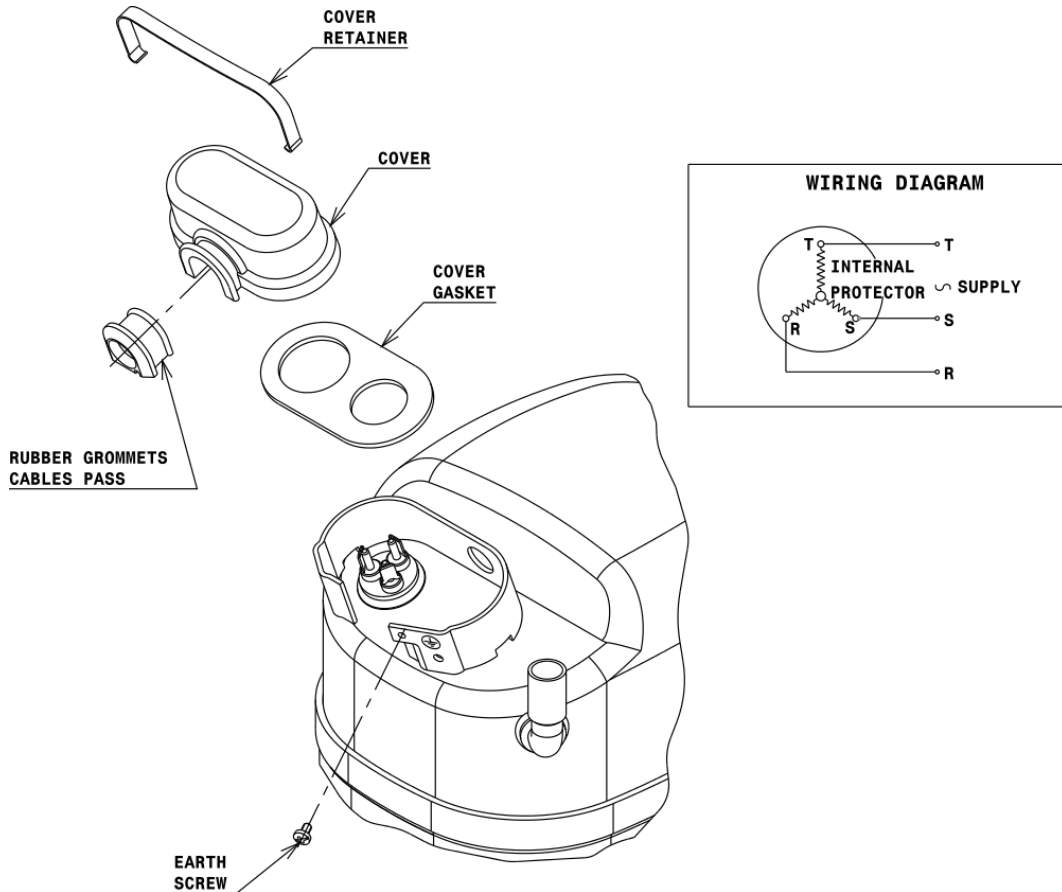
COMPRESSOR DIMENSIONS



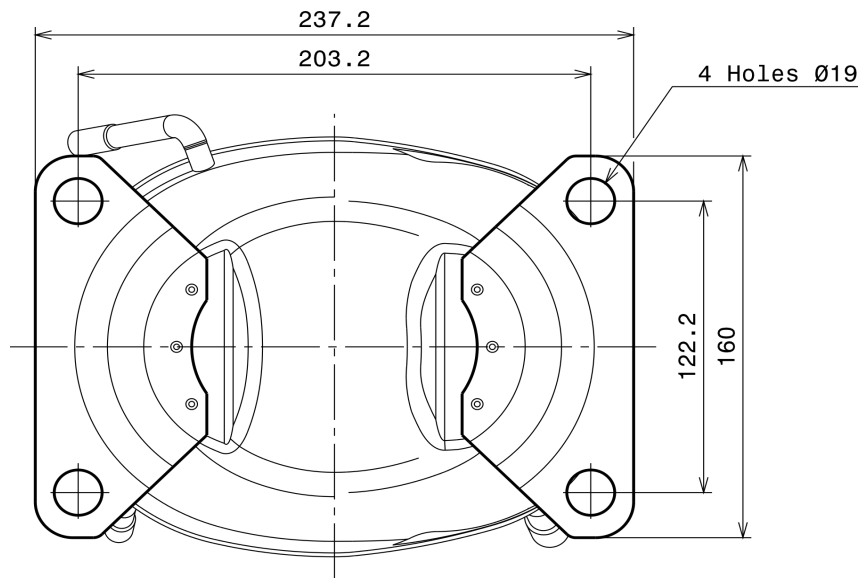
	DESIGNATION	INTERNAL DIAM.
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

3PH CONNECTION (S range)



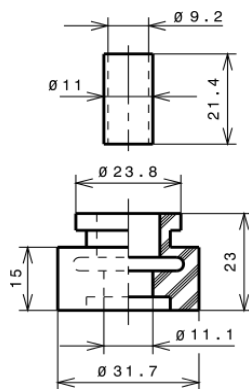
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A LBP

