

Technical Data Sheet

Compressor model **MS34FB_T**
 Voltage **220-240V 50Hz ~1**
 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. 38,0 °C

COMPRESSOR

Displacement 34,42 cm³
 Diameter 42,86 mm
 Stroke 23,85 mm
 Net Weight 22,13 Kg
 Oil type ISO VG 46 ESTER
 Oil charge 887 cm³

MOTOR

Nominal Power 1 hp
 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) 9,00 A
 Main W. resist. at 25°C 2,13 Ω
 Start W. resist. at 25°C 7,40 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		
Reference	T0534		
Current	20,00 A		
Time check	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 52,00 °C		

Technical Data Sheet

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

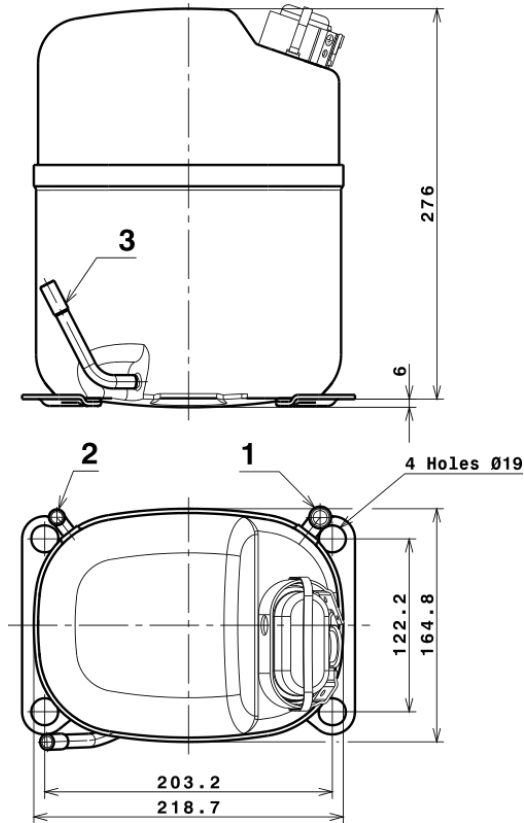
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	7.866,2830571158	1.394,1248074672	7,3121881026	101,66204223601
2	196,7850135386	18,3423680464	0,1074893733	2,8493753593517
3	-85,3332911288	15,5651875892	0,0711475323	-0,61103460941987
4	0,8145428566	0,1637826227	0,0013687272	0,019712444818155
5	-1,6477686049	0,5296740817	0,0023029708	-0,0086372699454982

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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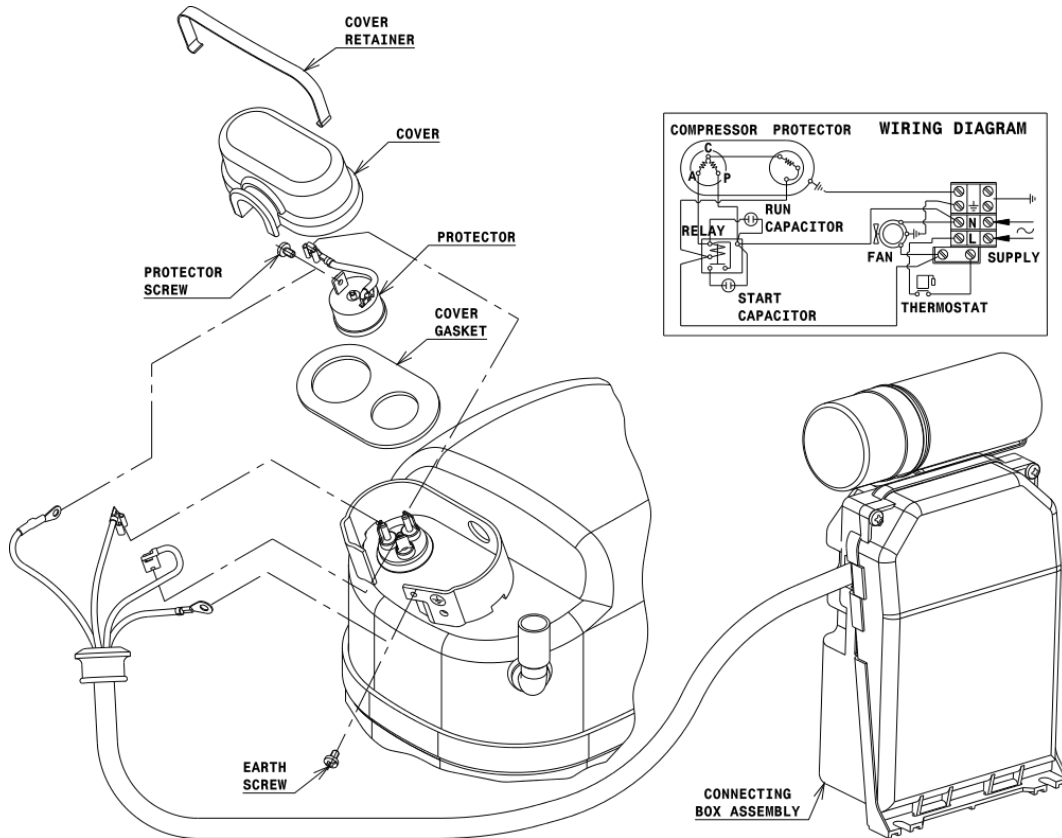
COMPRESSOR DIMENSIONS



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

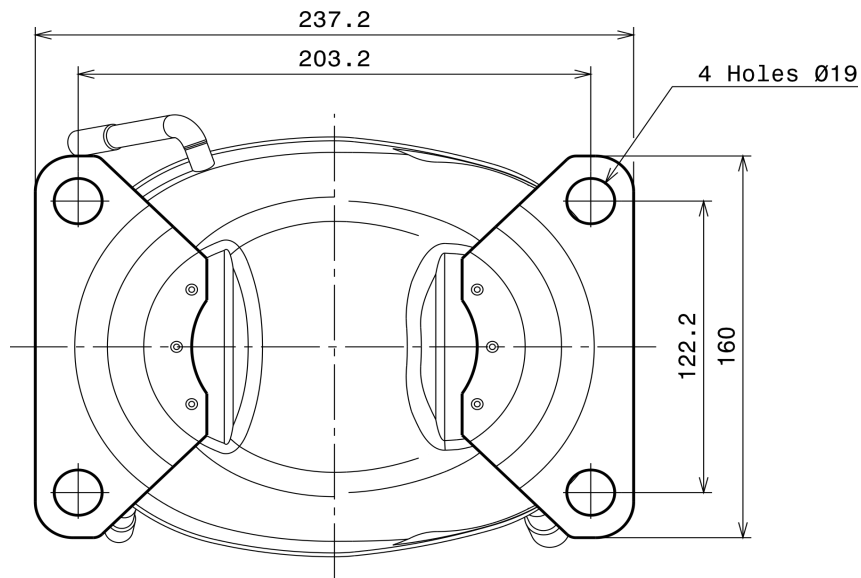
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (EXTERNAL CONNECTING BOX) (S range)



Technical Data Sheet

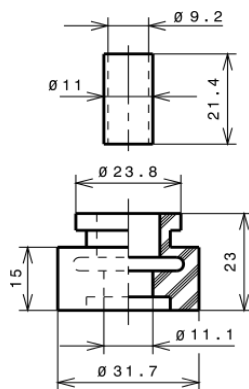
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø19 holes (203.2x122.2 net)



SOA

SOA R404A LBP

