

Technical Data Sheet

Compressor model **MLY90RAb**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R404A**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	9,09 cm ³	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	19,62 mm	Voltage range	187-264 V
Expansion	Capillar/Valve	Net Weight	11,44 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	400 cm ³	Locked Rotor Amps (LRA)	17,00 A
				Max. Cont. Current (MCC)	5,30 A
				Main W. resist. at 25°C	4,68 Ω
				Start W. resist. at 25°C	10,50 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.225 kCal/h	1.129 W
COP	2,34 W/W	1,89 W/W
EER	2,01 kCal/Wh	1,63 kCal/Wh
Input Power	610 W	597 W
Current	3,20 A	3,14 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T _e)	7,2 °C	5,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	46,0 °C	55,0 °C
Ambient temp. (T _{amb.})	35,0 °C	32,0 °C
Suction temp. (T _{suction})	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		
Run capacitor	10 μF 420 V		
Relay	Option 1		
Reference	2014 149. + NTC15Ω		
Pick-Up	7,70 A		
Drop-Out	6,50 A		
Protector	Option 1	Option 2	
Reference	MRA38139	T0267	
Current	10,30 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	420	333	2,06	1,47	1,26
40	-20	546	363	2,17	1,75	1,50
40	-15	692	393	2,28	2,05	1,76
40	-10	859	421	2,39	2,37	2,04
40	-5	1.045	449	2,50	2,71	2,33
40	0	1.252	476	2,61	3,06	2,63
40	5	1.479	501	2,72	3,43	2,95
40	7,2	1.585	513	2,77	3,60	3,09
40	10	1.726	526	2,83	3,81	3,28

45	-25	385	337	2,07	1,33	1,14
45	-20	498	372	2,20	1,56	1,34
45	-15	631	406	2,33	1,81	1,56
45	-10	784	438	2,46	2,08	1,79
45	-5	958	470	2,59	2,37	2,04
45	0	1.151	502	2,72	2,67	2,29
45	5	1.365	532	2,85	2,98	2,57
45	7,2	1.465	545	2,91	3,13	2,69
45	10	1.598	561	2,98	3,31	2,85

50	-25	350	341	2,09	1,19	1,03
50	-20	450	380	2,23	1,38	1,18
50	-15	570	418	2,38	1,58	1,36
50	-10	710	456	2,53	1,81	1,56
50	-5	870	492	2,68	2,06	1,77
50	0	1.050	528	2,83	2,31	1,99
50	5	1.250	563	2,98	2,59	2,22
50	7,2	1.345	578	3,05	2,71	2,33
50	10	1.471	596	3,14	2,87	2,47

55	-25	315	345	2,10	1,06	0,91
55	-20	402	389	2,26	1,20	1,03
55	-15	508	431	2,43	1,37	1,18
55	-10	635	473	2,60	1,56	1,34
55	-5	782	514	2,77	1,77	1,52
55	0	949	554	2,95	1,99	1,71
55	5	1.136	593	3,12	2,23	1,92
55	7,2	1.225	610	3,20	2,34	2,01
55	10	1.344	631	3,30	2,48	2,13

60	-25	280	349	2,11	0,93	0,80
60	-20	353	397	2,30	1,04	0,89
60	-15	447	444	2,48	1,17	1,01
60	-10	560	490	2,67	1,33	1,14
60	-5	694	536	2,87	1,51	1,30
60	0	848	580	3,06	1,70	1,46
60	5	1.022	624	3,26	1,91	1,64
60	7,2	1.105	643	3,35	2,00	1,72
60	10	1.216	666	3,47	2,12	1,83

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	440	335	2,06	1,31	1,14
40	-20	576	365	2,18	1,58	1,36
40	-15	731	395	2,29	1,85	1,60
40	-10	905	424	2,40	2,14	1,85
40	-5	1.099	452	2,51	2,43	2,10
40	0	1.313	479	2,62	2,74	2,37
40	5	1.546	505	2,73	3,06	2,65
40	7,2	1.655	516	2,78	3,21	2,77
40	10	1.799	531	2,84	3,39	2,93

45	-25	399	339	2,08	1,18	1,02
45	-20	518	374	2,21	1,39	1,20
45	-15	657	408	2,34	1,61	1,39
45	-10	815	441	2,47	1,85	1,60
45	-5	993	474	2,60	2,10	1,81
45	0	1.190	505	2,73	2,36	2,04
45	5	1.407	536	2,87	2,63	2,27
45	7,2	1.509	549	2,93	2,75	2,37
45	10	1.644	566	3,00	2,90	2,51

50	-25	357	343	2,09	1,04	0,90
50	-20	460	382	2,24	1,20	1,04
50	-15	583	421	2,39	1,38	1,20
50	-10	725	459	2,54	1,58	1,37
50	-5	886	495	2,69	1,79	1,55
50	0	1.067	531	2,85	2,01	1,74
50	5	1.268	567	3,00	2,24	1,93
50	7,2	1.362	582	3,07	2,34	2,02
50	10	1.488	601	3,16	2,48	2,14

55	-25	316	347	2,11	0,91	0,79
55	-20	402	391	2,27	1,03	0,89
55	-15	508	434	2,44	1,17	1,01
55	-10	634	476	2,61	1,33	1,15
55	-5	779	517	2,79	1,51	1,30
55	0	944	558	2,96	1,69	1,46
55	5	1.129	597	3,14	1,89	1,63
55	7,2	1.216	615	3,22	1,98	1,71
55	10	1.333	636	3,32	2,09	1,81

60	-25	274	351	2,12	0,78	0,67
60	-20	344	399	2,30	0,86	0,75
60	-15	434	447	2,49	0,97	0,84
60	-10	544	493	2,68	1,10	0,95
60	-5	673	539	2,88	1,25	1,08
60	0	821	584	3,08	1,41	1,22
60	5	990	628	3,29	1,58	1,36
60	7,2	1.070	647	3,38	1,65	1,43
60	10	1.177	672	3,49	1,75	1,51

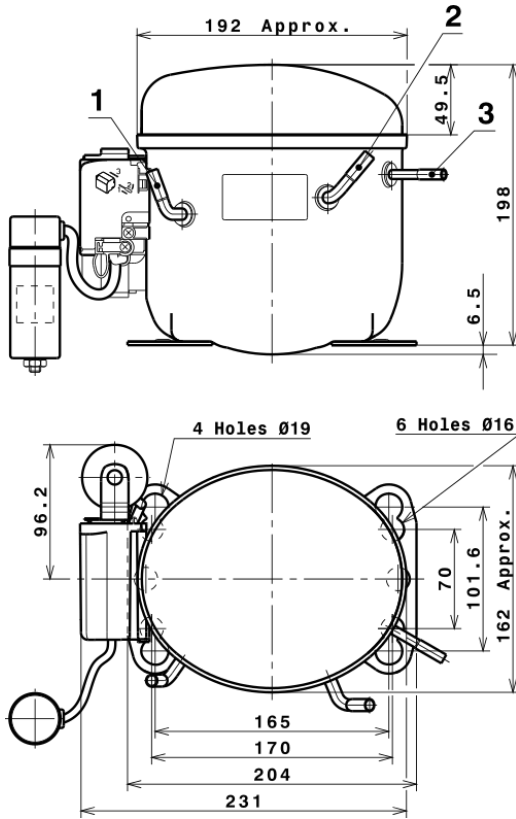
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2,297,1826481676	275,6412462422	1,6731259473	45,307763977656
2	70,6193561410	-1,6513159078	-0,0096654886	1,6241400367255
3	-25,4775811387	5,4440803752	0,0248524639	-0,22415304512681
4	0,3701388737	-0,0111772042	0,0000887826	0,017164229474771
5	-0,6820717842	0,1848129541	0,0008721986	-0,0052336386319753

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Technical Data Sheet

COMPRESSOR DIMENSIONS

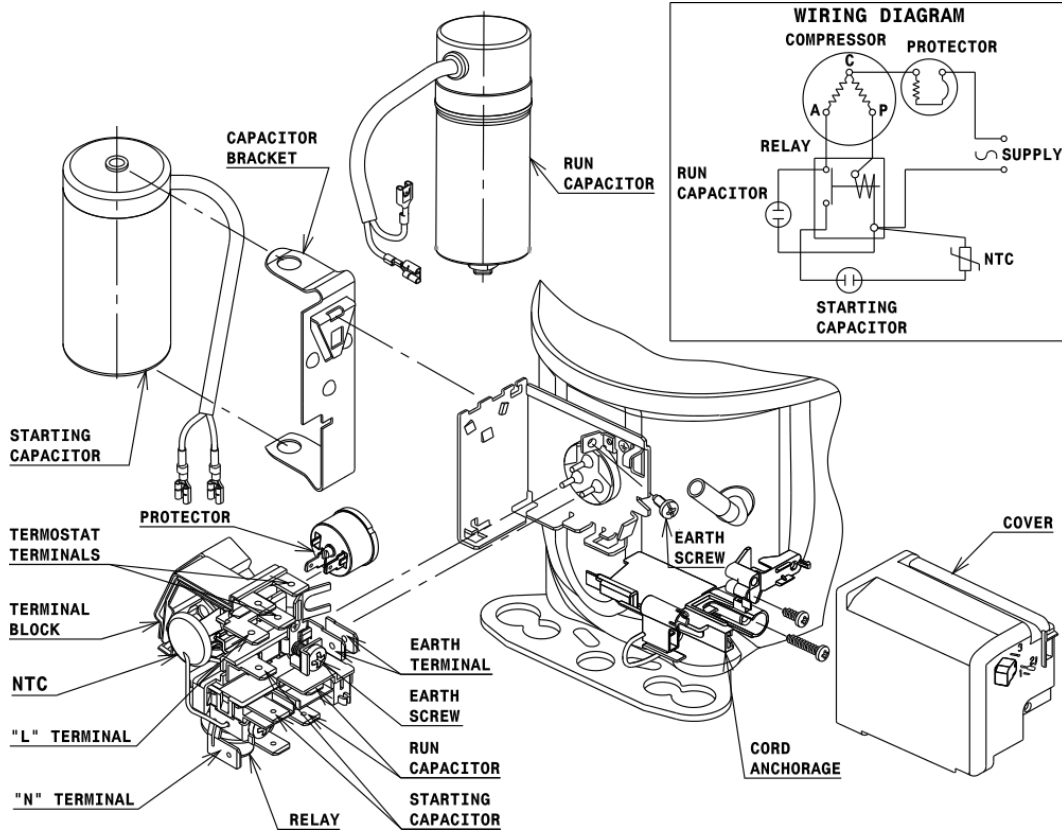


DESIGNATION INTERNAL DIAM.

1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



Technical Data Sheet

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 HMBP

