

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **MLY12LAa**
Voltage **220-240V 50Hz ~1**
Refrigerant **R404A**

APPLICATION

COMPRESSOR

MOTOR

Application	Low Back Pressure	Displacement	10,70 cm ³	Nominal Power	3/8 hp
Refrigerant	R404A	Diameter	25,40 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-40,0 °C to -10,0 °C	Stroke	21,11 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	11,18 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	395 cm ³	Locked Rotor Amps (LRA)	18,50 A
				Max. Cont. Current (MCC)	4,00 A
				Main W. resist. at 25°C	5,20 Ω
				Start W. resist. at 25°C	16,85 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	490 kCal/h	387 W
COP	1,33 W/W	0,94 W/W
EER	1,14 kCal/Wh	0,82 kCal/Wh
Input Power	430 W	410 W
Current	2,95 A	2,89 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	Option 2		
Reference	2014 149.	QLZ-7.8A		
Pick-Up	7,80 A	7,80 A		
Drop-Out	6,65 A	6,65 A		
Protector	Option 1			
Reference	T0266			
Current	11,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 52,00 °C			

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ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	223	267	2,55	0,97	0,84
40	-35	297	305	2,63	1,13	0,97
40	-30	391	348	2,72	1,31	1,12
40	-25	503	395	2,85	1,48	1,27
40	-23,3	546	413	2,90	1,54	1,32
40	-20	636	448	3,01	1,65	1,42
40	-15	787	506	3,20	1,81	1,56
40	-10	958	569	3,45	1,96	1,68

45	-40	209	263	2,54	0,92	0,79
45	-35	282	304	2,62	1,08	0,93
45	-30	374	349	2,73	1,24	1,07
45	-25	485	400	2,86	1,41	1,21
45	-23,3	527	419	2,92	1,47	1,26
45	-20	616	456	3,03	1,57	1,35
45	-15	766	516	3,24	1,72	1,48
45	-10	935	582	3,50	1,87	1,61

50	-40	195	259	2,54	0,88	0,75
50	-35	266	303	2,62	1,02	0,88
50	-30	357	351	2,73	1,18	1,02
50	-25	467	405	2,88	1,34	1,15
50	-23,3	509	424	2,93	1,39	1,20
50	-20	596	463	3,06	1,50	1,29
50	-15	745	527	3,28	1,64	1,41
50	-10	913	596	3,56	1,78	1,53

55	-40	181	255	2,53	0,83	0,71
55	-35	251	302	2,62	0,97	0,83
55	-30	340	353	2,74	1,12	0,96
55	-25	449	410	2,89	1,27	1,10
55	-23,3	490	430	2,95	1,33	1,14
55	-20	577	471	3,08	1,42	1,22
55	-15	724	538	3,32	1,57	1,35
55	-10	890	609	3,62	1,70	1,46

60	-40	167	251	2,52	0,77	0,67
60	-35	236	301	2,62	0,91	0,78
60	-30	323	355	2,74	1,06	0,91
60	-25	430	414	2,90	1,21	1,04
60	-23,3	471	436	2,97	1,26	1,08
60	-20	557	479	3,11	1,35	1,16
60	-15	703	548	3,37	1,49	1,28
60	-10	868	623	3,68	1,62	1,39

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	236	267	2,55	0,88	0,76
40	-35	326	305	2,63	1,07	0,92
40	-30	432	348	2,72	1,24	1,07
40	-25	554	395	2,85	1,40	1,21
40	-23,3	599	413	2,90	1,45	1,25
40	-20	692	448	3,01	1,54	1,33
40	-15	847	506	3,20	1,67	1,45
40	-10	1.017	569	3,45	1,79	1,55

45	-40	209	263	2,54	0,80	0,69
45	-35	289	304	2,62	0,95	0,82
45	-30	386	349	2,73	1,10	0,95
45	-25	498	400	2,86	1,24	1,08
45	-23,3	540	419	2,92	1,29	1,11
45	-20	627	456	3,03	1,37	1,19
45	-15	771	516	3,24	1,49	1,29
45	-10	932	582	3,50	1,60	1,38

50	-40	183	259	2,54	0,71	0,61
50	-35	253	303	2,62	0,84	0,72
50	-30	340	351	2,73	0,97	0,84
50	-25	442	405	2,88	1,09	0,94
50	-23,3	481	424	2,93	1,13	0,98
50	-20	561	463	3,06	1,21	1,05
50	-15	696	527	3,28	1,32	1,14
50	-10	847	596	3,56	1,42	1,23

55	-40	156	255	2,53	0,61	0,53
55	-35	217	302	2,62	0,72	0,62
55	-30	294	353	2,74	0,83	0,72
55	-25	387	410	2,89	0,94	0,82
55	-23,3	422	430	2,95	0,98	0,85
55	-20	495	471	3,08	1,05	0,91
55	-15	620	538	3,32	1,15	1,00
55	-10	762	609	3,62	1,25	1,08

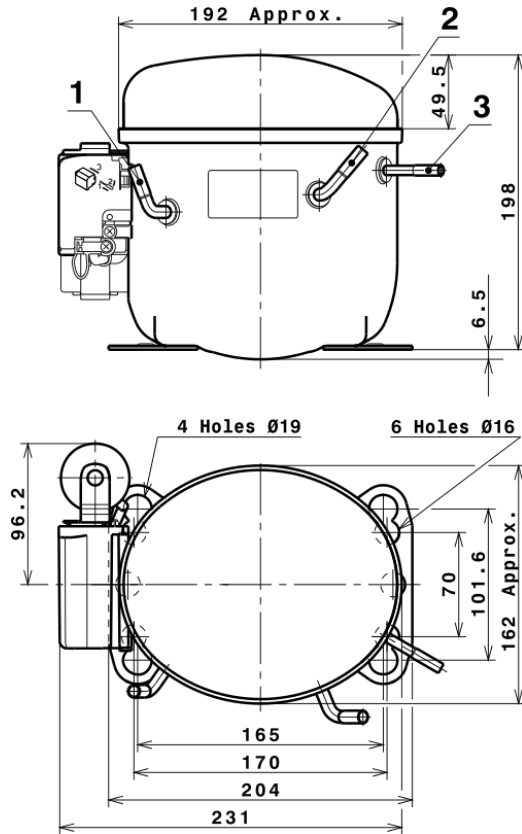
60	-40	130	251	2,52	0,52	0,45
60	-35	181	301	2,62	0,60	0,52
60	-30	248	355	2,74	0,70	0,60
60	-25	331	414	2,90	0,80	0,69
60	-23,3	363	436	2,97	0,83	0,72
60	-20	430	479	3,11	0,90	0,78
60	-15	545	548	3,37	0,99	0,86
60	-10	676	623	3,68	1,09	0,94

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.224,3393797778	570,6004563664	3,5076586652	45,772907112211
2	56,8392256996	10,8236286044	0,0581523723	1,3936865205216
3	-21,5999091521	3,9692117800	0,0169100299	-0,15372585154534
4	0,3053071851	0,1049780353	0,0008998498	0,012077203751283
5	-0,4078882717	0,1196731152	0,0004597511	-0,0018742458718253

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

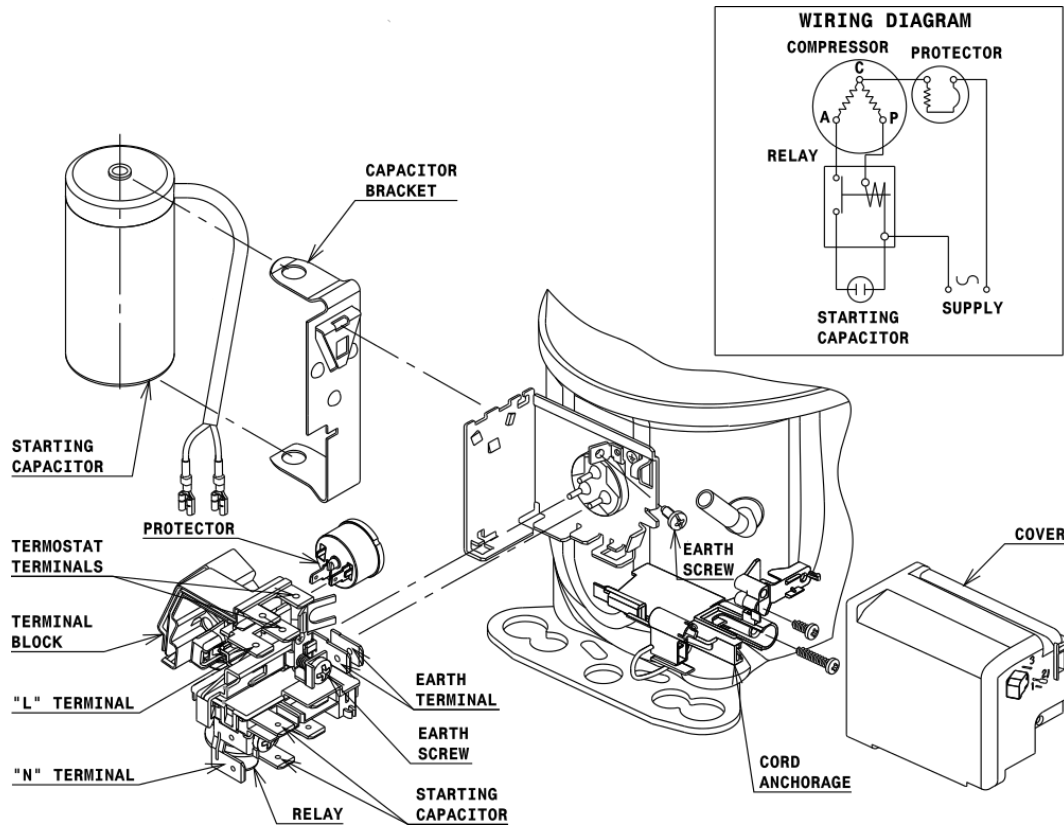


DESIGNATION INTERNAL DIAM.

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)



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



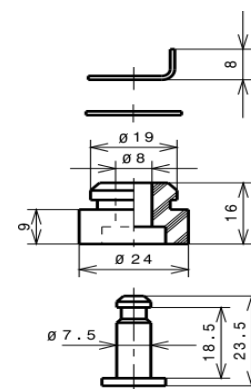
AMERICAN FEET

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



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R404A LBP

