

Technical Data Sheet

Compressor model **MS34F3_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 34,42 cm³
 Diameter 42,86 mm
 Stroke 23,85 mm
 Net Weight 22,45 Kg
 Oil type ISO VG 46 ESTER
 Oil charge 700 cm³

MOTOR

Nominal Power 1 hp
 Voltage/Frequency 440V 60Hz
 Voltage range 374-484 V
 Type 3PHASE
 Phase number 3 PH
 Locked Rotor Amps (LRA) 14,40 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	1.630 kCal/h	1.263 W
COP	1,35 W/W	0,96 W/W
EER	1,16 kCal/Wh	0,83 kCal/Wh
Input Power	1.400 W	1.322 W
Current	2,40 A	2,30 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	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	-40	590	690	1,61	0,99	0,86
40	-35	955	870	1,79	1,28	1,10
40	-30	1.379	1.059	1,99	1,52	1,30
40	-25	1.864	1.255	2,22	1,73	1,49
40	-23,3	2.042	1.323	2,30	1,79	1,54
40	-20	2.408	1.459	2,47	1,92	1,65
40	-15	3.011	1.670	2,76	2,10	1,80
40	-10	3.675	1.890	3,07	2,26	1,94

45	-40	500	685	1,61	0,85	0,73
45	-35	851	875	1,80	1,13	0,97
45	-30	1.261	1.072	2,01	1,37	1,18
45	-25	1.731	1.277	2,25	1,58	1,36
45	-23,3	1.905	1.349	2,34	1,64	1,41
45	-20	2.261	1.490	2,52	1,76	1,52
45	-15	2.851	1.711	2,81	1,94	1,67
45	-10	3.500	1.940	3,15	2,10	1,80

50	-40	410	680	1,60	0,70	0,60
50	-35	746	879	1,80	0,99	0,85
50	-30	1.143	1.085	2,02	1,22	1,05
50	-25	1.599	1.300	2,28	1,43	1,23
50	-23,3	1.767	1.374	2,37	1,50	1,29
50	-20	2.114	1.522	2,56	1,62	1,39
50	-15	2.690	1.752	2,87	1,79	1,54
50	-10	3.325	1.990	3,22	1,94	1,67

55	-40	320	675	1,60	0,55	0,47
55	-35	642	883	1,81	0,85	0,73
55	-30	1.024	1.099	2,04	1,08	0,93
55	-25	1.466	1.322	2,30	1,29	1,11
55	-23,3	1.630	1.400	2,40	1,35	1,16
55	-20	1.968	1.554	2,60	1,47	1,27
55	-15	2.529	1.793	2,93	1,64	1,41
55	-10	3.150	2.040	3,30	1,80	1,54

60	-40	230	670	1,60	0,40	0,34
60	-35	538	887	1,81	0,71	0,61
60	-30	906	1.112	2,05	0,95	0,81
60	-25	1.334	1.345	2,33	1,15	0,99
60	-23,3	1.493	1.426	2,43	1,22	1,05
60	-20	1.821	1.585	2,64	1,34	1,15
60	-15	2.368	1.834	2,99	1,50	1,29
60	-10	2.975	2.090	3,38	1,66	1,42

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	613	690	1,61	0,89	0,77
40	-35	1.034	870	1,79	1,19	1,03
40	-30	1.505	1.059	1,99	1,42	1,23
40	-25	2.026	1.255	2,22	1,61	1,39
40	-23,3	2.214	1.323	2,30	1,67	1,45
40	-20	2.596	1.459	2,47	1,78	1,54
40	-15	3.215	1.670	2,76	1,92	1,66
40	-10	3.885	1.890	3,07	2,06	1,78

45	-40	501	685	1,61	0,73	0,63
45	-35	875	875	1,80	1,00	0,86
45	-30	1.298	1.072	2,01	1,21	1,05
45	-25	1.771	1.277	2,25	1,39	1,20
45	-23,3	1.944	1.349	2,34	1,44	1,25
45	-20	2.294	1.490	2,52	1,54	1,33
45	-15	2.866	1.711	2,81	1,68	1,45
45	-10	3.488	1.940	3,15	1,80	1,55

50	-40	389	680	1,60	0,57	0,49
50	-35	715	879	1,80	0,81	0,70
50	-30	1.091	1.085	2,02	1,01	0,87
50	-25	1.517	1.300	2,28	1,17	1,01
50	-23,3	1.673	1.374	2,37	1,22	1,05
50	-20	1.993	1.522	2,56	1,31	1,13
50	-15	2.517	1.752	2,87	1,44	1,24
50	-10	3.092	1.990	3,22	1,55	1,34

55	-40	277	675	1,60	0,41	0,35
55	-35	556	883	1,81	0,63	0,54
55	-30	885	1.099	2,04	0,81	0,70
55	-25	1.263	1.322	2,30	0,96	0,83
55	-23,3	1.403	1.400	2,40	1,00	0,87
55	-20	1.691	1.554	2,60	1,09	0,94
55	-15	2.169	1.793	2,93	1,21	1,05
55	-10	2.696	2.040	3,30	1,32	1,14

60	-40	165	670	1,60	0,25	0,21
60	-35	396	887	1,81	0,45	0,39
60	-30	678	1.112	2,05	0,61	0,53
60	-25	1.009	1.345	2,33	0,75	0,65
60	-23,3	1.133	1.426	2,43	0,79	0,69
60	-20	1.389	1.585	2,64	0,88	0,76
60	-15	1.820	1.834	2,99	0,99	0,86
60	-10	2.299	2.090	3,38	1,10	0,95

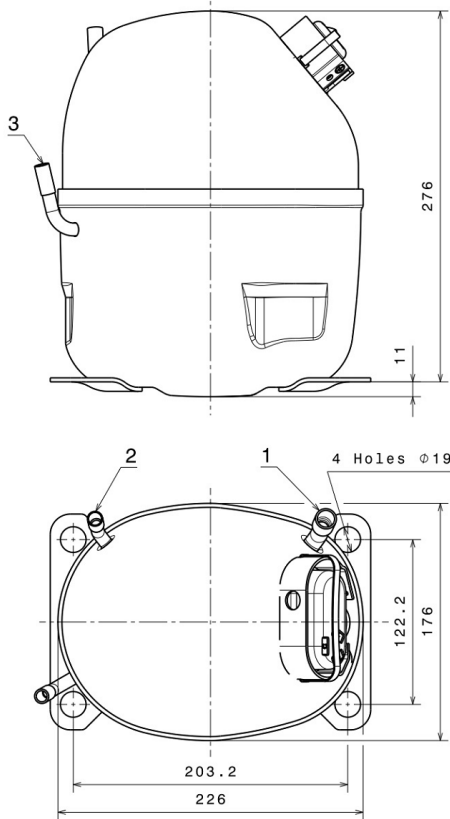
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	9.188,0664514520	1.860,2026974754	3,0744028281	199,41866027349
2	230,5407423103	34,7435525928	0,0635023073	5,6030758339481
3	-99,8014579464	14,0319760404	0,0215421017	-1,2033031894352
4	0,9387604694	0,1723139750	0,0007083243	0,038229966615624
5	-1,9469918686	0,3763529268	0,0005628672	-0,017540285503971

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

COMPRESSOR DIMENSIONS

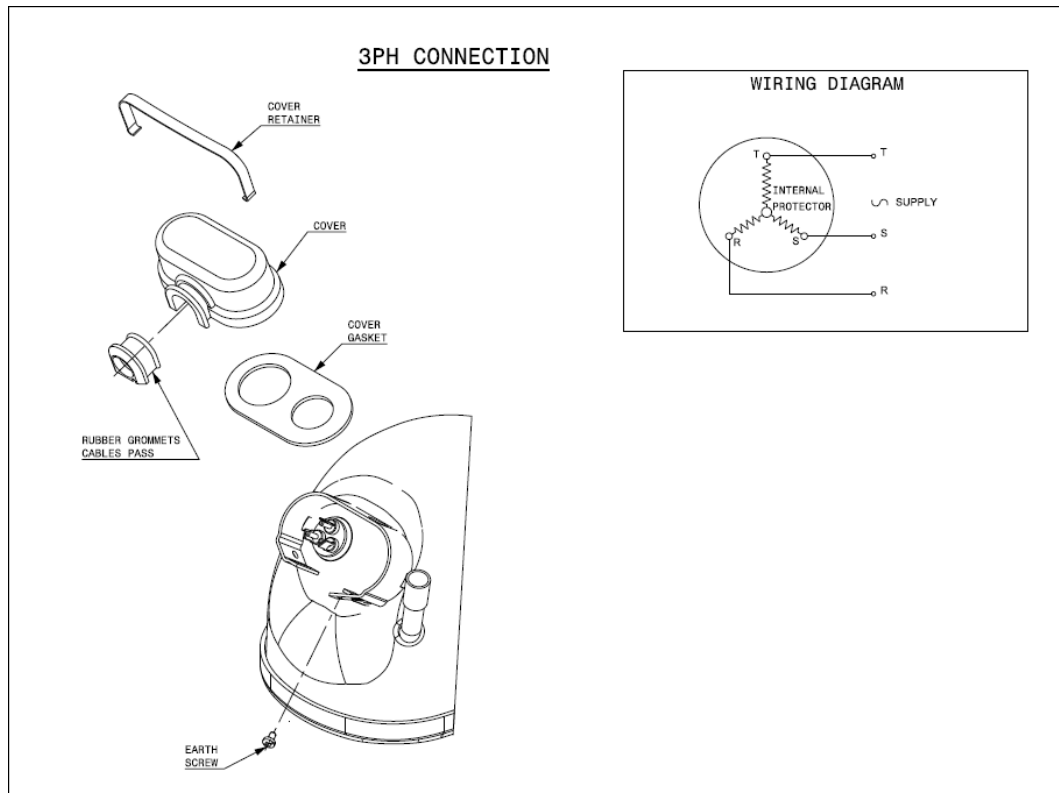


DESIGNATION INTERNAL DIAM.

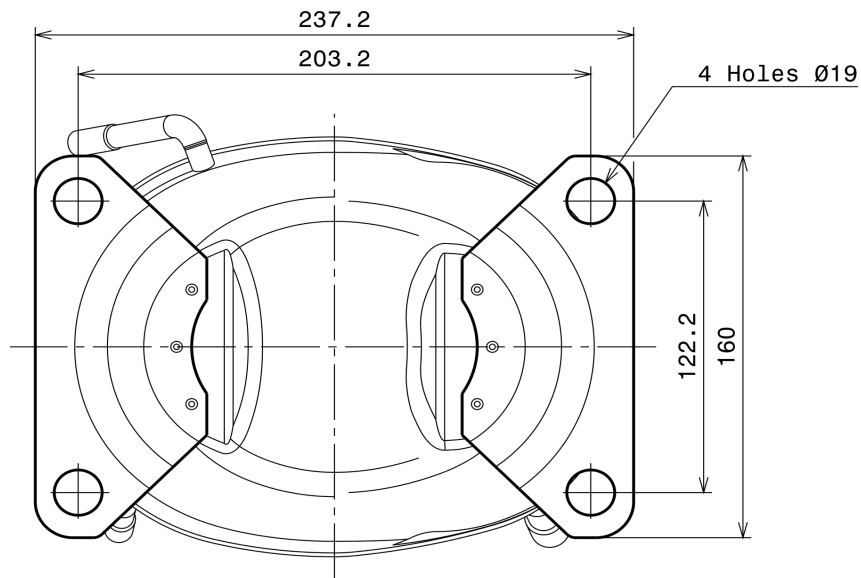
1	Suction	12,7 mm
2	Service	9,7 mm
3	Discharge	8,0 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

3PH CONNECTION (NS Range)



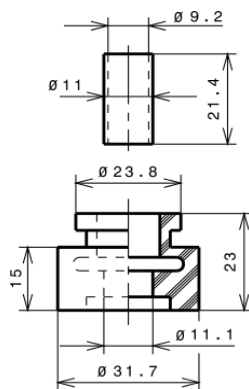
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A LBP

