

Technical Data Sheet

Compressor model **NLY60LAb**
 Voltage **220-240V 50Hz ~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 cm ³
Diameter	20,88 mm
Stroke	17,47 mm
Net Weight	9,77 Kg
Oil type	ISO VG 46 MINER
Oil charge	300 cm ³

MOTOR

Nominal Power	1/5 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	10,00 A
Max. Cont. Current (MCC)	2,00 A
Main W. resist. at 25°C	12,20 Ω
Start W. resist. at 25°C	16,80 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	230 kCal/h	198 W
COP	1,42 W/W	1,10 W/W
EER	1,22 kCal/Wh	0,95 kCal/Wh
Input Power	188 W	181 W
Current	1,05 A	1,02 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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V		
Run capacitor	5 µF 400 V		
Relay	Option 1		
Reference	2014 127. + NTC15Ω		
Pick-Up	4,80 A		
Drop-Out	4,10 A		
Protector	Option 1	Option 2	Option 3
Reference	MST63AMK	T0069	AE26FHY
Current	7,10 A	7,10 A	7,10 A
Time check	7,5-14 seg	7,5-14 seg	7,5-14 seg
Disc temp. (Open/Close)	105,00 / 61,00 °C	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	-40	107	123	0,79	1,01	0,87
40	-35	142	137	0,84	1,21	1,04
40	-30	187	152	0,90	1,44	1,24
40	-25	242	167	0,96	1,68	1,45
40	-23,3	262	172	0,98	1,77	1,52
40	-20	305	183	1,03	1,94	1,67
40	-15	378	201	1,10	2,19	1,89
40	-10	460	219	1,18	2,45	2,11

45	-40	101	124	0,79	0,95	0,81
45	-35	135	139	0,85	1,13	0,97
45	-30	179	155	0,91	1,34	1,15
45	-25	232	172	0,98	1,57	1,35
45	-23,3	252	178	1,01	1,65	1,42
45	-20	293	189	1,06	1,80	1,55
45	-15	365	208	1,14	2,04	1,76
45	-10	445	227	1,22	2,28	1,96

50	-40	96	125	0,80	0,89	0,76
50	-35	128	141	0,86	1,06	0,91
50	-30	170	159	0,93	1,25	1,07
50	-25	221	177	1,00	1,46	1,25
50	-23,3	241	183	1,03	1,53	1,32
50	-20	282	195	1,08	1,68	1,44
50	-15	351	215	1,17	1,90	1,63
50	-10	430	236	1,26	2,12	1,83

55	-40	90	126	0,80	0,83	0,71
55	-35	121	144	0,87	0,98	0,84
55	-30	161	162	0,94	1,16	1,00
55	-25	211	181	1,02	1,35	1,16
55	-23,3	230	188	1,05	1,42	1,22
55	-20	270	201	1,11	1,56	1,34
55	-15	338	222	1,20	1,77	1,52
55	-10	415	244	1,30	1,98	1,70

60	-40	84	127	0,80	0,77	0,67
60	-35	114	146	0,88	0,91	0,78
60	-30	153	166	0,96	1,07	0,92
60	-25	201	186	1,04	1,26	1,08
60	-23,3	219	193	1,07	1,32	1,13
60	-20	258	207	1,13	1,45	1,24
60	-15	324	230	1,23	1,64	1,41
60	-10	400	253	1,34	1,84	1,58

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	115	123	0,79	0,94	0,81
40	-35	158	137	0,84	1,15	1,00
40	-30	209	152	0,90	1,38	1,19
40	-25	269	167	0,96	1,61	1,39
40	-23,3	291	172	0,98	1,69	1,46
40	-20	337	183	1,03	1,84	1,59
40	-15	414	201	1,10	2,06	1,78
40	-10	499	219	1,18	2,28	1,97

45	-40	105	124	0,79	0,85	0,73
45	-35	143	139	0,85	1,03	0,89
45	-30	190	155	0,91	1,23	1,06
45	-25	245	172	0,98	1,43	1,23
45	-23,3	266	178	1,01	1,50	1,29
45	-20	309	189	1,06	1,63	1,41
45	-15	381	208	1,14	1,84	1,59
45	-10	462	227	1,22	2,04	1,76

50	-40	95	125	0,80	0,76	0,66
50	-35	129	141	0,86	0,91	0,79
50	-30	171	159	0,93	1,08	0,93
50	-25	222	177	1,00	1,26	1,09
50	-23,3	241	183	1,03	1,32	1,14
50	-20	281	195	1,08	1,44	1,24
50	-15	349	215	1,17	1,62	1,40
50	-10	426	236	1,26	1,81	1,56

55	-40	85	126	0,80	0,67	0,58
55	-35	114	144	0,87	0,79	0,69
55	-30	152	162	0,94	0,94	0,81
55	-25	198	181	1,02	1,10	0,95
55	-23,3	216	188	1,05	1,15	0,99
55	-20	254	201	1,11	1,26	1,09
55	-15	317	222	1,20	1,43	1,23
55	-10	389	244	1,30	1,60	1,38

60	-40	75	127	0,80	0,59	0,51
60	-35	100	146	0,88	0,68	0,59
60	-30	133	166	0,96	0,80	0,69
60	-25	175	186	1,04	0,94	0,81
60	-23,3	191	193	1,07	0,99	0,86
60	-20	226	207	1,13	1,09	0,94
60	-15	285	230	1,23	1,24	1,07
60	-10	353	253	1,34	1,40	1,21

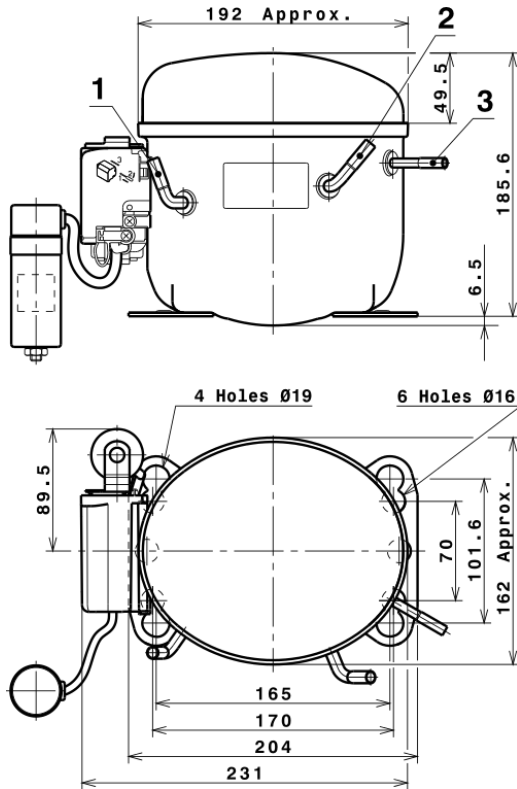
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.052,2687529982	173,5582049385	0,9757225004	10,045041384409
2	28,1020763255	2,1112277177	0,0106544398	0,30235631614507
3	-9,2506713439	2,2545798648	0,0105397773	-0,045702294135043
4	0,1667643683	0,0177393914	0,0001362294	0,0024301339937139
5	-0,1800176249	0,0512561435	0,0002439919	-0,00080623163043106

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)



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

