

Technical Data Sheet

Compressor model **ML45FG**
 Voltage **200-240/220-230V 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	4,56 cm ³
Diameter	19,09 mm
Stroke	15,93 mm
Net Weight	10,87 Kg
Oil type	ISO VG 32 ESTER
Oil charge	295 cm ³

MOTOR

Nominal Power	1/6 hp
Voltage/Frequency	200-240V 50Hz
Voltage range	170-255 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	8,50 A
Max. Cont. Current (MCC)	2,30 A
Main W. resist. at 25°C	8,41 Ω
Start W. resist. at 25°C	18,00 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	170 kCal/h	133 W
COP	0,96 W/W	0,68 W/W
EER	0,83 kCal/Wh	0,59 kCal/Wh
Input Power	205 W	197 W
Current	1,40 A	1,37 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	200 V 50 Hz	200 V 50 Hz

ELECTRICAL COMPONENTS

	Option 1	Option 2		
Starting capacitor	47- 56 μF 330 V			
Relay	Option 1	Option 2		
Reference	2014 127.	QLZ-4.8A		
Pick-Up	4,80 A	4,8 A		
Drop-Out	4,10 A	4,1 A		
Protector	Option 1	Option 2		
Reference	MRP61AMJ	T0073		
Current	6,90 A	6,20 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	90,00 / 57,00 °C	110,00 / 62,00 °C		

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	83	130	1,15	0,74	0,63
40	-35	113	147	1,20	0,89	0,76
40	-30	150	166	1,25	1,06	0,91
40	-25	196	185	1,32	1,23	1,06
40	-23,3	213	192	1,35	1,29	1,11
40	-20	250	207	1,41	1,41	1,21
40	-15	311	229	1,51	1,58	1,36
40	-10	380	253	1,63	1,75	1,50

45	-40	75	130	1,15	0,67	0,58
45	-35	103	148	1,20	0,81	0,69
45	-30	139	168	1,26	0,96	0,82
45	-25	182	189	1,34	1,12	0,96
45	-23,3	199	197	1,37	1,18	1,01
45	-20	234	212	1,43	1,29	1,10
45	-15	293	235	1,54	1,45	1,25
45	-10	360	260	1,67	1,61	1,38

50	-40	68	130	1,15	0,60	0,52
50	-35	93	150	1,20	0,73	0,62
50	-30	127	171	1,27	0,87	0,74
50	-25	169	193	1,35	1,02	0,87
50	-23,3	184	201	1,38	1,07	0,92
50	-20	218	217	1,45	1,17	1,01
50	-15	275	241	1,57	1,33	1,14
50	-10	340	268	1,71	1,48	1,27

55	-40	60	130	1,15	0,54	0,46
55	-35	84	151	1,21	0,65	0,56
55	-30	115	173	1,28	0,77	0,67
55	-25	155	197	1,37	0,92	0,79
55	-23,3	170	205	1,40	0,96	0,83
55	-20	202	222	1,47	1,06	0,91
55	-15	257	248	1,60	1,21	1,04
55	-10	320	275	1,75	1,35	1,16

60	-40	53	130	1,15	0,47	0,40
60	-35	74	152	1,21	0,57	0,49
60	-30	104	176	1,29	0,69	0,59
60	-25	141	200	1,38	0,82	0,70
60	-23,3	156	209	1,42	0,86	0,74
60	-20	186	227	1,50	0,96	0,82
60	-15	239	254	1,63	1,10	0,94
60	-10	300	283	1,79	1,24	1,06

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	87	130	1,15	0,67	0,58
40	-35	123	147	1,20	0,83	0,72
40	-30	165	166	1,25	1,00	0,86
40	-25	215	185	1,32	1,16	1,00
40	-23,3	233	192	1,35	1,21	1,04
40	-20	270	207	1,41	1,31	1,13
40	-15	332	229	1,51	1,45	1,26
40	-10	401	253	1,63	1,59	1,37

45	-40	75	130	1,15	0,58	0,50
45	-35	106	148	1,20	0,71	0,62
45	-30	143	168	1,26	0,85	0,74
45	-25	187	189	1,34	0,99	0,86
45	-23,3	204	197	1,37	1,04	0,90
45	-20	238	212	1,43	1,13	0,97
45	-15	295	235	1,54	1,26	1,08
45	-10	359	260	1,67	1,38	1,19

50	-40	63	130	1,15	0,49	0,42
50	-35	89	150	1,20	0,60	0,52
50	-30	122	171	1,27	0,71	0,62
50	-25	160	193	1,35	0,83	0,72
50	-23,3	175	201	1,38	0,87	0,75
50	-20	206	217	1,45	0,95	0,82
50	-15	258	241	1,57	1,07	0,92
50	-10	316	268	1,71	1,18	1,02

55	-40	52	130	1,15	0,40	0,34
55	-35	72	151	1,21	0,48	0,41
55	-30	100	173	1,28	0,58	0,50
55	-25	133	197	1,37	0,68	0,59
55	-23,3	146	205	1,40	0,71	0,62
55	-20	174	222	1,47	0,78	0,68
55	-15	220	248	1,60	0,89	0,77
55	-10	274	275	1,75	1,00	0,86

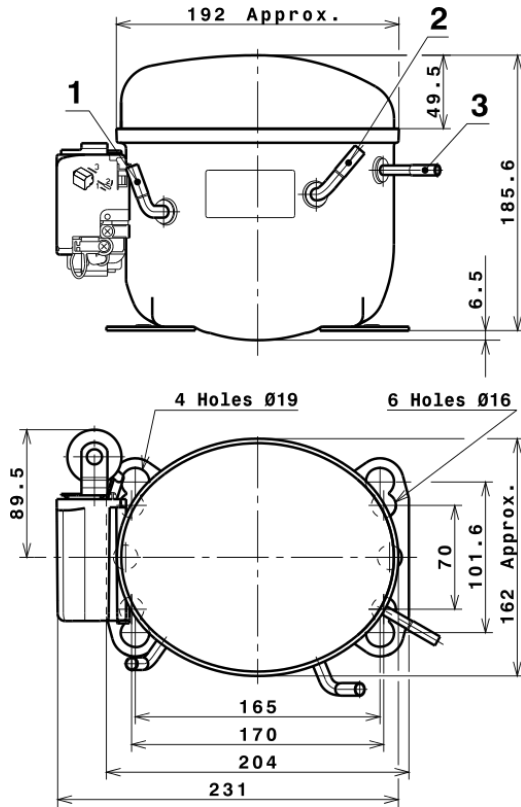
60	-40	40	130	1,15	0,31	0,27
60	-35	56	152	1,21	0,37	0,32
60	-30	78	176	1,29	0,44	0,38
60	-25	106	200	1,38	0,53	0,46
60	-23,3	118	209	1,42	0,56	0,49
60	-20	141	227	1,50	0,62	0,54
60	-15	183	254	1,63	0,72	0,62
60	-10	231	283	1,79	0,82	0,71

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	967,3062190897	230,3744366590	1,5135935817	21,493639694895
2	24,7519678571	3,5484439858	0,0251940297	0,6318311618164
3	-10,6824033385	2,0536893544	0,0119057778	-0,14232537262891
4	0,1241878389	0,0277760356	0,0004071100	0,004845150942639
5	-0,2094867184	0,0513422339	0,0002976444	-0,0025084020112827

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)



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

