

Technical Data Sheet

Compressor model **NLY12NGa**
 Voltage **200-220/220-230V 50/60Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	Low-Medium Back Pressure	Displacement	10,70 cm ³	Nominal Power	3/8 hp
Refrigerant	R290	Diameter	25,40 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-40,0 °C to 0,0 °C	Stroke	21,12 mm	Voltage range	180-242 V
Expansion	Capillar/Valve	Net Weight	11,04 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	400 cm ³	Locked Rotor Amps (LRA)	22,00 A
				Max. Cont. Current (MCC)	4,60 A
				Main W. resist. at 25°C	3,73 Ω
				Start W. resist. at 25°C	17,04 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	429 kCal/h	371 W
COP	1,28 W/W	0,98 W/W
EER	1,10 kCal/Wh	0,85 kCal/Wh
Input Power	391 W	379 W
Current	3,31 A	3,29 A

TEST CYCLE CONDITIONS

	ASHRAE LMBP (B)	CECOMAF LMBP (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	88-108 µF 330 V			
Relay	Option 1			
Reference	2014 170.			
Pick-Up	12,10 A			
Drop-Out	10,30 A			
Protector	Option 1			
Reference	T0267			
Current	11,00 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	210	262	3,20	0,93	0,80
40	-35	266	293	3,21	1,06	0,91
40	-30	340	326	3,23	1,21	1,04
40	-25	430	361	3,26	1,39	1,19
40	-23,3	464	373	3,28	1,45	1,25
40	-20	537	397	3,32	1,57	1,35
40	-15	661	434	3,39	1,77	1,52
40	-10	801	474	3,49	1,97	1,69
40	-5	958	515	3,61	2,17	1,86
40	0	1.133	557	3,76	2,36	2,03

45	-40	199	267	3,20	0,87	0,75
45	-35	255	299	3,21	0,99	0,85
45	-30	328	332	3,23	1,15	0,99
45	-25	418	367	3,27	1,33	1,14
45	-23,3	453	379	3,29	1,39	1,19
45	-20	525	403	3,33	1,51	1,30
45	-15	648	441	3,41	1,71	1,47
45	-10	788	480	3,51	1,91	1,64
45	-5	945	521	3,63	2,11	1,81
45	0	1.119	564	3,79	2,31	1,98

50	-40	189	273	3,20	0,80	0,69
50	-35	244	304	3,21	0,93	0,80
50	-30	317	338	3,24	1,09	0,94
50	-25	407	373	3,28	1,27	1,09
50	-23,3	441	385	3,30	1,33	1,15
50	-20	513	409	3,34	1,46	1,25
50	-15	636	447	3,42	1,65	1,42
50	-10	776	487	3,53	1,85	1,59
50	-5	932	528	3,66	2,05	1,76
50	0	1.106	571	3,81	2,25	1,94

55	-40	178	278	3,20	0,74	0,64
55	-35	234	310	3,22	0,88	0,75
55	-30	306	344	3,24	1,04	0,89
55	-25	395	379	3,29	1,21	1,04
55	-23,3	429	391	3,31	1,28	1,10
55	-20	501	415	3,35	1,40	1,21
55	-15	623	454	3,44	1,60	1,37
55	-10	763	494	3,55	1,80	1,55
55	-5	919	535	3,68	2,00	1,72
55	0	1.092	578	3,84	2,20	1,89

60	-40	168	284	3,20	0,69	0,59
60	-35	223	316	3,22	0,82	0,71
60	-30	295	349	3,25	0,98	0,84
60	-25	383	385	3,30	1,16	1,00
60	-23,3	417	397	3,32	1,22	1,05
60	-20	489	422	3,37	1,35	1,16
60	-15	611	460	3,46	1,54	1,33
60	-10	750	500	3,57	1,74	1,50
60	-5	906	542	3,70	1,94	1,67
60	0	1.079	585	3,87	2,14	1,84

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	227	262	3,20	0,87	0,75
40	-35	298	293	3,21	1,02	0,88
40	-30	385	326	3,23	1,18	1,02
40	-25	487	361	3,26	1,35	1,17
40	-23,3	525	373	3,28	1,41	1,22
40	-20	605	397	3,32	1,52	1,32
40	-15	738	434	3,39	1,70	1,47
40	-10	887	474	3,49	1,87	1,62
40	-5	1.051	515	3,61	2,04	1,76
40	0	1.231	557	3,76	2,21	1,91

45	-40	207	267	3,20	0,78	0,67
45	-35	272	299	3,21	0,91	0,79
45	-30	353	332	3,23	1,06	0,92
45	-25	448	367	3,27	1,22	1,06
45	-23,3	485	379	3,29	1,28	1,11
45	-20	560	403	3,33	1,39	1,20
45	-15	687	441	3,41	1,56	1,35
45	-10	829	480	3,51	1,73	1,49
45	-5	987	521	3,63	1,89	1,64
45	0	1.161	564	3,79	2,06	1,78

50	-40	187	273	3,20	0,69	0,59
50	-35	246	304	3,21	0,81	0,70
50	-30	320	338	3,24	0,95	0,82
50	-25	410	373	3,28	1,10	0,95
50	-23,3	444	385	3,30	1,15	1,00
50	-20	515	409	3,34	1,26	1,09
50	-15	636	447	3,42	1,42	1,23
50	-10	772	487	3,53	1,59	1,37
50	-5	924	528	3,66	1,75	1,51
50	0	1.091	571	3,81	1,91	1,65

55	-40	168	278	3,20	0,60	0,52
55	-35	220	310	3,22	0,71	0,61
55	-30	288	344	3,24	0,84	0,72
55	-25	371	379	3,29	0,98	0,85
55	-23,3	403	391	3,31	1,03	0,89
55	-20	470	415	3,35	1,13	0,98
55	-15	585	454	3,44	1,29	1,11
55	-10	715	494	3,55	1,45	1,25
55	-5	860	535	3,68	1,61	1,39
55	0	1.021	578	3,84	1,77	1,53

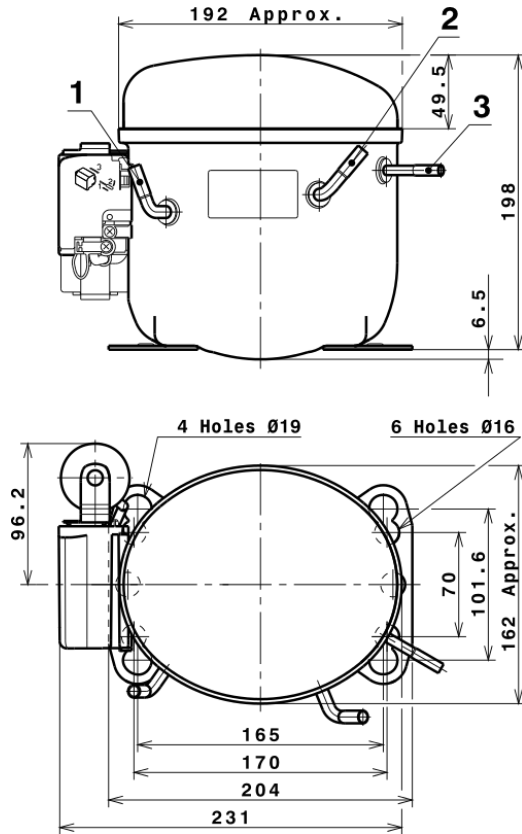
60	-40	148	284	3,20	0,52	0,45
60	-35	194	316	3,22	0,61	0,53
60	-30	256	349	3,25	0,73	0,63
60	-25	333	385	3,30	0,87	0,75
60	-23,3	363	397	3,32	0,91	0,79
60	-20	426	422	3,37	1,01	0,87
60	-15	534	460	3,46	1,16	1,00
60	-10	658	500	3,57	1,31	1,14
60	-5	797	542	3,70	1,47	1,27
60	0	952	585	3,87	1,63	1,41

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.790,7451013140	514,4223608107	3,5794131490	15,776495238072
2	47,3545455824	8,6674668663	0,0272619596	0,48612265205097
3	-14,4982239204	1,4375075951	0,0058895281	-0,034544727569866
4	0,3030578728	0,0340560475	0,0004348590	0,004534246433121
5	-0,2630179587	0,0078417475	0,0001394391	-0,00022151159007468

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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COMPRESSOR DIMENSIONS



DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Suction	8,1 mm
2 Service	8,1 mm
3 Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

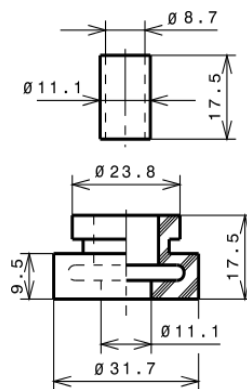
STANDARD

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LMBP

