

# Technical Data Sheet

Compressor model **MLY80RAa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R404A**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	8,10 cm <sup>3</sup>	Nominal Power	3/8 hp
Refrigerant	R404A	Diameter	24,29 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	17,47 mm	Voltage range	187-264 V
Expansion	Capillar/Valve	Net Weight	11,29 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 <sup>3</sup>	Locked Rotor Amps (LRA)	14,00 A
				Max. Cont. Current (MCC)	5,70 A
				Main W. resist. at 25°C	5,37 Ω
				Start W. resist. at 25°C	11,92 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.140 kCal/h	1.049 W
COP	2,27 W/W	1,84 W/W
EER	1,95 kCal/Wh	1,59 kCal/Wh
Input Power	585 W	571 W
Current	3,40 A	3,34 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °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 149.			
Pick-Up	7,80 A			
Drop-Out	6,65 A			
Protector	Option 1	Option 2		
Reference	MRA38133	T0267		
Current	11,50 A	11,00 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 52,00 °C	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	-25	385	302	2,42	1,48	1,27
40	-20	500	331	2,50	1,76	1,51
40	-15	635	359	2,59	2,06	1,77
40	-10	790	388	2,68	2,37	2,03
40	-5	964	417	2,77	2,69	2,31
40	0	1.157	446	2,87	3,02	2,60
40	5	1.370	475	2,97	3,36	2,89
40	7,2	1.470	488	3,02	3,51	3,02
40	10	1.603	504	3,08	3,70	3,18

45	-25	350	306	2,43	1,33	1,14
45	-20	454	339	2,52	1,56	1,34
45	-15	577	372	2,63	1,80	1,55
45	-10	720	405	2,73	2,07	1,78
45	-5	882	439	2,85	2,34	2,01
45	0	1.064	472	2,96	2,62	2,25
45	5	1.265	505	3,09	2,91	2,50
45	7,2	1.360	520	3,14	3,04	2,62
45	10	1.486	539	3,21	3,21	2,76

50	-25	315	310	2,44	1,18	1,02
50	-20	407	348	2,55	1,36	1,17
50	-15	519	385	2,67	1,57	1,35
50	-10	650	423	2,79	1,79	1,54
50	-5	801	460	2,92	2,02	1,74
50	0	971	498	3,06	2,27	1,95
50	5	1.160	536	3,20	2,52	2,17
50	7,2	1.250	553	3,27	2,63	2,26
50	10	1.370	574	3,35	2,78	2,39

55	-25	280	314	2,45	1,04	0,89
55	-20	360	356	2,58	1,18	1,01
55	-15	460	398	2,71	1,35	1,16
55	-10	580	440	2,85	1,53	1,32
55	-5	719	482	3,00	1,73	1,49
55	0	878	524	3,16	1,95	1,67
55	5	1.056	566	3,32	2,17	1,86
55	7,2	1.140	585	3,40	2,27	1,95
55	10	1.253	609	3,50	2,39	2,06

60	-25	245	318	2,46	0,90	0,77
60	-20	314	364	2,60	1,00	0,86
60	-15	402	411	2,75	1,14	0,98
60	-10	510	457	2,91	1,30	1,12
60	-5	637	504	3,08	1,47	1,27
60	0	784	550	3,26	1,66	1,43
60	5	951	597	3,45	1,85	1,59
60	7,2	1.030	618	3,54	1,94	1,67
60	10	1.136	644	3,65	2,05	1,77

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	403	304	2,42	1,33	1,15
40	-20	528	333	2,50	1,59	1,37
40	-15	671	361	2,59	1,86	1,60
40	-10	833	391	2,68	2,13	1,84
40	-5	1.014	420	2,78	2,42	2,09
40	0	1.214	449	2,88	2,70	2,34
40	5	1.433	478	2,99	3,00	2,59
40	7,2	1.535	491	3,03	3,13	2,70
40	10	1.671	508	3,10	3,29	2,84

45	-25	362	308	2,43	1,18	1,02
45	-20	472	341	2,53	1,38	1,20
45	-15	601	374	2,63	1,60	1,39
45	-10	748	408	2,74	1,83	1,58
45	-5	915	442	2,86	2,07	1,79
45	0	1.100	475	2,97	2,32	2,00
45	5	1.305	509	3,10	2,56	2,21
45	7,2	1.401	524	3,16	2,67	2,31
45	10	1.528	543	3,23	2,81	2,43

50	-25	321	312	2,44	1,03	0,89
50	-20	417	350	2,56	1,19	1,03
50	-15	531	387	2,67	1,37	1,18
50	-10	664	425	2,80	1,56	1,35
50	-5	816	463	2,93	1,76	1,52
50	0	987	502	3,07	1,97	1,70
50	5	1.177	540	3,22	2,18	1,88
50	7,2	1.266	557	3,29	2,27	1,97
50	10	1.386	578	3,37	2,40	2,07

55	-25	280	316	2,46	0,89	0,77
55	-20	361	358	2,58	1,01	0,87
55	-15	461	400	2,72	1,15	0,99
55	-10	579	443	2,86	1,31	1,13
55	-5	717	485	3,01	1,48	1,28
55	0	873	528	3,17	1,65	1,43
55	5	1.049	571	3,34	1,84	1,59
55	7,2	1.132	589	3,42	1,92	1,66
55	10	1.243	613	3,52	2,03	1,75

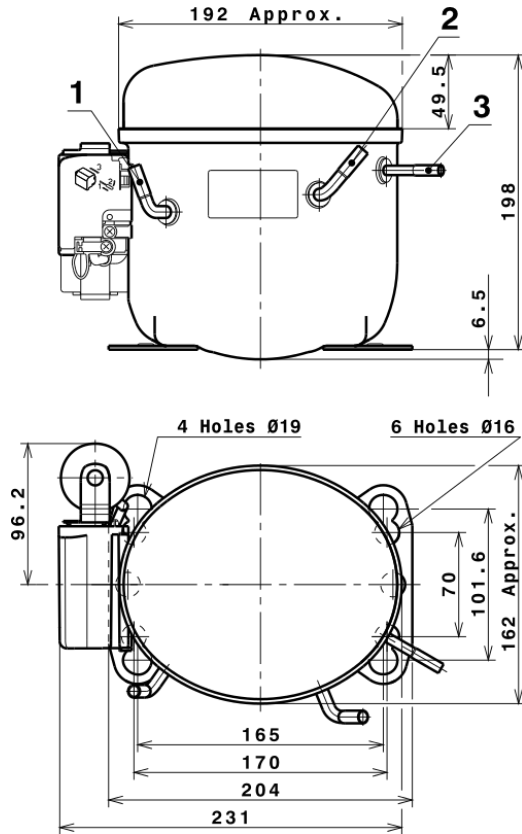
60	-25	240	320	2,47	0,75	0,65
60	-20	306	366	2,61	0,83	0,72
60	-15	391	413	2,76	0,95	0,82
60	-10	495	460	2,92	1,08	0,93
60	-5	618	507	3,09	1,22	1,05
60	0	760	554	3,28	1,37	1,18
60	5	920	601	3,47	1,53	1,32
60	7,2	997	622	3,56	1,60	1,38
60	10	1.100	649	3,67	1,70	1,47

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.123,4126478547	244,8447696391	2,0259217141	41,753008087198
2	65,0692506749	-1,1301542075	-0,0075634886	1,4842036657486
3	-23,5460478342	5,4440803752	0,0220084813	-0,20462457186498
4	0,3587603633	0,0078707220	0,0002083699	0,01650788742581
5	-0,6112381783	0,1848129541	0,0007844278	-0,0039595139602085

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 HMBP

