

Technical Data Sheet

Compressor model **MLY12LRa**
 Voltage **115-127V 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 10,70 cm³
 Diameter 25,40 mm
 Stroke 21,12 mm
 Net Weight 11,01 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 400 cm³

MOTOR

Nominal Power 3/8 hp
 Voltage/Frequency 115-127V 60Hz
 Voltage range 98-140 V
 Type CSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 42,00 A
 Max. Cont. Current (MCC) 8,20 A
 Main W. resist. at 25°C 1,04 Ω
 Start W. resist. at 25°C 6,66 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	600 kCal/h	478 W
COP	1,34 W/W	0,96 W/W
EER	1,15 kCal/Wh	0,83 kCal/Wh
Input Power	522 W	499 W
Current	6,02 A	5,85 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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	250 µF 160 V			
Relay	Option 1			
Reference	2014 187.			
Pick-Up	20,30 A			
Drop-Out	17,25 A			
Protector	Option 1			
Reference	T0258			
Current	23,50 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	120,00 / 52,00 °C			

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	265	302	4,75	1,02	0,88
40	-35	365	354	4,99	1,20	1,03
40	-30	479	407	5,27	1,37	1,18
40	-25	609	462	5,61	1,53	1,32
40	-23,3	656	481	5,73	1,59	1,36
40	-20	753	519	6,00	1,69	1,45
40	-15	912	577	6,44	1,84	1,58
40	-10	1.086	637	6,95	1,98	1,71

45	-40	253	302	4,75	0,97	0,84
45	-35	351	358	5,01	1,14	0,98
45	-30	464	415	5,32	1,30	1,12
45	-25	591	474	5,69	1,45	1,25
45	-23,3	637	495	5,83	1,50	1,29
45	-20	733	535	6,12	1,59	1,37
45	-15	890	597	6,61	1,73	1,49
45	-10	1.061	661	7,18	1,87	1,61

50	-40	242	302	4,75	0,93	0,80
50	-35	337	362	5,03	1,08	0,93
50	-30	448	423	5,37	1,23	1,06
50	-25	573	487	5,77	1,37	1,18
50	-23,3	619	508	5,92	1,42	1,22
50	-20	713	551	6,24	1,50	1,29
50	-15	867	618	6,79	1,63	1,40
50	-10	1.037	686	7,41	1,76	1,51

55	-40	230	302	4,75	0,89	0,76
55	-35	324	366	5,05	1,03	0,88
55	-30	432	432	5,41	1,16	1,00
55	-25	555	499	5,85	1,29	1,11
55	-23,3	600	522	6,02	1,34	1,15
55	-20	693	568	6,37	1,42	1,22
55	-15	845	638	6,97	1,54	1,32
55	-10	1.012	710	7,65	1,66	1,43

60	-40	219	302	4,75	0,84	0,72
60	-35	310	370	5,07	0,97	0,84
60	-30	416	440	5,46	1,10	0,95
60	-25	537	511	5,94	1,22	1,05
60	-23,3	581	536	6,12	1,26	1,09
60	-20	672	584	6,50	1,34	1,15
60	-15	823	658	7,15	1,45	1,25
60	-10	988	735	7,90	1,56	1,34

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	281	302	4,75	0,93	0,80
40	-35	396	354	4,99	1,12	0,97
40	-30	523	407	5,27	1,28	1,11
40	-25	662	462	5,61	1,43	1,24
40	-23,3	713	481	5,73	1,48	1,28
40	-20	814	519	6,00	1,57	1,36
40	-15	977	577	6,44	1,69	1,46
40	-10	1.153	637	6,95	1,81	1,57

45	-40	253	302	4,75	0,84	0,72
45	-35	357	358	5,01	1,00	0,86
45	-30	473	415	5,32	1,14	0,98
45	-25	601	474	5,69	1,27	1,09
45	-23,3	647	495	5,83	1,31	1,13
45	-20	741	535	6,12	1,39	1,20
45	-15	893	597	6,61	1,50	1,29
45	-10	1.057	661	7,18	1,60	1,38

50	-40	226	302	4,75	0,75	0,65
50	-35	318	362	5,03	0,88	0,76
50	-30	423	423	5,37	1,00	0,86
50	-25	539	487	5,77	1,11	0,96
50	-23,3	582	508	5,92	1,14	0,99
50	-20	668	551	6,24	1,21	1,05
50	-15	809	618	6,79	1,31	1,13
50	-10	962	686	7,41	1,40	1,21

55	-40	199	302	4,75	0,66	0,57
55	-35	280	366	5,05	0,76	0,66
55	-30	373	432	5,41	0,86	0,75
55	-25	478	499	5,85	0,96	0,83
55	-23,3	516	522	6,02	0,99	0,85
55	-20	595	568	6,37	1,05	0,91
55	-15	725	638	6,97	1,14	0,98
55	-10	866	710	7,65	1,22	1,05

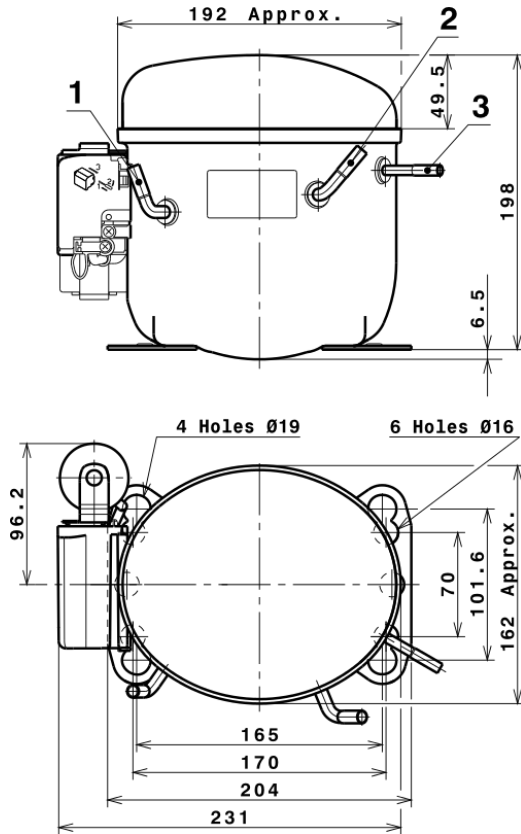
60	-40	172	302	4,75	0,57	0,49
60	-35	241	370	5,07	0,65	0,56
60	-30	323	440	5,46	0,73	0,63
60	-25	416	511	5,94	0,81	0,70
60	-23,3	451	536	6,12	0,84	0,73
60	-20	522	584	6,50	0,89	0,77
60	-15	640	658	7,15	0,97	0,84
60	-10	770	735	7,90	1,05	0,91

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.469,4587371024	514,8523458866	5,8737414866	50,175218493971
2	58,6176846037	6,6189207928	0,0942481317	1,3909761423223
3	-24,4519068221	6,7087185578	0,0665418802	-0,17459708816477
4	0,2292066497	0,0366194235	0,0016716589	0,0096387346116928
5	-0,4737401595	0,1677179639	0,0016635470	-0,0027365374402712

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)



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

