

Technical Data Sheet

Compressor model **MS34FB_T**
Voltage **220-240V 50Hz ~1**
Refrigerant **R404A**
Compressor status

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	21,68 Kg
Oil type	ISO VG 46 ESTER
Oil charge	887 cm³
HP	1 hp

MOTOR

Voltage/Frequency	220-240V 50Hz
Voltage range	198-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	39,00 A
Max. Cont. Current (MCC)	10,00 A
Main W. resist. at 25°C	1,53 Ω
Start W. resist. at 25°C	4,79 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.397 kCal/h	1.083 W
COP	1,35 W/W	0,95 W/W
EER	1,16 kCal/Wh	0,82 kCal/Wh
Input Power	1.204 W	1.139 W
Current	6,39 A	6,12 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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	88-108 µF 330 V			
Run capacitor	20 µF 420 V			
Relay	Option 1	Option 2		
Reference	3ARR3 10AA3	RVA 4M..		
Pick-Up	239-270 V	242-270 V		
Drop-Out	50-110 V	50-110 V		
Protector	Option 1	Option 2	Option 3	
Reference	MRT00AHK	T0534	T0257	
Current	22,00 A	20,00 A	24,00 A	
Time check	7,5-14 seg	7,5-14 seg	6,0-16 seg	
Disc temp. (Open/Close)	105,00 / 61,00 °C	105,00 / 52,00 °C	120,00 / 52,00 °C	

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	520	683	4,31	0,89	0,76
40	-35	829	816	4,82	1,18	1,02
40	-30	1.189	957	5,37	1,45	1,24
40	-25	1.602	1.105	5,98	1,69	1,45
40	-23,3	1.754	1.157	6,19	1,76	1,52
40	-20	2.066	1.261	6,63	1,91	1,64
40	-15	2.582	1.424	7,34	2,11	1,81
40	-10	3.150	1.595	8,11	2,30	1,97

45	-40	440	655	4,20	0,78	0,67
45	-35	737	801	4,76	1,07	0,92
45	-30	1.086	955	5,37	1,32	1,14
45	-25	1.487	1.116	6,02	1,55	1,33
45	-23,3	1.635	1.173	6,26	1,62	1,39
45	-20	1.939	1.285	6,73	1,76	1,51
45	-15	2.444	1.461	7,50	1,95	1,67
45	-10	3.000	1.645	8,34	2,12	1,82

50	-40	360	628	4,10	0,67	0,57
50	-35	645	787	4,70	0,95	0,82
50	-30	983	953	5,36	1,20	1,03
50	-25	1.372	1.127	6,07	1,42	1,22
50	-23,3	1.516	1.188	6,32	1,48	1,28
50	-20	1.813	1.309	6,84	1,61	1,38
50	-15	2.305	1.498	7,67	1,79	1,54
50	-10	2.850	1.695	8,57	1,96	1,68

55	-40	280	600	4,00	0,54	0,47
55	-35	554	772	4,65	0,83	0,72
55	-30	879	952	5,35	1,07	0,92
55	-25	1.257	1.139	6,12	1,28	1,10
55	-23,3	1.397	1.204	6,39	1,35	1,16
55	-20	1.686	1.333	6,94	1,47	1,26
55	-15	2.167	1.535	7,84	1,64	1,41
55	-10	2.700	1.745	8,80	1,80	1,55

60	-40	200	573	3,90	0,41	0,35
60	-35	462	757	4,59	0,71	0,61
60	-30	776	950	5,35	0,95	0,82
60	-25	1.142	1.150	6,16	1,15	0,99
60	-23,3	1.278	1.220	6,46	1,22	1,05
60	-20	1.559	1.357	7,05	1,34	1,15
60	-15	2.029	1.572	8,00	1,50	1,29
60	-10	2.550	1.795	9,04	1,65	1,42

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	540	682	4,31	0,79	0,68
40	-35	897	816	4,82	1,10	0,95
40	-30	1.298	957	5,37	1,36	1,17
40	-25	1.741	1.105	5,98	1,58	1,36
40	-23,3	1.902	1.157	6,19	1,64	1,42
40	-20	2.228	1.261	6,63	1,77	1,53
40	-15	2.757	1.424	7,34	1,94	1,67
40	-10	3.330	1.595	8,11	2,09	1,80

45	-40	441	655	4,20	0,67	0,58
45	-35	758	801	4,76	0,95	0,82
45	-30	1.118	955	5,37	1,17	1,01
45	-25	1.522	1.116	6,02	1,36	1,18
45	-23,3	1.669	1.173	6,26	1,42	1,23
45	-20	1.968	1.285	6,73	1,53	1,32
45	-15	2.458	1.461	7,50	1,68	1,45
45	-10	2.990	1.645	8,34	1,82	1,57

50	-40	341	628	4,10	0,54	0,47
50	-35	619	787	4,70	0,79	0,68
50	-30	939	953	5,36	0,98	0,85
50	-25	1.302	1.127	6,07	1,16	1,00
50	-23,3	1.436	1.188	6,32	1,21	1,04
50	-20	1.709	1.309	6,84	1,31	1,13
50	-15	2.158	1.498	7,67	1,44	1,24
50	-10	2.650	1.695	8,57	1,56	1,35

55	-40	242	600	4,00	0,40	0,35
55	-35	479	772	4,65	0,62	0,54
55	-30	759	952	5,35	0,80	0,69
55	-25	1.083	1.139	6,12	0,95	0,82
55	-23,3	1.202	1.204	6,39	1,00	0,86
55	-20	1.449	1.333	6,94	1,09	0,94
55	-15	1.858	1.535	7,84	1,21	1,05
55	-10	2.311	1.745	8,80	1,32	1,14

60	-40	143	573	3,90	0,25	0,22
60	-35	340	757	4,59	0,45	0,39
60	-30	580	950	5,35	0,61	0,53
60	-25	863	1.150	6,16	0,75	0,65
60	-23,3	969	1.220	6,46	0,79	0,69
60	-20	1.189	1.357	7,05	0,88	0,76
60	-15	1.559	1.572	8,00	0,99	0,86
60	-10	1.971	1.795	9,04	1,10	0,95

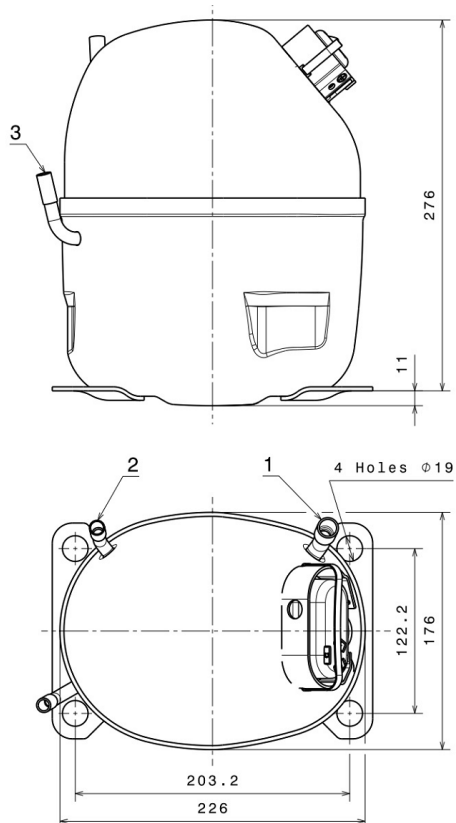
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	7.866,2830571158	1.394,1248074672	7,3121881026	170,71964994434
2	196,7850135386	18,3423680464	0,1074893733	4,7849163090711
3	-85,3332911288	15,5651875892	0,0711475323	-1,0261018992897
4	0,8145428566	0,1637826227	0,0013687272	0,033102833711425
5	-1,6477686049	0,5296740817	0,0023029708	-0,014504446980782

Equation

$$x_1 + x_2 Te + x_3 Tc + x_4 Te^2 + x_5 Te Tc$$

COMPRESSOR DIMENSIONS

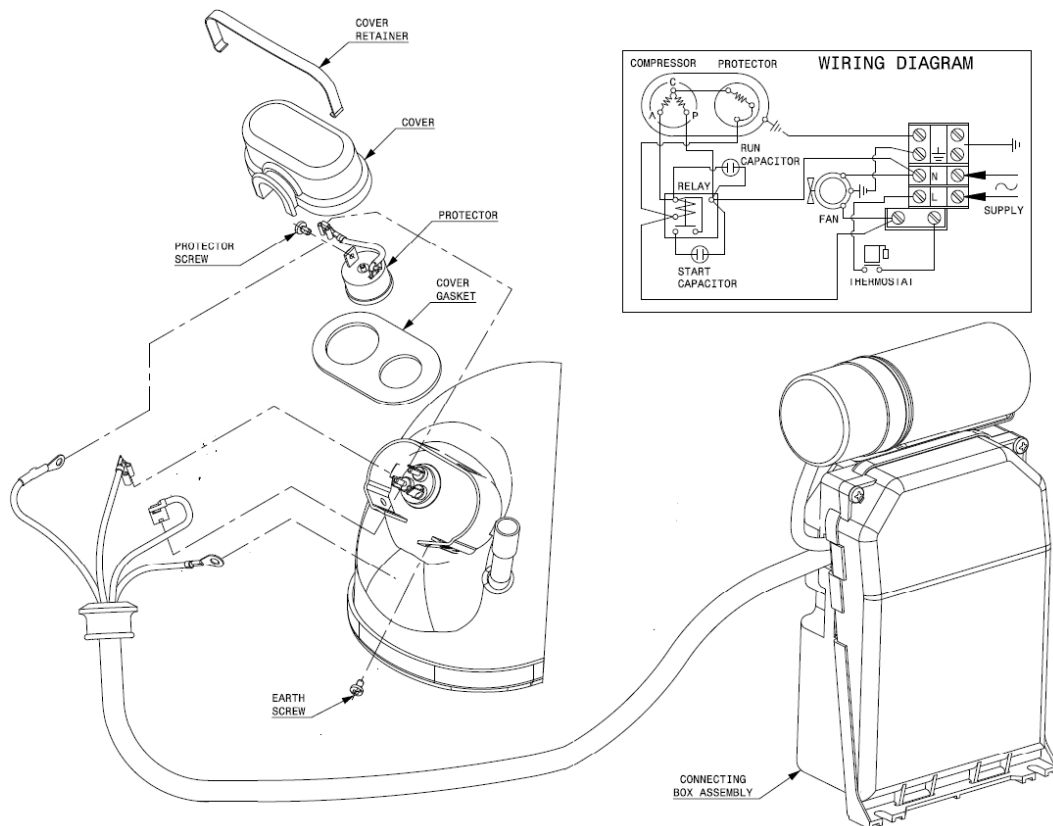


DESIGNATION INTERNAL DIAM.

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

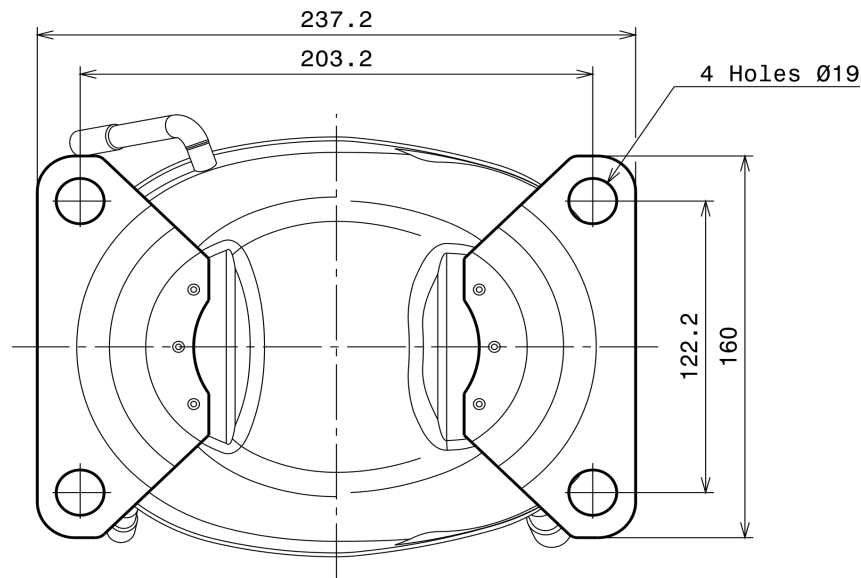
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (NS Range)



Technical Data Sheet

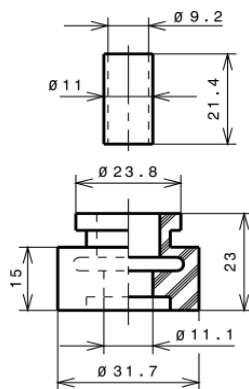
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A LBP

