

# Technical Data Sheet

Compressor model **ML60FB**  
 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. 43,0 °C

## COMPRESSOR

Displacement 5,98 cm<sup>3</sup>  
 Diameter 20,88 mm  
 Stroke 17,47 mm  
 Net Weight 8,84 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 260 cm<sup>3</sup>

## MOTOR

Nominal Power 1/5 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 198-255 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 8,60 A  
 Max. Cont. Current (MCC) 1,90 A  
 Main W. resist. at 25°C 15,67 Ω  
 Start W. resist. at 25°C 29,60 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	236 kCal/h	186 W
COP	1,20 W/W	0,86 W/W
EER	1,04 kCal/Wh	0,74 kCal/Wh
Input Power	228 W	217 W
Current	1,35 A	1,31 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Relay	Option 1			
Reference	2014 118.			
Pick-Up	3,75 A			
Drop-Out	3,20 A			
Protector	Option 1	Option 2		
Reference	AE26FHY	T0069		
Current	7,10 A	7,10 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 62,00 °C	105,00 / 62,00 °C		

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	112	149	1,10	0,87	0,75
40	-35	153	166	1,14	1,08	0,93
40	-30	204	186	1,21	1,28	1,10
40	-25	265	210	1,29	1,47	1,26
40	-23,3	288	219	1,32	1,53	1,31
40	-20	336	239	1,39	1,64	1,41
40	-15	416	271	1,51	1,79	1,54
40	-10	506	307	1,65	1,92	1,65

45	-40	103	146	1,09	0,82	0,71
45	-35	142	164	1,14	1,00	0,86
45	-30	190	187	1,21	1,19	1,02
45	-25	249	213	1,30	1,36	1,17
45	-23,3	271	222	1,33	1,42	1,22
45	-20	317	243	1,40	1,52	1,31
45	-15	394	276	1,53	1,66	1,43
45	-10	482	314	1,69	1,79	1,54

50	-40	94	143	1,08	0,76	0,66
50	-35	130	163	1,14	0,93	0,80
50	-30	176	187	1,21	1,10	0,94
50	-25	232	215	1,30	1,26	1,08
50	-23,3	253	225	1,34	1,31	1,13
50	-20	298	247	1,42	1,40	1,21
50	-15	373	282	1,55	1,54	1,32
50	-10	458	322	1,72	1,66	1,42

55	-40	85	140	1,07	0,71	0,61
55	-35	119	162	1,13	0,85	0,73
55	-30	162	188	1,21	1,01	0,87
55	-25	216	217	1,31	1,16	0,99
55	-23,3	236	228	1,35	1,20	1,04
55	-20	279	251	1,43	1,29	1,11
55	-15	351	288	1,58	1,42	1,22
55	-10	434	329	1,75	1,53	1,32

60	-40	76	137	1,06	0,65	0,55
60	-35	107	161	1,13	0,78	0,67
60	-30	148	188	1,21	0,92	0,79
60	-25	199	219	1,32	1,06	0,91
60	-23,3	219	231	1,36	1,10	0,95
60	-20	260	255	1,45	1,19	1,02
60	-15	330	294	1,60	1,31	1,12
60	-10	410	337	1,78	1,42	1,22

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	118	149	1,10	0,79	0,68
40	-35	167	166	1,14	1,01	0,87
40	-30	224	186	1,21	1,21	1,04
40	-25	290	210	1,29	1,38	1,19
40	-23,3	314	219	1,32	1,43	1,24
40	-20	363	239	1,39	1,52	1,32
40	-15	445	271	1,51	1,64	1,42
40	-10	535	307	1,65	1,75	1,51

45	-40	103	146	1,09	0,71	0,61
45	-35	146	164	1,14	0,89	0,77
45	-30	196	187	1,21	1,05	0,91
45	-25	255	213	1,30	1,20	1,04
45	-23,3	277	222	1,33	1,25	1,08
45	-20	322	243	1,40	1,33	1,15
45	-15	397	276	1,53	1,44	1,24
45	-10	480	314	1,69	1,53	1,32

50	-40	88	143	1,08	0,62	0,53
50	-35	124	163	1,14	0,76	0,66
50	-30	168	187	1,21	0,90	0,78
50	-25	220	215	1,30	1,03	0,89
50	-23,3	240	225	1,34	1,07	0,92
50	-20	281	247	1,42	1,14	0,98
50	-15	349	282	1,55	1,24	1,07
50	-10	426	322	1,72	1,32	1,14

55	-40	73	140	1,07	0,52	0,45
55	-35	103	162	1,13	0,64	0,55
55	-30	140	188	1,21	0,75	0,65
55	-25	186	217	1,31	0,86	0,74
55	-23,3	203	228	1,35	0,89	0,77
55	-20	240	251	1,43	0,96	0,83
55	-15	301	288	1,58	1,05	0,90
55	-10	371	329	1,75	1,13	0,98

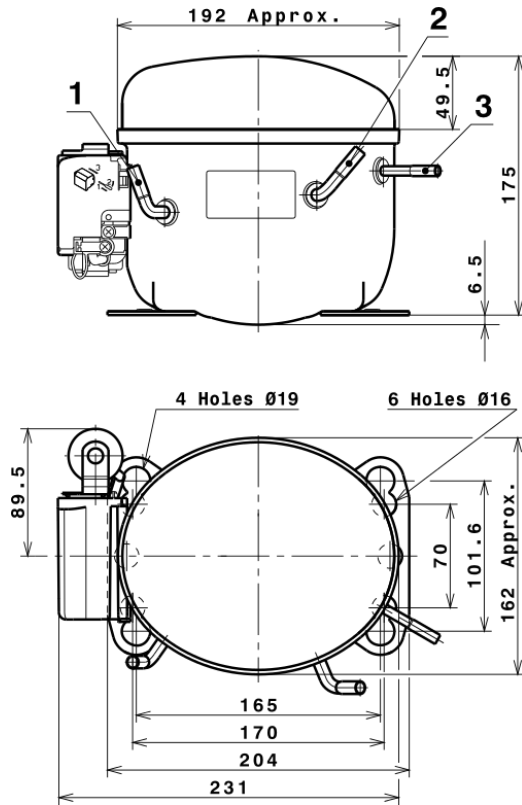
60	-40	59	137	1,06	0,43	0,37
60	-35	81	161	1,13	0,51	0,44
60	-30	112	188	1,21	0,60	0,52
60	-25	151	219	1,32	0,69	0,60
60	-23,3	166	231	1,36	0,72	0,62
60	-20	198	255	1,45	0,78	0,67
60	-15	253	294	1,60	0,86	0,75
60	-10	317	337	1,78	0,94	0,81

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.264,4621127732	310,9883368460	1,6863366050	27,71857257915
2	31,9860910036	6,5981670366	0,0315974335	0,80796526978317
3	-13,7456738084	2,2581175609	0,0095937527	-0,17115511903015
4	0,1543639894	0,0811054645	0,0004707188	0,0060821633092759
5	-0,2699116436	0,0717850545	0,0002838487	-0,0030174281742311

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

