

# Technical Data Sheet

Compressor model **MLY90LAa**  
 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 9,09 cm<sup>3</sup>  
 Diameter 24,29 mm  
 Stroke 19,62 mm  
 Net Weight 10,35 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 400 cm<sup>3</sup>

## MOTOR

Nominal Power 1/3 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 198-255 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 11,50 A  
 Max. Cont. Current (MCC) 3,20 A  
 Main W. resist. at 25°C 7,26 Ω  
 Start W. resist. at 25°C 10,48 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	395 kCal/h	311 W
COP	1,28 W/W	0,91 W/W
EER	1,10 kCal/Wh	0,78 kCal/Wh
Input Power	360 W	343 W
Current	2,35 A	2,29 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	64- 77 μF 330 V			
Relay	Option 1			
Reference	2014 145.			
Pick-Up	7,10 A			
Drop-Out	6,00 A			
Protector	Option 1			
Reference	T0269			
Current	9,60 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	170	219	1,92	0,90	0,78
40	-35	240	256	2,02	1,09	0,94
40	-30	326	294	2,13	1,29	1,11
40	-25	425	334	2,26	1,48	1,27
40	-23,3	463	347	2,31	1,55	1,33
40	-20	540	375	2,40	1,68	1,44
40	-15	669	417	2,57	1,87	1,60
40	-10	813	461	2,75	2,05	1,76

45	-40	160	214	1,90	0,87	0,75
45	-35	227	254	2,01	1,04	0,89
45	-30	308	295	2,13	1,22	1,05
45	-25	404	337	2,27	1,39	1,20
45	-23,3	440	352	2,32	1,46	1,25
45	-20	515	381	2,43	1,57	1,35
45	-15	640	426	2,60	1,75	1,50
45	-10	780	472	2,80	1,92	1,65

50	-40	150	209	1,89	0,83	0,72
50	-35	213	251	2,00	0,99	0,85
50	-30	291	295	2,13	1,15	0,98
50	-25	383	340	2,28	1,31	1,13
50	-23,3	418	356	2,34	1,36	1,17
50	-20	490	387	2,45	1,47	1,27
50	-15	611	434	2,64	1,64	1,41
50	-10	748	484	2,85	1,80	1,55

55	-40	140	204	1,88	0,80	0,69
55	-35	199	249	2,00	0,93	0,80
55	-30	273	296	2,13	1,07	0,92
55	-25	362	343	2,29	1,22	1,05
55	-23,3	395	360	2,35	1,28	1,10
55	-20	465	393	2,47	1,38	1,18
55	-15	583	443	2,67	1,53	1,31
55	-10	715	495	2,90	1,68	1,44

60	-40	130	199	1,87	0,76	0,65
60	-35	185	247	1,99	0,87	0,75
60	-30	256	296	2,14	1,00	0,86
60	-25	340	347	2,30	1,14	0,98
60	-23,3	372	364	2,37	1,19	1,02
60	-20	440	399	2,49	1,28	1,10
60	-15	554	452	2,71	1,43	1,23
60	-10	683	507	2,95	1,57	1,35

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	180	219	1,92	0,82	0,71
40	-35	263	256	2,02	1,03	0,89
40	-30	358	294	2,13	1,22	1,05
40	-25	465	334	2,26	1,39	1,20
40	-23,3	504	347	2,31	1,45	1,25
40	-20	585	375	2,40	1,56	1,35
40	-15	716	417	2,57	1,72	1,48
40	-10	860	461	2,75	1,87	1,61

45	-40	160	214	1,90	0,75	0,65
45	-35	233	254	2,01	0,92	0,79
45	-30	317	295	2,13	1,08	0,93
45	-25	414	337	2,27	1,23	1,06
45	-23,3	450	352	2,32	1,28	1,10
45	-20	523	381	2,43	1,37	1,19
45	-15	644	426	2,60	1,51	1,31
45	-10	777	472	2,80	1,65	1,42

50	-40	141	209	1,89	0,67	0,58
50	-35	202	251	2,00	0,81	0,70
50	-30	276	295	2,13	0,94	0,81
50	-25	363	340	2,28	1,07	0,92
50	-23,3	395	356	2,34	1,11	0,96
50	-20	461	387	2,45	1,19	1,03
50	-15	572	434	2,64	1,32	1,14
50	-10	695	484	2,85	1,44	1,24

55	-40	121	204	1,88	0,59	0,51
55	-35	172	249	2,00	0,69	0,60
55	-30	236	296	2,13	0,80	0,69
55	-25	311	343	2,29	0,91	0,78
55	-23,3	340	360	2,35	0,94	0,82
55	-20	399	393	2,47	1,02	0,88
55	-15	500	443	2,67	1,13	0,97
55	-10	612	495	2,90	1,24	1,07

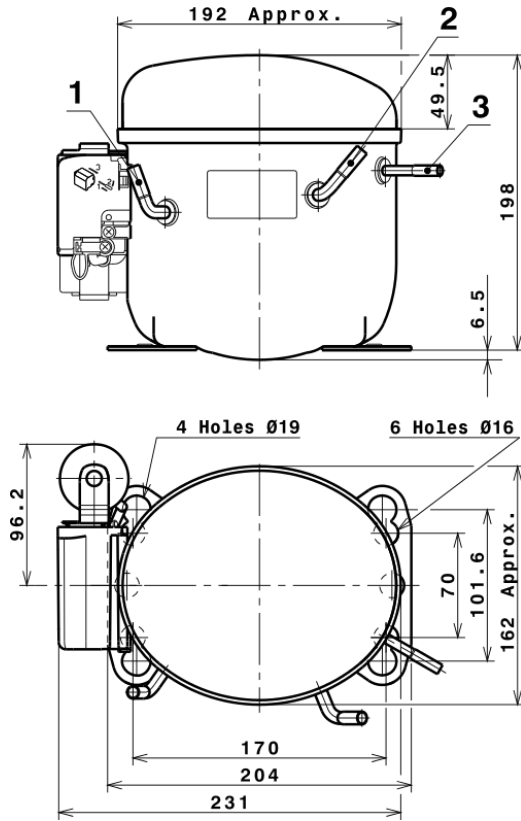
60	-40	101	199	1,87	0,51	0,44
60	-35	142	247	1,99	0,58	0,50
60	-30	195	296	2,14	0,66	0,57
60	-25	260	347	2,30	0,75	0,65
60	-23,3	285	364	2,37	0,78	0,68
60	-20	338	399	2,49	0,85	0,73
60	-15	427	452	2,71	0,95	0,82
60	-10	529	507	2,95	1,04	0,90

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.991,9335646110	428,3927000894	2,6683094986	25,525239276417
2	50,7818880745	5,3029067660	0,0349072766	0,75415264859149
3	-21,1530029751	3,4897040210	0,0152701504	-0,1409922683122
4	0,2314469662	0,0302863112	0,0004752705	0,005497647134996
5	-0,4306352175	0,1127961263	0,0004459985	-0,0026864640795071

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



## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

$\varnothing 16$  holes (170x70 net)



### AMERICAN FEET

$\varnothing 19$  holes (165x101.6 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R404A LBP

