

Technical Data Sheet

Compressor model **NLY60LRa**
 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 5,98 cm³
 Diameter 20,88 mm
 Stroke 17,47 mm
 Net Weight 10,07 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 350 cm³

MOTOR

Nominal Power 1/5 hp
 Voltage/Frequency 115-127V 60Hz
 Voltage range 98-140 V
 Type CSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 23,00 A
 Max. Cont. Current (MCC) 5,80 A
 Main W. resist. at 25°C 1,76 Ω
 Start W. resist. at 25°C 5,16 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	300 kCal/h	260 W
COP	1,42 W/W	1,10 W/W
EER	1,22 kCal/Wh	0,95 kCal/Wh
Input Power	245 W	237 W
Current	3,10 A	3,04 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			
Relay	Option 1			
Reference	2014 170.			
Pick-Up	12,10 A			
Drop-Out	10,30 A			
Protector	Option 1	Option 2		
Reference	MRA38134	T0348		
Current	15,80 A	15,40 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	-40	141	164	2,68	1,00	0,86
40	-35	189	186	2,76	1,18	1,02
40	-30	247	206	2,86	1,39	1,20
40	-25	314	226	2,98	1,62	1,39
40	-23,3	339	232	3,02	1,70	1,46
40	-20	391	244	3,10	1,86	1,60
40	-15	477	262	3,22	2,12	1,82
40	-10	573	278	3,35	2,40	2,06

45	-40	131	161	2,67	0,95	0,81
45	-35	178	185	2,76	1,12	0,96
45	-30	235	208	2,87	1,32	1,13
45	-25	302	230	3,00	1,53	1,31
45	-23,3	326	237	3,04	1,60	1,38
45	-20	377	250	3,13	1,76	1,51
45	-15	462	269	3,28	2,00	1,72
45	-10	557	287	3,43	2,26	1,94

50	-40	122	159	2,66	0,89	0,77
50	-35	168	185	2,76	1,06	0,91
50	-30	224	209	2,88	1,24	1,07
50	-25	289	233	3,02	1,44	1,24
50	-23,3	313	241	3,07	1,51	1,30
50	-20	363	255	3,17	1,65	1,42
50	-15	448	277	3,34	1,88	1,62
50	-10	541	297	3,51	2,12	1,82

55	-40	112	156	2,65	0,84	0,72
55	-35	157	184	2,76	0,99	0,85
55	-30	212	211	2,89	1,17	1,00
55	-25	276	237	3,04	1,36	1,17
55	-23,3	300	245	3,10	1,42	1,22
55	-20	350	261	3,22	1,56	1,34
55	-15	433	284	3,40	1,77	1,52
55	-10	525	306	3,60	2,00	1,72

60	-40	103	154	2,64	0,78	0,67
60	-35	147	184	2,75	0,93	0,80
60	-30	200	212	2,90	1,10	0,94
60	-25	263	240	3,07	1,28	1,10
60	-23,3	287	249	3,13	1,34	1,15
60	-20	336	266	3,26	1,47	1,26
60	-15	418	292	3,47	1,67	1,43
60	-10	509	316	3,69	1,88	1,61

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	152	164	2,68	0,93	0,80
40	-35	208	186	2,76	1,12	0,97
40	-30	274	206	2,86	1,32	1,14
40	-25	348	226	2,98	1,54	1,33
40	-23,3	375	232	3,02	1,61	1,39
40	-20	430	244	3,10	1,76	1,52
40	-15	522	262	3,22	1,99	1,72
40	-10	622	278	3,35	2,24	1,94

45	-40	136	161	2,67	0,85	0,73
45	-35	188	185	2,76	1,02	0,88
45	-30	249	208	2,87	1,20	1,03
45	-25	318	230	3,00	1,39	1,20
45	-23,3	344	237	3,04	1,45	1,26
45	-20	396	250	3,13	1,59	1,37
45	-15	483	269	3,28	1,80	1,55
45	-10	579	287	3,43	2,02	1,74

50	-40	121	159	2,66	0,76	0,66
50	-35	168	185	2,76	0,91	0,79
50	-30	224	209	2,88	1,07	0,92
50	-25	289	233	3,02	1,24	1,07
50	-23,3	313	241	3,07	1,30	1,12
50	-20	362	255	3,17	1,42	1,23
50	-15	445	277	3,34	1,61	1,39
50	-10	535	297	3,51	1,81	1,56

55	-40	106	156	2,65	0,68	0,58
55	-35	148	184	2,76	0,80	0,70
55	-30	200	211	2,89	0,95	0,82
55	-25	260	237	3,04	1,10	0,95
55	-23,3	282	245	3,10	1,15	0,99
55	-20	328	261	3,22	1,26	1,09
55	-15	406	284	3,40	1,43	1,23
55	-10	492	306	3,60	1,61	1,39

60	-40	90	154	2,64	0,59	0,51
60	-35	128	184	2,75	0,70	0,60
60	-30	175	212	2,90	0,82	0,71
60	-25	230	240	3,07	0,96	0,83
60	-23,3	251	249	3,13	1,01	0,87
60	-20	295	266	3,26	1,11	0,96
60	-15	368	292	3,47	1,26	1,09
60	-10	449	316	3,69	1,42	1,23

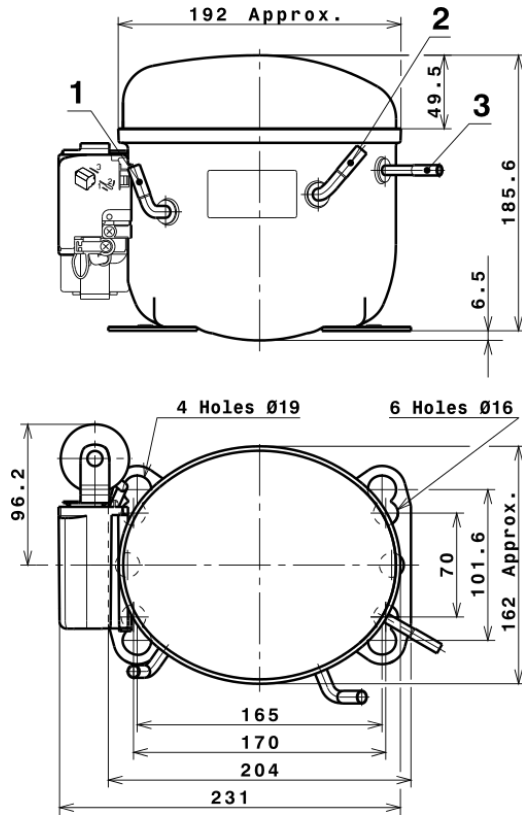
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.262,0122952215	203,0660896629	2,7907847114	11,835946547889
2	31,5583147956	-0,5851567607	0,0160826134	0,33084032478221
3	-10,7294008822	2,7662274716	0,0249436298	-0,045811979486496
4	0,1704487324	-0,0243723746	0,0003813996	0,0025268681242766
5	-0,1909491115	0,0819265697	0,0006675392	-0,00056458566026307

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

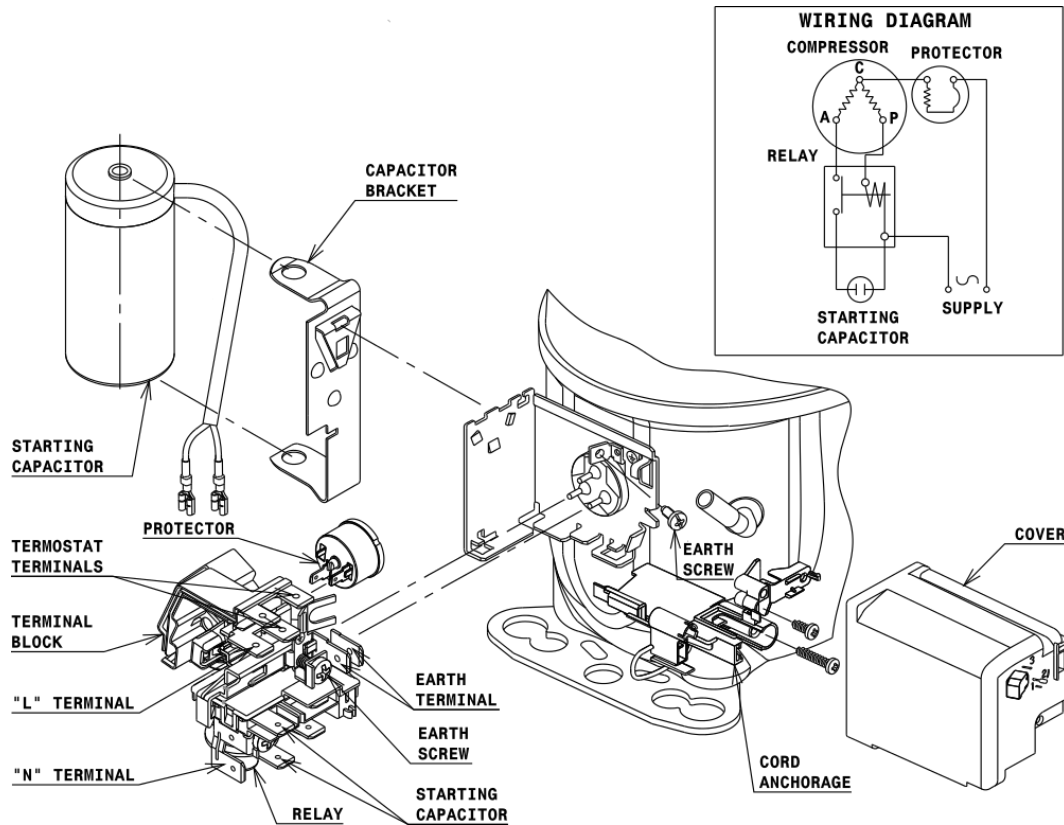
COMPRESSOR DIMENSIONS



DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



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 R290 LBP

