

Technical Data Sheet

Compressor model **ML80FG**
 Voltage **200-220/220-230V 50/60Hz ~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.	43,0 °C

COMPRESSOR

Displacement	8,10 cm ³
Diameter	24,29 mm
Stroke	17,47 mm
Net Weight	12,20 Kg
Oil type	ISO VG 32 ESTER
Oil charge	595 cm ³

MOTOR

Nominal Power	1/4 hp
Voltage/Frequency	220-230V 60Hz
Voltage range	187-253 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	17,20 A
Max. Cont. Current (MCC)	4,50 A
Main W. resist. at 25°C	4,23 Ω
Start W. resist. at 25°C	34,16 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	376 kCal/h	296 W
COP	1,07 W/W	0,76 W/W
EER	0,92 kCal/Wh	0,65 kCal/Wh
Input Power	410 W	391 W
Current	2,60 A	2,53 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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 μF 330 V		
Relay	Option 1		
Reference	2014 158.		
Pick-Up	9,05 A		
Drop-Out	7,70 A		
Protector	Option 1	Option 2	
Reference	MRA38145	T0266	
Current	14,90 A	11,00 A	
Time check	2,8-5,2 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 52,00 °C	105,00 / 52,00 °C	

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ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	179	253	2,05	0,82	0,71
40	-35	234	294	2,20	0,93	0,80
40	-30	305	338	2,35	1,05	0,90
40	-25	392	384	2,51	1,19	1,02
40	-23,3	425	400	2,56	1,23	1,06
40	-20	493	432	2,68	1,33	1,14
40	-15	610	482	2,85	1,47	1,27
40	-10	743	535	3,04	1,61	1,39

45	-40	164	248	2,03	0,77	0,66
45	-35	219	292	2,19	0,87	0,75
45	-30	290	338	2,35	1,00	0,86
45	-25	376	386	2,52	1,13	0,97
45	-23,3	408	403	2,58	1,18	1,01
45	-20	477	437	2,69	1,27	1,09
45	-15	593	490	2,88	1,41	1,21
45	-10	725	545	3,07	1,55	1,33

50	-40	150	243	2,02	0,72	0,62
50	-35	204	289	2,18	0,82	0,71
50	-30	274	338	2,35	0,94	0,81
50	-25	360	389	2,53	1,08	0,92
50	-23,3	392	407	2,59	1,12	0,96
50	-20	460	442	2,71	1,21	1,04
50	-15	576	497	2,90	1,35	1,16
50	-10	708	555	3,11	1,48	1,27

55	-40	135	238	2,00	0,66	0,57
55	-35	189	287	2,17	0,77	0,66
55	-30	259	338	2,35	0,89	0,77
55	-25	344	391	2,53	1,02	0,88
55	-23,3	376	410	2,60	1,07	0,92
55	-20	444	447	2,73	1,15	0,99
55	-15	559	505	2,93	1,29	1,11
55	-10	690	565	3,14	1,42	1,22

60	-40	121	233	1,98	0,60	0,52
60	-35	174	284	2,16	0,71	0,61
60	-30	243	338	2,35	0,84	0,72
60	-25	328	394	2,54	0,97	0,83
60	-23,3	360	413	2,61	1,01	0,87
60	-20	427	452	2,75	1,10	0,95
60	-15	542	512	2,96	1,23	1,06
60	-10	673	575	3,17	1,36	1,17

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	188	253	2,05	0,74	0,64
40	-35	256	294	2,20	0,87	0,75
40	-30	337	338	2,35	1,00	0,86
40	-25	431	384	2,51	1,12	0,97
40	-23,3	466	400	2,56	1,16	1,01
40	-20	537	432	2,68	1,24	1,07
40	-15	657	482	2,85	1,36	1,18
40	-10	789	535	3,04	1,47	1,27

45	-40	164	248	2,03	0,66	0,57
45	-35	225	292	2,19	0,77	0,67
45	-30	299	338	2,35	0,89	0,76
45	-25	386	386	2,52	1,00	0,86
45	-23,3	418	403	2,58	1,04	0,90
45	-20	485	437	2,69	1,11	0,96
45	-15	598	490	2,88	1,22	1,05
45	-10	723	545	3,07	1,33	1,15

50	-40	140	243	2,02	0,58	0,50
50	-35	195	289	2,18	0,67	0,58
50	-30	261	338	2,35	0,77	0,67
50	-25	341	389	2,53	0,88	0,76
50	-23,3	371	407	2,59	0,91	0,79
50	-20	433	442	2,71	0,98	0,85
50	-15	539	497	2,90	1,08	0,94
50	-10	657	555	3,11	1,18	1,02

55	-40	117	238	2,00	0,49	0,42
55	-35	164	287	2,17	0,57	0,49
55	-30	223	338	2,35	0,66	0,57
55	-25	296	391	2,53	0,76	0,65
55	-23,3	324	410	2,60	0,79	0,68
55	-20	381	447	2,73	0,85	0,74
55	-15	480	505	2,93	0,95	0,82
55	-10	590	565	3,14	1,05	0,90

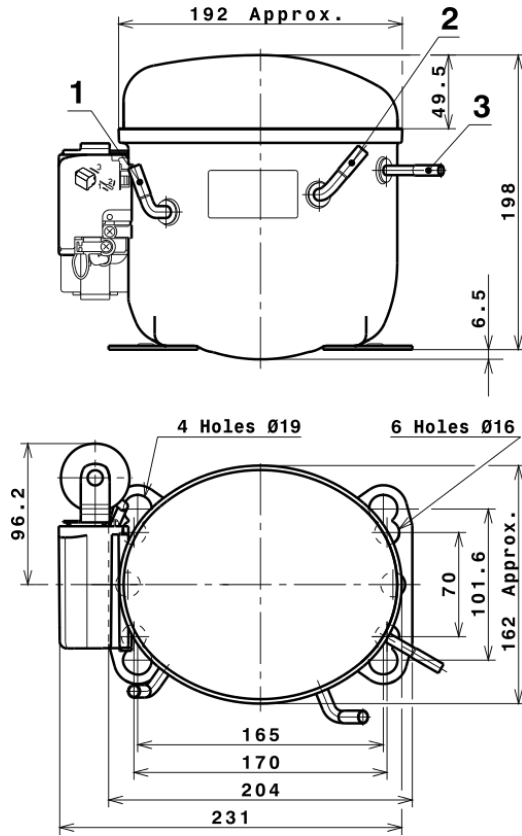
60	-40	93	233	1,98	0,40	0,34
60	-35	133	284	2,16	0,47	0,40
60	-30	186	338	2,35	0,55	0,47
60	-25	251	394	2,54	0,64	0,55
60	-23,3	276	413	2,61	0,67	0,58
60	-20	329	452	2,75	0,73	0,63
60	-15	421	512	2,96	0,82	0,71
60	-10	524	575	3,17	0,91	0,79

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.717,4748932619	542,8316572175	3,0625247503	35,268408706215
2	43,3614732860	8,0544410891	0,0279976873	1,0588547766223
3	-16,5514356860	3,0789661501	0,0107227522	-0,11287124203455
4	0,2422744005	0,0492708181	0,0001700016	0,0095616197245766
5	-0,2956926858	0,1025276796	0,0003572622	-0,00078971015809779

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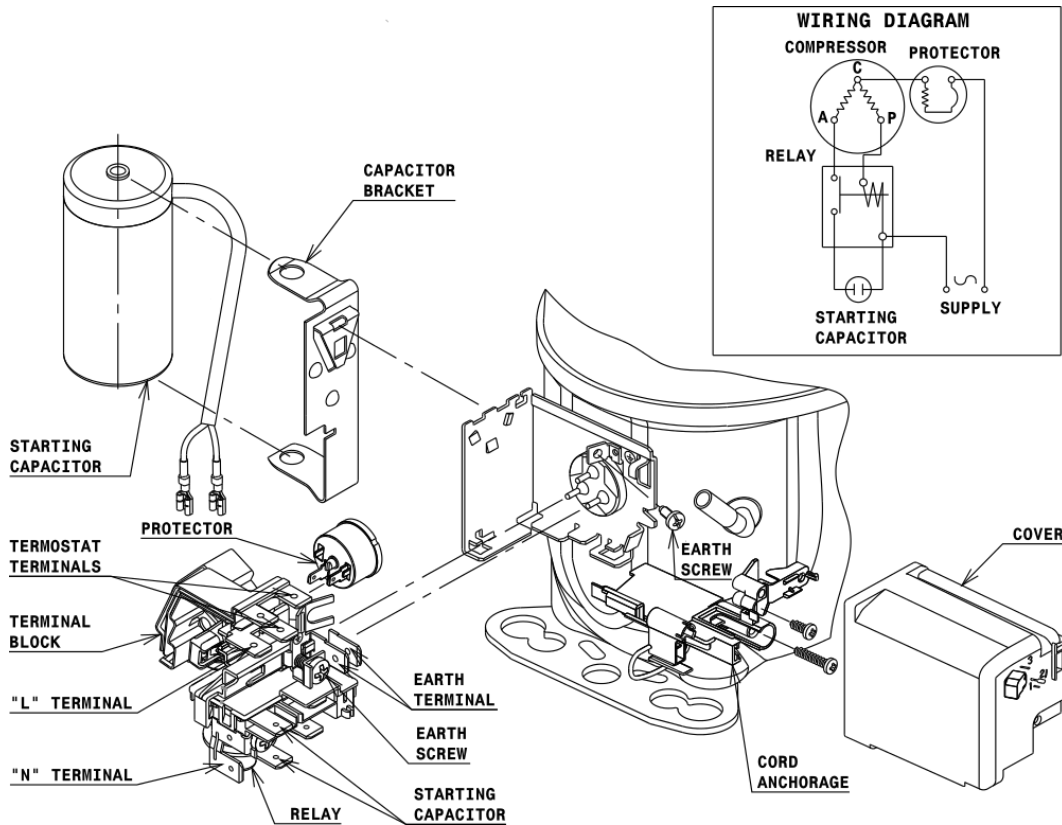
COMPRESSOR DIMENSIONS



DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



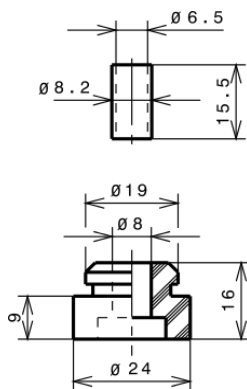
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FIXINGS

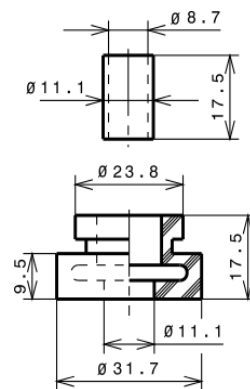


SILENT BLOCKS (MOUNTING ACCESSORIES)

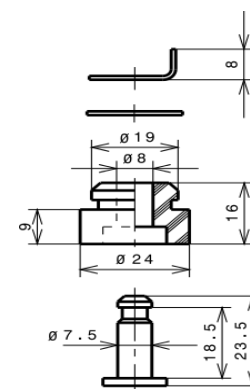
STANDARD



AMERICAN FEET



SNAP-ON



SOA

SOA R404A LBP

