

Technical Data Sheet

Compressor model **MP14FG**
 Voltage **200-220/230V 50/60Hz ~1**
 Refrigerant **R404A**

APPLICATION		COMPRESSOR		MOTOR	
Application	Low Back Pressure	Displacement	14,17 cm ³	Nominal Power	1/2 hp
Refrigerant	R404A	Diameter	31,19 mm	Voltage/Frequency	230V 60Hz
Evaporating Temp.	-40,0 °C to -10,0 °C	Stroke	18,54 mm	Voltage range	207-244 V
Expansion	Capillar/Valve	Net Weight	12,03 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	400 cm ³	Locked Rotor Amps (LRA)	20,50 A
				Max. Cont. Current (MCC)	4,50 A
				Main W. resist. at 25°C	4,25 Ω
				Start W. resist. at 25°C	18,66 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	631 kCal/h	492 W
COP	1,15 W/W	0,82 W/W
EER	0,99 kCal/Wh	0,70 kCal/Wh
Input Power	639 W	603 W
Current	3,60 A	3,45 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	72- 88 µF 330 V			
Relay	Option 1	Option 2		
Reference	2014 166.	QLZ-11.0A		
Pick-Up	11,00 A	11.0 A		
Drop-Out	9,35 A	9.35 A		
Protector	Option 1			
Reference	T0267			
Current	11,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 52,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	269	366	2,56	0,85	0,73
40	-35	392	434	2,80	1,05	0,90
40	-30	539	509	3,08	1,23	1,06
40	-25	711	591	3,40	1,40	1,20
40	-23,3	775	620	3,52	1,45	1,25
40	-20	908	679	3,77	1,55	1,34
40	-15	1.129	774	4,18	1,70	1,46
40	-10	1.375	876	4,65	1,82	1,57

45	-40	234	350	2,51	0,78	0,67
45	-35	353	425	2,77	0,97	0,83
45	-30	496	507	3,07	1,14	0,98
45	-25	664	595	3,42	1,30	1,12
45	-23,3	727	626	3,55	1,35	1,16
45	-20	857	690	3,81	1,44	1,24
45	-15	1.074	792	4,26	1,58	1,36
45	-10	1.316	900	4,77	1,70	1,46

50	-40	199	334	2,45	0,69	0,60
50	-35	314	416	2,74	0,88	0,76
50	-30	454	504	3,06	1,05	0,90
50	-25	618	599	3,44	1,20	1,03
50	-23,3	679	633	3,57	1,25	1,07
50	-20	806	701	3,86	1,34	1,15
50	-15	1.020	809	4,34	1,47	1,26
50	-10	1.258	924	4,88	1,58	1,36

55	-40	164	318	2,40	0,60	0,52
55	-35	275	406	2,70	0,79	0,68
55	-30	411	501	3,05	0,95	0,82
55	-25	571	603	3,45	1,10	0,95
55	-23,3	631	639	3,60	1,15	0,99
55	-20	756	711	3,91	1,24	1,06
55	-15	965	826	4,42	1,36	1,17
55	-10	1.199	948	5,00	1,47	1,26

60	-40	129	302	2,35	0,50	0,43
60	-35	236	397	2,67	0,69	0,59
60	-30	368	499	3,04	0,86	0,74
60	-25	524	607	3,47	1,00	0,86
60	-23,3	583	645	3,63	1,05	0,90
60	-20	705	722	3,95	1,14	0,98
60	-15	910	844	4,50	1,26	1,08
60	-10	1.141	972	5,12	1,36	1,17

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	281	366	2,56	0,77	0,66
40	-35	425	434	2,80	0,98	0,85
40	-30	590	509	3,08	1,16	1,00
40	-25	775	591	3,40	1,31	1,13
40	-23,3	843	620	3,52	1,36	1,17
40	-20	981	679	3,77	1,44	1,25
40	-15	1.208	774	4,18	1,56	1,35
40	-10	1.454	876	4,65	1,66	1,43

45	-40	234	350	2,51	0,67	0,58
45	-35	363	425	2,77	0,85	0,74
45	-30	512	507	3,07	1,01	0,87
45	-25	681	595	3,42	1,14	0,99
45	-23,3	743	626	3,55	1,19	1,02
45	-20	871	690	3,81	1,26	1,09
45	-15	1.081	792	4,26	1,37	1,18
45	-10	1.312	900	4,77	1,46	1,26

50	-40	188	334	2,45	0,56	0,49
50	-35	300	416	2,74	0,72	0,62
50	-30	433	504	3,06	0,86	0,74
50	-25	586	599	3,44	0,98	0,85
50	-23,3	643	633	3,57	1,02	0,88
50	-20	760	701	3,86	1,08	0,94
50	-15	954	809	4,34	1,18	1,02
50	-10	1.169	924	4,88	1,26	1,09

55	-40	142	318	2,40	0,45	0,39
55	-35	238	406	2,70	0,59	0,51
55	-30	355	501	3,05	0,71	0,61
55	-25	492	603	3,45	0,82	0,70
55	-23,3	543	639	3,60	0,85	0,73
55	-20	649	711	3,91	0,91	0,79
55	-15	828	826	4,42	1,00	0,87
55	-10	1.026	948	5,00	1,08	0,94

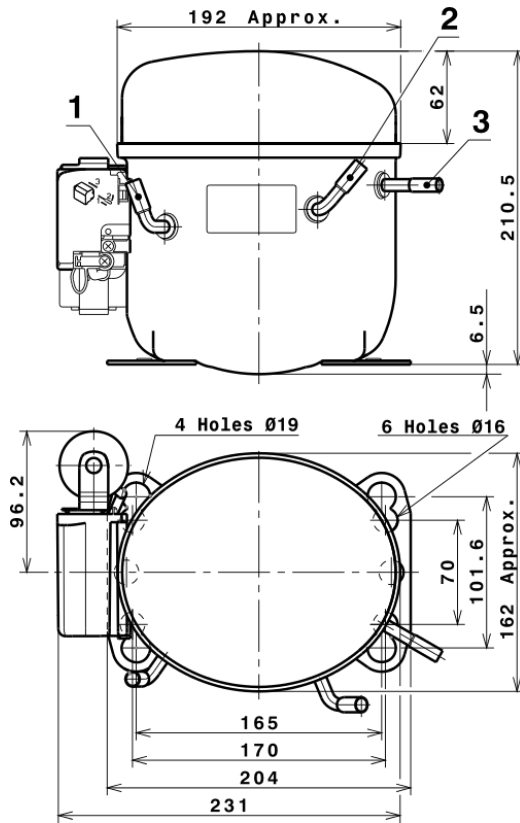
60	-40	95	302	2,35	0,32	0,27
60	-35	176	397	2,67	0,44	0,38
60	-30	276	499	3,04	0,55	0,48
60	-25	397	607	3,47	0,65	0,57
60	-23,3	443	645	3,63	0,69	0,59
60	-20	539	722	3,95	0,75	0,64
60	-15	701	844	4,50	0,83	0,72
60	-10	883	972	5,12	0,91	0,79

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	3.369,9285221161	825,0998017952	4,5198019919	72,402427667986
2	83,8871140152	13,6970545799	0,0846758720	2,049702350403
3	-35,6618314784	7,6620897022	0,0360424936	-0,39417768872466
4	0,3876096910	0,1423250322	0,0011882733	0,015546434922986
5	-0,6642924655	0,2733235252	0,0011785459	-0,0049714945562604

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



DESIGNATION INTERNAL DIAM.

1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R404A LBP

