

# Technical Data Sheet

Compressor model **NLY60RAb**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R290**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	5,98 cm <sup>3</sup>	Nominal Power	1/4 hp
Refrigerant	R290	Diameter	20,88 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	17,47 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	9,74 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	295 cm <sup>3</sup>	Locked Rotor Amps (LRA)	10,00 A
				Max. Cont. Current (MCC)	2,60 A
				Main W. resist. at 25°C	12,46 Ω
				Start W. resist. at 25°C	18,65 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	720 kCal/h	703 W
COP	2,79 W/W	2,38 W/W
EER	2,40 kCal/Wh	2,06 kCal/Wh
Input Power	300 W	295 W
Current	1,50 A	1,48 A

## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	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	5 µF 400 V			
Relay	Option 1	Option 2		
Reference	2014 118. + NTC15î©	QLZ-3.75+NTC15		
Pick-Up	3.8 A	3.75 A		
Drop-Out	3.25 A	3.2 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	-25	251	175	0,99	1,67	1,43
40	-20	314	189	1,05	1,93	1,66
40	-15	390	203	1,11	2,23	1,92
40	-10	477	216	1,16	2,57	2,21
40	-5	577	228	1,21	2,94	2,53
40	0	688	240	1,26	3,34	2,87
40	5	812	250	1,30	3,77	3,24
40	7,2	870	255	1,32	3,97	3,41
40	10	947	261	1,34	4,23	3,64

45	-25	234	180	1,01	1,51	1,30
45	-20	292	196	1,08	1,73	1,49
45	-15	362	211	1,14	2,00	1,72
45	-10	445	226	1,20	2,29	1,97
45	-5	539	239	1,26	2,62	2,25
45	0	646	252	1,31	2,97	2,56
45	5	764	265	1,36	3,36	2,89
45	7,2	820	270	1,38	3,53	3,04
45	10	895	276	1,41	3,76	3,24

50	-25	217	185	1,03	1,36	1,17
50	-20	270	203	1,10	1,55	1,33
50	-15	335	219	1,17	1,78	1,53
50	-10	412	235	1,24	2,04	1,75
50	-5	502	251	1,30	2,33	2,00
50	0	603	265	1,36	2,64	2,27
50	5	716	279	1,42	2,98	2,57
50	7,2	770	285	1,44	3,14	2,70
50	10	842	292	1,47	3,35	2,88

55	-25	200	190	1,05	1,22	1,05
55	-20	248	209	1,13	1,38	1,19
55	-15	308	227	1,21	1,58	1,35
55	-10	380	245	1,28	1,80	1,55
55	-5	464	262	1,35	2,06	1,77
55	0	560	278	1,41	2,34	2,02
55	5	669	293	1,47	2,65	2,28
55	7,2	720	300	1,50	2,79	2,40
55	10	789	308	1,53	2,98	2,56

60	-25	183	195	1,07	1,09	0,94
60	-20	226	216	1,16	1,22	1,05
60	-15	281	236	1,24	1,39	1,19
60	-10	348	255	1,32	1,59	1,37
60	-5	427	273	1,39	1,82	1,56
60	0	518	291	1,46	2,07	1,78
60	5	621	308	1,53	2,35	2,02
60	7,2	670	315	1,56	2,47	2,13
60	10	736	324	1,59	2,64	2,27

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	270	176	0,99	1,53	1,33
40	-20	339	190	1,05	1,78	1,54
40	-15	421	204	1,11	2,06	1,78
40	-10	515	217	1,17	2,37	2,05
40	-5	621	230	1,22	2,71	2,34
40	0	741	241	1,26	3,07	2,65
40	5	873	252	1,31	3,46	2,99
40	7,2	935	257	1,33	3,64	3,15
40	10	1.017	262	1,35	3,88	3,35

45	-25	250	181	1,01	1,38	1,19
45	-20	313	197	1,08	1,59	1,37
45	-15	389	212	1,14	1,83	1,58
45	-10	477	227	1,21	2,10	1,81
45	-5	577	241	1,26	2,40	2,07
45	0	690	254	1,32	2,72	2,35
45	5	816	267	1,37	3,06	2,65
45	7,2	876	272	1,39	3,22	2,78
45	10	955	278	1,41	3,43	2,96

50	-25	231	186	1,03	1,24	1,07
50	-20	287	204	1,11	1,41	1,22
50	-15	357	221	1,18	1,62	1,40
50	-10	438	237	1,25	1,85	1,60
50	-5	533	252	1,31	2,11	1,83
50	0	640	267	1,37	2,40	2,07
50	5	760	281	1,42	2,70	2,34
50	7,2	816	287	1,45	2,85	2,46
50	10	892	294	1,48	3,03	2,62

55	-25	211	191	1,05	1,10	0,95
55	-20	261	210	1,14	1,24	1,07
55	-15	325	229	1,21	1,42	1,23
55	-10	400	246	1,29	1,62	1,40
55	-5	489	263	1,35	1,85	1,60
55	0	590	280	1,42	2,11	1,82
55	5	703	295	1,48	2,38	2,06
55	7,2	757	302	1,51	2,51	2,17
55	10	829	310	1,54	2,67	2,31

60	-25	191	196	1,08	0,98	0,84
60	-20	236	217	1,16	1,09	0,94
60	-15	293	237	1,25	1,24	1,07
60	-10	362	256	1,33	1,41	1,22
60	-5	444	275	1,40	1,62	1,40
60	0	539	293	1,47	1,84	1,59
60	5	647	310	1,54	2,09	1,80
60	7,2	698	317	1,57	2,20	1,90
60	10	767	326	1,60	2,35	2,03

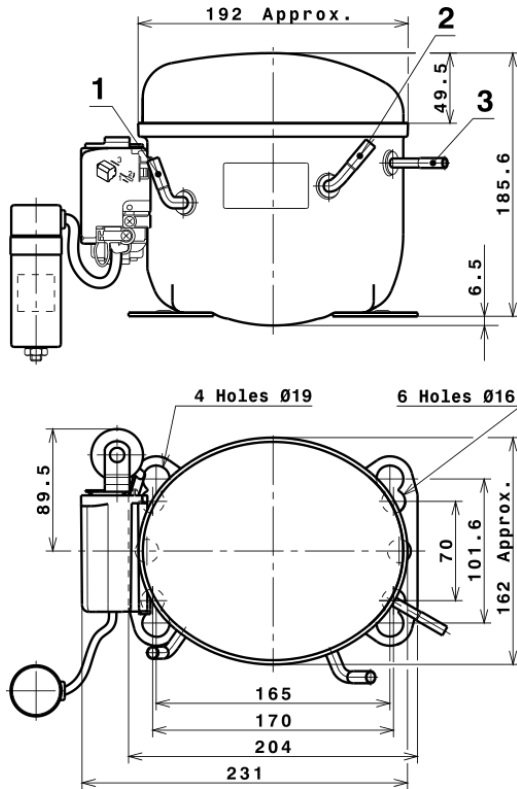
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.146,8528053447	141,9993865722	0,8757057825	10,140143818245
2	35,0547734435	-0,2024509748	-0,0000976198	0,34820683429529
3	-10,4236580289	2,6430027234	0,0104529752	-0,038227100819351
4	0,2473253100	-0,0131538372	-0,0000747847	0,0039067027854988
5	-0,2566927770	0,0645824756	0,0002423847	-0,00071996265575087

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

## COMPRESSOR DIMENSIONS

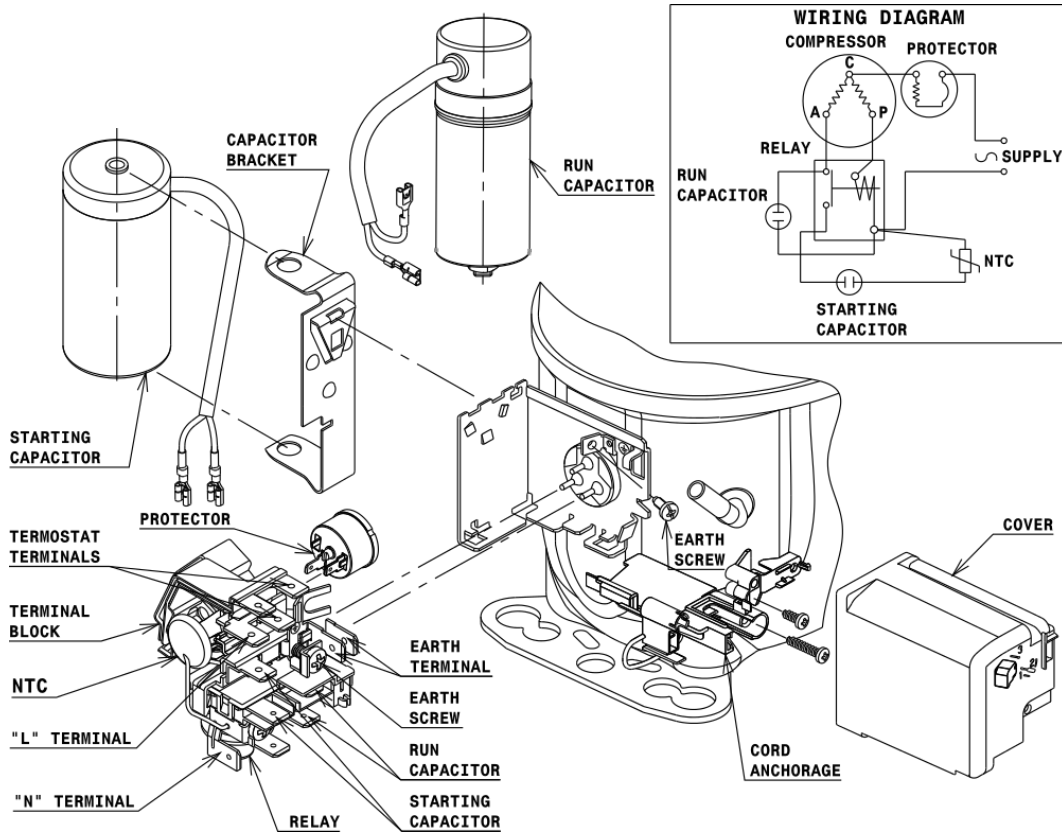


## DESIGNATION INTERNAL DIAM.

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

