

Technical Data Sheet

Compressor model **NLY45RRb**
 Voltage **115-127V 60Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	4,56 cm ³	Nominal Power	1/5 hp
Refrigerant	R290	Diameter	19,09 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,93 mm	Voltage range	98-140 V
Expansion	Capillar/Valve	Net Weight	9,29 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	300 cm ³	Locked Rotor Amps (LRA)	20,50 A
				Max. Cont. Current (MCC)	5,10 A
				Main W. resist. at 25°C	2,80 Ω
				Start W. resist. at 25°C	8,55 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	633 kCal/h	618 W
COP	2,61 W/W	2,25 W/W
EER	2,24 kCal/Wh	1,94 kCal/Wh
Input Power	282 W	275 W
Current	2,61 A	2,54 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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	125 µF 160 V		
Run capacitor	15 µF 250 V		
Relay	Option 1		
Reference	2014 166. + NTC3Ω		
Pick-Up	11,00 A		
Drop-Out	9,35 A		
Protector	Option 1	Option 2	
Reference	MRA38132	T0253	
Current	16,20 A	15,00 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	

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	219	162	1,65	1,57	1,35
40	-20	276	174	1,73	1,85	1,59
40	-15	344	186	1,81	2,15	1,85
40	-10	422	199	1,90	2,47	2,12
40	-5	511	212	2,00	2,80	2,41
40	0	610	225	2,11	3,15	2,70
40	5	719	240	2,22	3,49	3,00
40	7,2	771	246	2,28	3,65	3,13
40	10	840	254	2,35	3,84	3,30

45	-25	203	163	1,66	1,45	1,25
45	-20	255	176	1,74	1,68	1,45
45	-15	318	190	1,84	1,95	1,67
45	-10	392	205	1,95	2,23	1,91
45	-5	476	220	2,06	2,52	2,17
45	0	570	235	2,19	2,82	2,43
45	5	675	251	2,32	3,13	2,69
45	7,2	725	258	2,39	3,27	2,81
45	10	791	267	2,47	3,44	2,96

50	-25	187	164	1,66	1,33	1,14
50	-20	235	179	1,76	1,52	1,31
50	-15	293	195	1,87	1,75	1,51
50	-10	362	211	1,99	2,00	1,72
50	-5	441	227	2,12	2,26	1,94
50	0	531	245	2,27	2,53	2,17
50	5	632	262	2,42	2,80	2,41
50	7,2	679	270	2,50	2,92	2,51
50	10	742	280	2,59	3,08	2,65

55	-25	171	165	1,67	1,21	1,04
55	-20	214	182	1,78	1,37	1,18
55	-15	268	199	1,90	1,56	1,34
55	-10	332	217	2,04	1,78	1,53
55	-5	407	235	2,19	2,01	1,73
55	0	492	254	2,35	2,25	1,94
55	5	588	273	2,53	2,50	2,15
55	7,2	633	282	2,61	2,61	2,24
55	10	694	293	2,72	2,75	2,37

60	-25	155	166	1,68	1,09	0,93
60	-20	194	185	1,80	1,22	1,05
60	-15	243	204	1,94	1,39	1,19
60	-10	302	223	2,09	1,57	1,35
60	-5	372	243	2,25	1,78	1,53
60	0	453	264	2,44	2,00	1,72
60	5	544	285	2,64	2,22	1,91
60	7,2	587	294	2,73	2,32	2,00
60	10	645	306	2,85	2,45	2,11

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	236	163	1,66	1,45	1,25
40	-20	298	175	1,73	1,70	1,47
40	-15	371	187	1,82	1,98	1,71
40	-10	455	200	1,91	2,28	1,97
40	-5	550	213	2,01	2,58	2,23
40	0	656	227	2,12	2,89	2,50
40	5	773	241	2,24	3,21	2,77
40	7,2	828	248	2,29	3,35	2,89
40	10	901	256	2,37	3,52	3,04

45	-25	217	164	1,66	1,33	1,14
45	-20	274	177	1,75	1,54	1,33
45	-15	341	191	1,85	1,78	1,54
45	-10	420	206	1,95	2,04	1,76
45	-5	510	221	2,07	2,31	1,99
45	0	610	236	2,20	2,58	2,23
45	5	722	253	2,34	2,86	2,47
45	7,2	774	260	2,40	2,98	2,58
45	10	844	269	2,49	3,14	2,71

50	-25	199	165	1,67	1,21	1,04
50	-20	250	180	1,77	1,39	1,20
50	-15	312	196	1,88	1,59	1,38
50	-10	385	212	2,00	1,81	1,57
50	-5	469	229	2,13	2,05	1,77
50	0	564	246	2,28	2,29	1,98
50	5	670	264	2,44	2,54	2,19
50	7,2	720	272	2,51	2,65	2,29
50	10	787	282	2,61	2,79	2,41

55	-25	180	166	1,68	1,09	0,94
55	-20	226	183	1,79	1,23	1,07
55	-15	282	200	1,91	1,41	1,22
55	-10	350	218	2,05	1,60	1,38
55	-5	428	237	2,20	1,81	1,56
55	0	518	256	2,36	2,02	1,75
55	5	618	275	2,54	2,25	1,94
55	7,2	666	284	2,63	2,34	2,03
55	10	729	295	2,74	2,47	2,14

60	-25	162	167	1,68	0,97	0,84
60	-20	202	186	1,81	1,09	0,94
60	-15	253	205	1,95	1,23	1,07
60	-10	315	224	2,10	1,40	1,21
60	-5	387	245	2,27	1,58	1,37
60	0	471	265	2,45	1,78	1,53
60	5	566	286	2,65	1,98	1,71
60	7,2	611	296	2,75	2,07	1,78
60	10	672	308	2,87	2,18	1,88

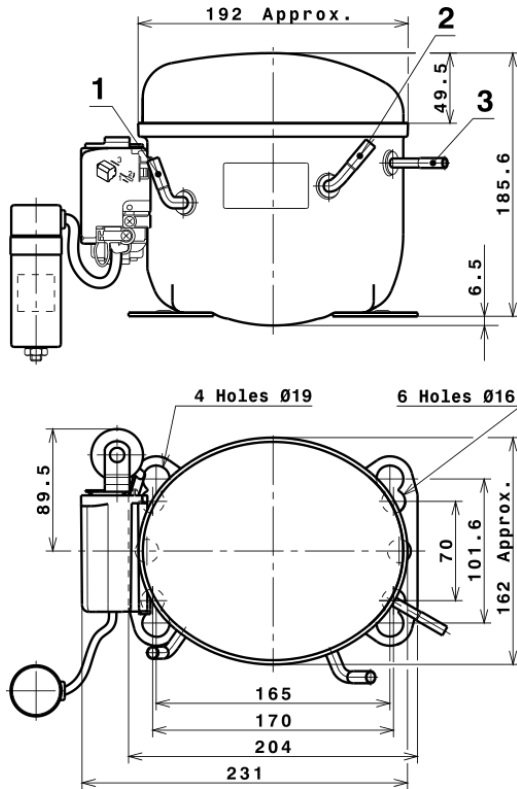
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.028,3868952824	153,9391343991	1,3919029766	9,1757676190538
2	31,3106233784	0,1177923415	-0,0019009651	0,3115238872585
3	-9,5434464756	1,9764250233	0,0188758610	-0,038541944849069
4	0,2154618756	0,0118169003	0,0002999579	0,0034098630484448
5	-0,2324613302	0,0708294743	0,0007016877	-0,00070130544545818

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

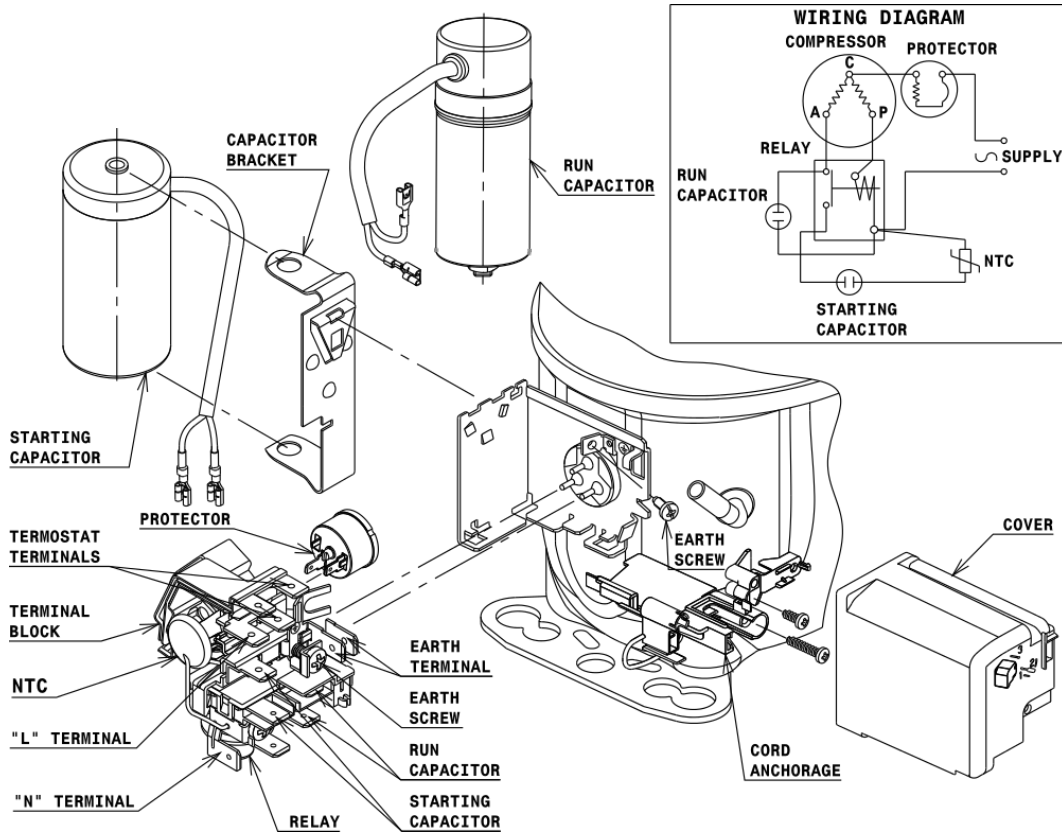
COMPRESSOR DIMENSIONS



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

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 HMBP

