

Technical Data Sheet

Compressor model **NLY45LRb**
 Voltage **115-127V 60Hz ~1**
 Refrigerant **R290**

APPLICATION

Application	Low Back Pressure
Refrigerant	R290
Evaporating Temp.	-40,0 °C to -10,0 °C
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 °C

COMPRESSOR

Displacement	4,56 cm ³
Diameter	19,09 mm
Stroke	15,93 mm
Net Weight	9,31 Kg
Oil type	ISO VG 46 MINER
Oil charge	300 cm ³

MOTOR

Nominal Power	1/6 hp
Voltage/Frequency	115-127V 60Hz
Voltage range	98-140 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	22,50 A
Max. Cont. Current (MCC)	3,40 A
Main W. resist. at 25°C	2,98 Ω
Start W. resist. at 25°C	9,22 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	207 kCal/h	177 W
COP	1,38 W/W	1,06 W/W
EER	1,19 kCal/Wh	0,92 kCal/Wh
Input Power	174 W	167 W
Current	1,69 A	1,64 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	200 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			
Reference	T0269			
Current	9,60 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	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	-40	102	137	1,40	0,87	0,74
40	-35	132	147	1,48	1,05	0,90
40	-30	171	158	1,57	1,26	1,09
40	-25	220	170	1,66	1,50	1,29
40	-23,3	239	175	1,70	1,59	1,36
40	-20	278	184	1,77	1,75	1,51
40	-15	345	199	1,88	2,01	1,73
40	-10	421	216	2,01	2,27	1,95

45	-40	92	130	1,35	0,82	0,71
45	-35	122	142	1,44	1,00	0,86
45	-30	161	155	1,54	1,21	1,04
45	-25	210	169	1,65	1,44	1,24
45	-23,3	228	175	1,69	1,52	1,31
45	-20	267	185	1,78	1,68	1,44
45	-15	334	202	1,91	1,92	1,65
45	-10	410	221	2,05	2,16	1,86

50	-40	82	123	1,29	0,78	0,67
50	-35	112	137	1,40	0,95	0,82
50	-30	151	152	1,52	1,15	0,99
50	-25	199	168	1,65	1,37	1,18
50	-23,3	218	174	1,69	1,45	1,25
50	-20	256	186	1,78	1,60	1,38
50	-15	323	205	1,93	1,83	1,57
50	-10	399	226	2,08	2,05	1,77

55	-40	72	116	1,24	0,72	0,62
55	-35	102	132	1,36	0,90	0,77
55	-30	140	149	1,50	1,10	0,94
55	-25	189	167	1,64	1,31	1,13
55	-23,3	207	174	1,69	1,38	1,19
55	-20	246	187	1,79	1,53	1,31
55	-15	312	208	1,95	1,74	1,50
55	-10	388	231	2,12	1,95	1,68

60	-40	62	109	1,18	0,66	0,57
60	-35	91	127	1,32	0,84	0,72
60	-30	130	146	1,47	1,04	0,89
60	-25	178	166	1,63	1,24	1,07
60	-23,3	196	174	1,69	1,32	1,13
60	-20	235	188	1,80	1,45	1,25
60	-15	301	211	1,97	1,66	1,43
60	-10	377	236	2,16	1,86	1,60

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	110	137	1,40	0,80	0,69
40	-35	146	147	1,48	1,00	0,86
40	-30	191	158	1,57	1,21	1,05
40	-25	245	170	1,66	1,44	1,24
40	-23,3	265	175	1,70	1,51	1,31
40	-20	307	184	1,77	1,67	1,44
40	-15	378	199	1,88	1,89	1,64
40	-10	457	216	2,01	2,12	1,83

45	-40	96	130	1,35	0,74	0,64
45	-35	129	142	1,44	0,91	0,79
45	-30	172	155	1,54	1,11	0,96
45	-25	222	169	1,65	1,31	1,13
45	-23,3	242	175	1,69	1,38	1,20
45	-20	282	185	1,78	1,52	1,31
45	-15	350	202	1,91	1,73	1,49
45	-10	426	221	2,05	1,93	1,67

50	-40	82	123	1,29	0,67	0,57
50	-35	113	137	1,40	0,82	0,71
50	-30	152	152	1,52	1,00	0,86
50	-25	200	168	1,65	1,19	1,03
50	-23,3	218	174	1,69	1,25	1,08
50	-20	256	186	1,78	1,38	1,19
50	-15	321	205	1,93	1,56	1,35
50	-10	395	226	2,08	1,75	1,51

55	-40	68	116	1,24	0,58	0,51
55	-35	96	132	1,36	0,73	0,63
55	-30	132	149	1,50	0,89	0,77
55	-25	177	167	1,64	1,06	0,92
55	-23,3	195	174	1,69	1,12	0,97
55	-20	231	187	1,79	1,23	1,07
55	-15	293	208	1,95	1,41	1,22
55	-10	364	231	2,12	1,58	1,36

60	-40	54	109	1,18	0,49	0,43
60	-35	79	127	1,32	0,62	0,54
60	-30	113	146	1,47	0,77	0,67
60	-25	155	166	1,63	0,93	0,80
60	-23,3	171	174	1,69	0,99	0,85
60	-20	206	188	1,80	1,09	0,94
60	-15	265	211	1,97	1,25	1,08
60	-10	333	236	2,16	1,41	1,22

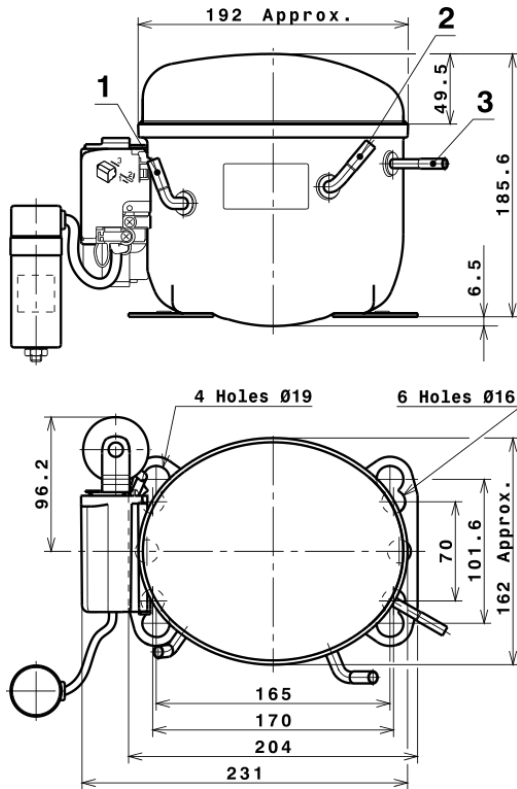
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	930,9191736439	186,1147040356	1,7743353780	8,7284252994462
2	24,4772618515	0,8608391544	0,0049758218	0,25952486813377
3	-7,5408951950	1,8430685924	0,0138922473	-0,028678936351982
4	0,1667823761	0,0284383086	0,0001878141	0,0024225975331781
5	-0,1190350757	0,0818351869	0,0006273249	-0,00010592004665209

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
----------	---

Technical Data Sheet

COMPRESSOR DIMENSIONS

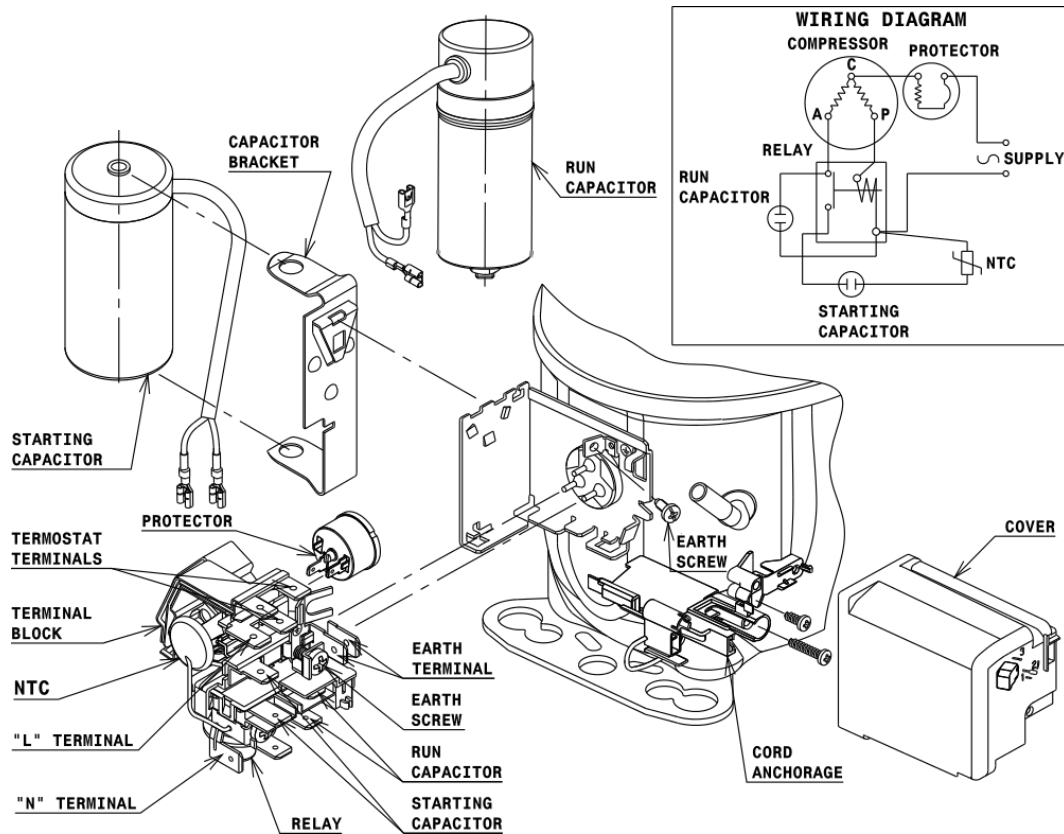


DESIGNATION INTERNAL DIAM.

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 LBP

