

Technical Data Sheet

Compressor model **NLY60RAa**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	5,98 cm ³	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	198-255 V
Expansion	Capillar/Valve	Net Weight	9,64 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 MINER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	295 cm ³	Locked Rotor Amps (LRA)	10,00 A
				Max. Cont. Current (MCC)	2,70 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	2,58 W/W	2,20 W/W
EER	2,22 kCal/Wh	1,90 kCal/Wh
Input Power	325 W	320 W
Current	1,90 A	1,88 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			
Relay	Option 1	Option 2		
Reference	2014 118.	QLZ-3.75A		
Pick-Up	3,75 A	3.75 A		
Drop-Out	3,20 A	3.20 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	190	1,40	1,54	1,32
40	-20	314	206	1,45	1,78	1,53
40	-15	390	221	1,51	2,06	1,77
40	-10	477	234	1,56	2,37	2,04
40	-5	577	247	1,60	2,72	2,34
40	0	688	258	1,64	3,10	2,67
40	5	812	268	1,68	3,52	3,03
40	7,2	870	273	1,70	3,71	3,19
40	10	947	278	1,72	3,97	3,41

45	-25	234	194	1,41	1,40	1,21
45	-20	292	212	1,48	1,60	1,38
45	-15	362	229	1,54	1,84	1,58
45	-10	445	244	1,59	2,12	1,82
45	-5	539	259	1,65	2,42	2,08
45	0	646	273	1,70	2,76	2,37
45	5	764	285	1,75	3,12	2,68
45	7,2	820	290	1,76	3,29	2,83
45	10	895	296	1,79	3,51	3,02

50	-25	217	198	1,43	1,27	1,10
50	-20	270	218	1,50	1,44	1,24
50	-15	335	237	1,57	1,65	1,41
50	-10	412	255	1,63	1,88	1,62
50	-5	502	271	1,69	2,15	1,85
50	0	603	287	1,75	2,44	2,10
50	5	716	301	1,81	2,76	2,38
50	7,2	770	308	1,83	2,91	2,50
50	10	842	315	1,86	3,11	2,67

55	-25	200	202	1,44	1,15	0,99
55	-20	248	224	1,52	1,29	1,11
55	-15	308	245	1,60	1,46	1,26
55	-10	380	265	1,67	1,67	1,43
55	-5	464	284	1,74	1,90	1,64
55	0	560	301	1,81	2,16	1,86
55	5	669	318	1,87	2,44	2,10
55	7,2	720	325	1,90	2,58	2,22
55	10	789	334	1,93	2,75	2,37

60	-25	183	206	1,45	1,03	0,89
60	-20	226	230	1,54	1,14	0,98
60	-15	281	253	1,63	1,29	1,11
60	-10	348	275	1,71	1,47	1,26
60	-5	427	296	1,79	1,68	1,44
60	0	518	316	1,86	1,91	1,64
60	5	621	335	1,94	2,16	1,86
60	7,2	670	343	1,97	2,28	1,96
60	10	736	352	2,01	2,43	2,09

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	270	191	1,40	1,41	1,22
40	-20	339	207	1,46	1,64	1,42
40	-15	421	222	1,51	1,90	1,64
40	-10	515	235	1,56	2,19	1,89
40	-5	621	248	1,61	2,50	2,16
40	0	741	260	1,65	2,85	2,47
40	5	873	270	1,69	3,23	2,79
40	7,2	935	274	1,71	3,41	2,94
40	10	1.017	279	1,72	3,64	3,15

45	-25	250	195	1,42	1,28	1,11
45	-20	313	213	1,48	1,47	1,27
45	-15	389	230	1,54	1,69	1,46
45	-10	477	246	1,60	1,94	1,67
45	-5	577	261	1,65	2,21	1,91
45	0	690	274	1,70	2,52	2,18
45	5	816	287	1,75	2,85	2,46
45	7,2	876	292	1,77	3,00	2,59
45	10	955	298	1,80	3,20	2,77

50	-25	231	199	1,43	1,16	1,00
50	-20	287	219	1,50	1,31	1,13
50	-15	357	238	1,57	1,50	1,29
50	-10	438	256	1,64	1,71	1,48
50	-5	533	273	1,70	1,95	1,69
50	0	640	289	1,76	2,22	1,91
50	5	760	303	1,82	2,50	2,16
50	7,2	816	310	1,84	2,64	2,28
50	10	892	317	1,87	2,81	2,43

55	-25	211	203	1,44	1,04	0,90
55	-20	261	225	1,52	1,16	1,00
55	-15	325	246	1,60	1,32	1,14
55	-10	400	267	1,68	1,50	1,30
55	-5	489	286	1,75	1,71	1,48
55	0	590	303	1,82	1,94	1,68
55	5	703	320	1,88	2,20	1,90
55	7,2	757	327	1,91	2,31	2,00
55	10	829	336	1,94	2,47	2,13

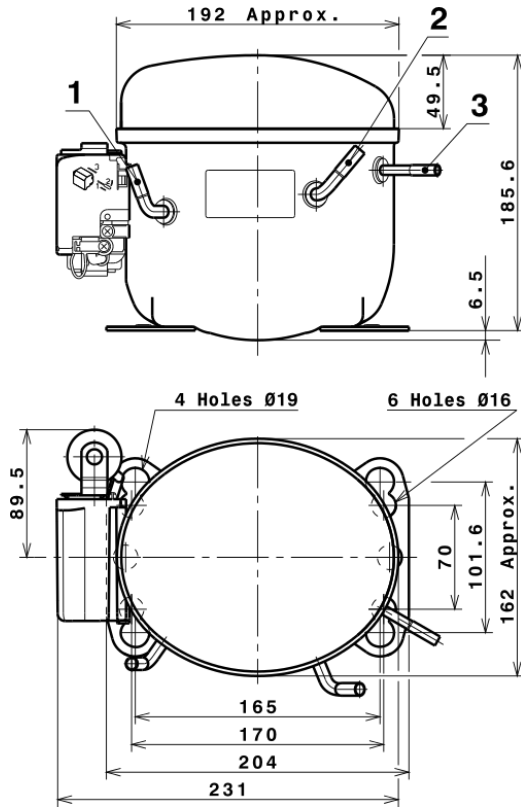
60	-25	191	207	1,46	0,92	0,80
60	-20	236	231	1,55	1,02	0,88
60	-15	293	255	1,63	1,15	0,99
60	-10	362	277	1,71	1,31	1,13
60	-5	444	298	1,80	1,49	1,29
60	0	539	318	1,87	1,70	1,47
60	5	647	337	1,95	1,92	1,66
60	7,2	698	345	1,98	2,02	1,75
60	10	767	355	2,02	2,16	1,87

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.146,8528053447	146,6444924587	1,2068542223	10,140143818245
2	35,0547734435	-1,1526524358	-0,0050531101	0,34820683429529
3	-10,4236580289	2,9991838045	0,0116439256	-0,038227100819351
4	0,2473253100	-0,0207474424	-0,0000542207	0,0039067027854988
5	-0,2566927770	0,0870572455	0,0003485266	-0,00071996265575087

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

