

Technical Data Sheet

Compressor model **MLY45LAa**
 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 4,56 cm³
 Diameter 19,09 mm
 Stroke 15,93 mm
 Net Weight 9,55 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 300 cm³

MOTOR

Nominal Power 1/6 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-255 V
 Type CSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 8,10 A
 Max. Cont. Current (MCC) 1,60 A
 Main W. resist. at 25°C 16,13 Ω
 Start W. resist. at 25°C 17,05 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	200 kCal/h	157 W
COP	1,30 W/W	0,92 W/W
EER	1,12 kCal/Wh	0,79 kCal/Wh
Input Power	179 W	171 W
Current	1,12 A	1,09 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	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	AE22FHY	T0067	
Current	6,20 A	6,60 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	85	118	0,89	0,84	0,72
40	-35	119	132	0,94	1,05	0,90
40	-30	162	149	1,00	1,27	1,09
40	-25	213	167	1,07	1,48	1,27
40	-23,3	232	174	1,10	1,55	1,33
40	-20	272	188	1,16	1,68	1,45
40	-15	339	210	1,25	1,88	1,61
40	-10	415	235	1,36	2,05	1,77

45	-40	80	115	0,88	0,81	0,70
45	-35	113	131	0,93	1,00	0,86
45	-30	153	149	1,00	1,20	1,03
45	-25	203	168	1,08	1,40	1,20
45	-23,3	221	176	1,11	1,46	1,26
45	-20	260	190	1,17	1,59	1,37
45	-15	326	214	1,27	1,77	1,52
45	-10	400	240	1,38	1,94	1,67

50	-40	75	113	0,87	0,78	0,67
50	-35	106	130	0,93	0,95	0,82
50	-30	145	149	1,00	1,13	0,98
50	-25	193	170	1,08	1,32	1,13
50	-23,3	211	177	1,11	1,38	1,19
50	-20	248	193	1,18	1,50	1,29
50	-15	313	218	1,28	1,67	1,43
50	-10	385	245	1,41	1,83	1,57

55	-40	70	110	0,86	0,74	0,64
55	-35	99	128	0,93	0,90	0,77
55	-30	137	149	1,00	1,07	0,92
55	-25	183	171	1,09	1,24	1,07
55	-23,3	200	179	1,12	1,30	1,12
55	-20	237	195	1,19	1,41	1,21
55	-15	299	222	1,30	1,57	1,35
55	-10	370	250	1,43	1,72	1,48

60	-40	65	108	0,85	0,70	0,60
60	-35	93	127	0,92	0,85	0,73
60	-30	128	149	1,00	1,00	0,86
60	-25	173	172	1,09	1,17	1,00
60	-23,3	189	181	1,13	1,22	1,05
60	-20	225	198	1,20	1,32	1,14
60	-15	286	225	1,32	1,48	1,27
60	-10	355	255	1,45	1,62	1,39

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	90	118	0,89	0,77	0,66
40	-35	131	132	0,94	0,99	0,86
40	-30	179	149	1,00	1,20	1,04
40	-25	233	167	1,07	1,40	1,21
40	-23,3	254	174	1,10	1,46	1,26
40	-20	295	188	1,16	1,57	1,36
40	-15	364	210	1,25	1,73	1,49
40	-10	440	235	1,36	1,87	1,62

45	-40	80	115	0,88	0,70	0,60
45	-35	116	131	0,93	0,89	0,76
45	-30	158	149	1,00	1,07	0,92
45	-25	208	168	1,08	1,24	1,07
45	-23,3	227	176	1,11	1,29	1,11
45	-20	265	190	1,17	1,39	1,20
45	-15	328	214	1,27	1,53	1,32
45	-10	399	240	1,38	1,66	1,44

50	-40	70	113	0,87	0,62	0,54
50	-35	101	130	0,93	0,78	0,67
50	-30	138	149	1,00	0,93	0,80
50	-25	183	170	1,08	1,08	0,93
50	-23,3	199	177	1,11	1,12	0,97
50	-20	234	193	1,18	1,21	1,05
50	-15	292	218	1,28	1,34	1,16
50	-10	358	245	1,41	1,46	1,26

55	-40	61	110	0,86	0,55	0,48
55	-35	86	128	0,93	0,67	0,58
55	-30	118	149	1,00	0,79	0,69
55	-25	157	171	1,09	0,92	0,79
55	-23,3	172	179	1,12	0,96	0,83
55	-20	203	195	1,19	1,04	0,90
55	-15	257	222	1,30	1,16	1,00
55	-10	317	250	1,43	1,27	1,09

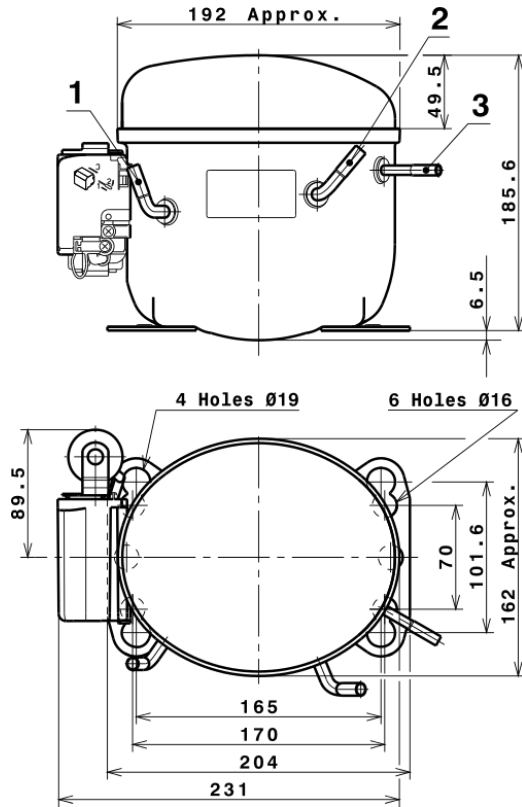
60	-40	51	108	0,85	0,47	0,41
60	-35	71	127	0,92	0,56	0,48
60	-30	98	149	1,00	0,66	0,57
60	-25	132	172	1,09	0,77	0,66
60	-23,3	145	181	1,13	0,80	0,69
60	-20	173	198	1,20	0,87	0,75
60	-15	221	225	1,32	0,98	0,85
60	-10	276	255	1,45	1,08	0,93

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.011,9867152384	237,1351828486	1,3835482605	21,62228099592
2	26,4412416168	4,1151395150	0,0213975626	0,66136356626667
3	-10,5035189300	1,5394830750	0,0070105681	-0,10886544807506
4	0,1319684645	0,0425092436	0,0002747934	0,0052008050332876
5	-0,2134930448	0,0512638398	0,0002201872	-0,0020177276589803

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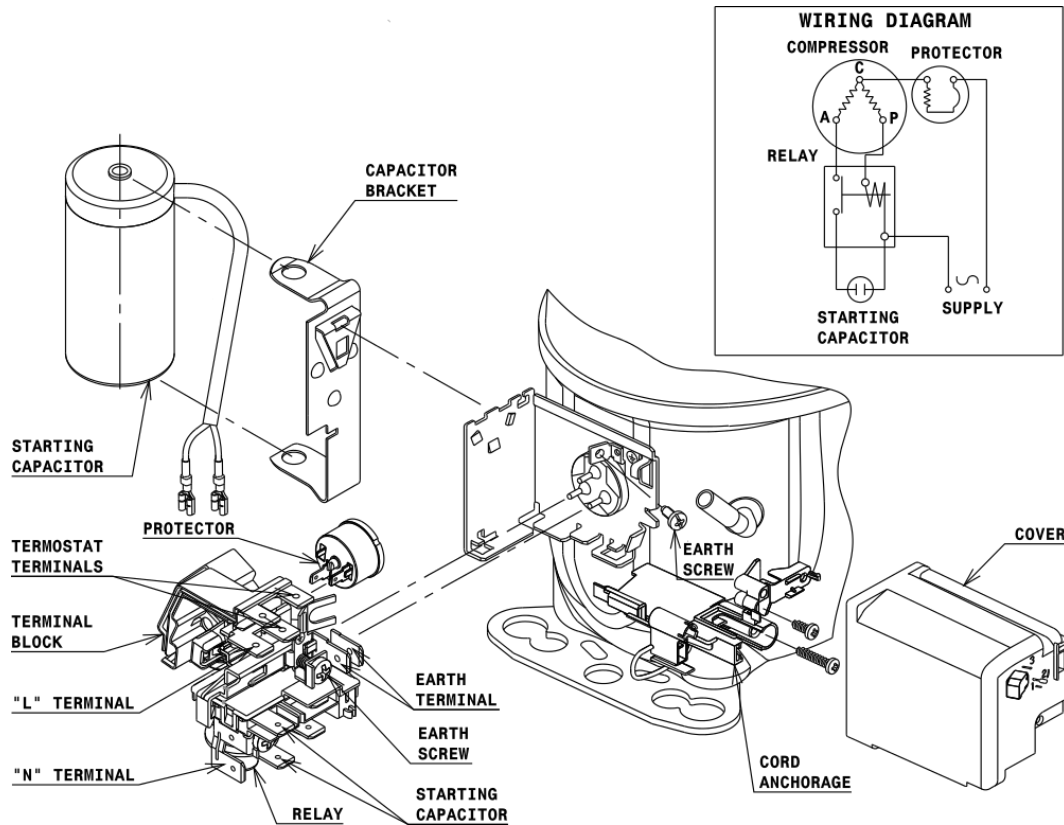
COMPRESSOR DIMENSIONS



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

