

Technical Data Sheet

Compressor model **NLY45RAb**
 Voltage **220-240V 50Hz ~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	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,93 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	9,54 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 MINER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	350 cm ³	Locked Rotor Amps (LRA)	8,20 A
				Max. Cont. Current (MCC)	1,60 A
				Main W. resist. at 25°C	16,10 Ω
				Start W. resist. at 25°C	23,50 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	530 kCal/h	518 W
COP	2,75 W/W	2,34 W/W
EER	2,37 kCal/Wh	2,02 kCal/Wh
Input Power	224 W	221 W
Current	1,18 A	1,17 A



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	47- 56 µF 330 V		
Run capacitor	4 µF 400 V		
Relay	Option 1		
Reference	2014 125. + NTC15Ω		
Pick-Up	4,65 A		
Drop-Out	3,95 A		
Protector	Option 1	Option 2	
Reference	T0067	AE18BY	
Current	6,60 A	6,50 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 62,00 °C	105,00 / 62,00 °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	185	141	0,80	1,53	1,31
40	-20	235	151	0,84	1,81	1,56
40	-15	294	160	0,88	2,14	1,84
40	-10	360	167	0,91	2,50	2,15
40	-5	434	173	0,94	2,91	2,51
40	0	517	178	0,97	3,37	2,90
40	5	608	182	0,98	3,88	3,33
40	7,2	650	184	0,99	4,12	3,54
40	10	706	185	0,99	4,45	3,82

45	-25	170	141	0,80	1,40	1,21
45	-20	216	153	0,85	1,64	1,41
45	-15	271	164	0,90	1,92	1,65
45	-10	333	173	0,94	2,24	1,92
45	-5	404	182	0,98	2,58	2,22
45	0	483	189	1,01	2,97	2,55
45	5	569	195	1,04	3,40	2,92
45	7,2	610	197	1,05	3,60	3,10
45	10	664	199	1,06	3,87	3,33

50	-25	155	141	0,80	1,28	1,10
50	-20	197	155	0,86	1,48	1,27
50	-15	248	168	0,92	1,72	1,48
50	-10	307	180	0,97	1,98	1,71
50	-5	373	190	1,02	2,28	1,96
50	0	448	199	1,06	2,61	2,25
50	5	531	207	1,10	2,98	2,56
50	7,2	570	211	1,11	3,15	2,71
50	10	622	214	1,13	3,38	2,90

55	-25	140	141	0,80	1,15	0,99
55	-20	179	157	0,87	1,32	1,14
55	-15	225	172	0,94	1,52	1,31
55	-10	280	186	1,00	1,75	1,51
55	-5	343	199	1,06	2,01	1,73
55	0	414	210	1,11	2,29	1,97
55	5	493	220	1,16	2,61	2,24
55	7,2	530	224	1,18	2,75	2,37
55	10	580	229	1,20	2,95	2,53

60	-25	125	141	0,80	1,03	0,89
60	-20	160	159	0,88	1,17	1,00
60	-15	202	176	0,96	1,33	1,15
60	-10	253	192	1,03	1,53	1,32
60	-5	312	207	1,10	1,76	1,51
60	0	379	220	1,16	2,00	1,72
60	5	454	233	1,22	2,27	1,95
60	7,2	490	238	1,25	2,40	2,06
60	10	538	243	1,28	2,57	2,21

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	199	142	0,80	1,40	1,21
40	-20	254	152	0,85	1,67	1,44
40	-15	317	161	0,89	1,97	1,70
40	-10	388	168	0,92	2,31	1,99
40	-5	468	174	0,95	2,68	2,32
40	0	556	180	0,97	3,10	2,68
40	5	653	183	0,99	3,56	3,08
40	7,2	698	185	0,99	3,78	3,27
40	10	758	186	1,00	4,08	3,52

45	-25	182	142	0,80	1,28	1,11
45	-20	232	154	0,86	1,51	1,30
45	-15	290	165	0,90	1,76	1,52
45	-10	357	174	0,95	2,05	1,77
45	-5	432	183	0,99	2,36	2,04
45	0	516	190	1,02	2,71	2,35
45	5	608	196	1,05	3,10	2,68
45	7,2	651	198	1,06	3,28	2,84
45	10	709	201	1,07	3,53	3,05

50	-25	165	142	0,80	1,16	1,00
50	-20	210	156	0,87	1,35	1,16
50	-15	264	169	0,92	1,56	1,35
50	-10	326	181	0,98	1,80	1,56
50	-5	397	191	1,02	2,07	1,79
50	0	476	201	1,07	2,37	2,05
50	5	563	209	1,11	2,70	2,33
50	7,2	604	212	1,12	2,85	2,46
50	10	659	216	1,14	3,06	2,64

55	-25	148	142	0,80	1,04	0,90
55	-20	188	158	0,87	1,19	1,03
55	-15	237	173	0,94	1,37	1,18
55	-10	295	187	1,00	1,58	1,36
55	-5	361	200	1,06	1,81	1,56
55	0	435	211	1,12	2,06	1,78
55	5	518	221	1,17	2,34	2,02
55	7,2	557	225	1,19	2,47	2,14
55	10	609	230	1,21	2,65	2,29

60	-25	131	142	0,80	0,92	0,80
60	-20	167	160	0,88	1,04	0,90
60	-15	211	177	0,96	1,19	1,03
60	-10	264	193	1,03	1,36	1,18
60	-5	325	208	1,10	1,56	1,35
60	0	395	222	1,17	1,78	1,54
60	5	473	234	1,23	2,02	1,75
60	7,2	510	239	1,25	2,13	1,84
60	10	560	245	1,28	2,28	1,97

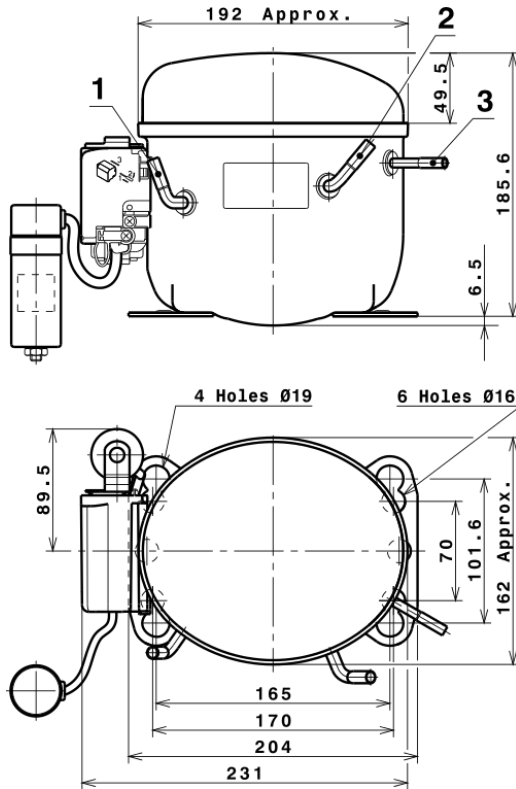
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	880,3152869844	97,4583642037	0,5680218768	7,9320761768184
2	26,0253584499	-2,5000633037	-0,0120888573	0,25779452503633
3	-8,3057681704	2,1717367179	0,0104872828	-0,036324844631184
4	0,1656517677	-0,0239196626	-0,0000847991	0,0026539738598093
5	-0,1941111157	0,0868694687	0,0004194913	-0,00057222105985386

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

COMPRESSOR DIMENSIONS

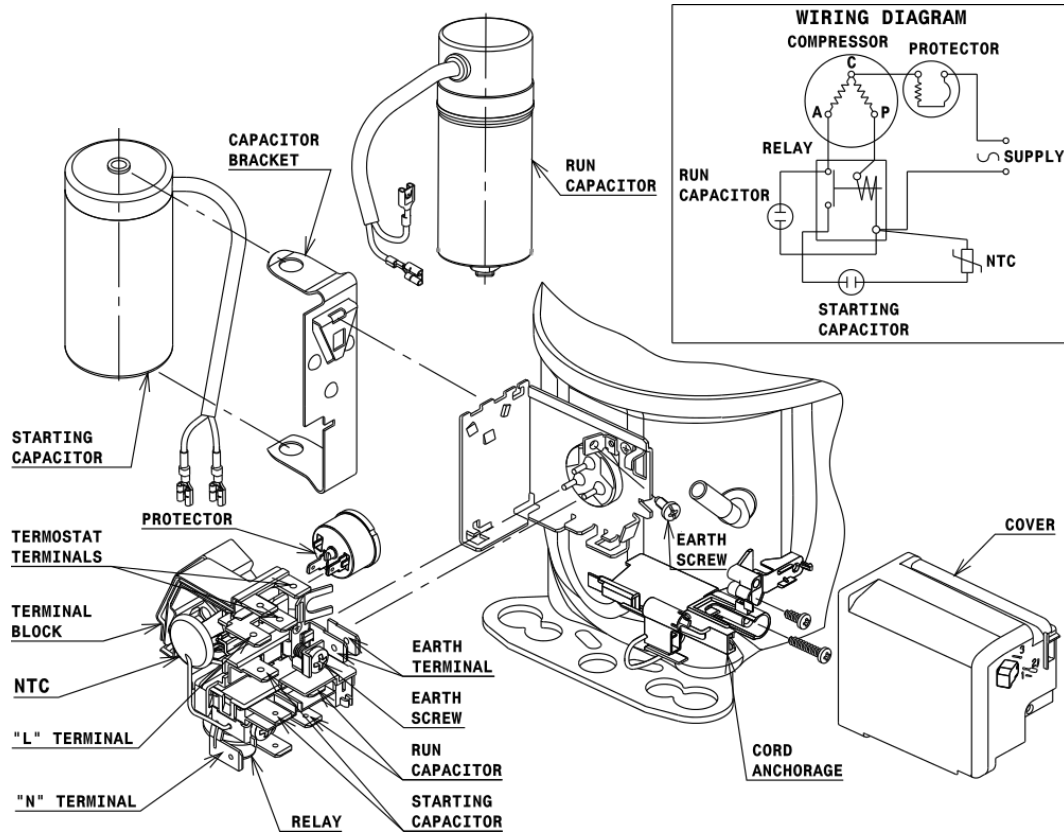


DESIGNATION INTERNAL DIAM.

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

