

Technical Data Sheet

Compressor model **NLY12RAb**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	10,70 cm ³	Nominal Power	3/8 hp
Refrigerant	R290	Diameter	25,40 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,11 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	11,54 Kg	Type	CSR
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)	18,50 A
				Max. Cont. Current (MCC)	5,00 A
				Main W. resist. at 25°C	5,45 Ω
				Start W. resist. at 25°C	8,72 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.273 kCal/h	1.249 W
COP	2,66 W/W	2,28 W/W
EER	2,29 kCal/Wh	1,97 kCal/Wh
Input Power	556 W	548 W
Current	2,63 A	2,59 A

APPROVALS



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	72- 88 µF 330 V			
Run capacitor	12 µF 420 V			
Relay	Option 1			
Reference	2014 158. + NTC15Ω			
Pick-Up	9,05 A			
Drop-Out	7,70 A			
Protector	Option 1			
Reference	T0188			
Current	12,30 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	115,00 / 61,00 °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	436	326	1,57	1,56	1,34
40	-20	557	355	1,71	1,83	1,57
40	-15	696	383	1,84	2,12	1,82
40	-10	852	408	1,96	2,43	2,09
40	-5	1.025	433	2,07	2,76	2,37
40	0	1.216	455	2,17	3,11	2,67
40	5	1.424	476	2,27	3,48	2,99
40	7,2	1.521	484	2,31	3,65	3,14
40	10	1.649	494	2,35	3,88	3,33

45	-25	410	333	1,61	1,43	1,23
45	-20	523	365	1,76	1,67	1,43
45	-15	653	395	1,90	1,92	1,65
45	-10	800	424	2,03	2,20	1,89
45	-5	965	450	2,15	2,49	2,14
45	0	1.146	475	2,27	2,81	2,41
45	5	1.345	498	2,37	3,14	2,70
45	7,2	1.438	508	2,41	3,29	2,83
45	10	1.561	520	2,47	3,49	3,00

50	-25	385	341	1,64	1,31	1,13
50	-20	488	375	1,81	1,51	1,30
50	-15	610	408	1,96	1,74	1,49
50	-10	748	439	2,10	1,98	1,70
50	-5	904	468	2,23	2,25	1,93
50	0	1.076	496	2,36	2,53	2,17
50	5	1.266	521	2,47	2,83	2,43
50	7,2	1.356	532	2,52	2,96	2,55
50	10	1.474	545	2,58	3,14	2,70

55	-25	359	348	1,68	1,20	1,03
55	-20	454	385	1,85	1,37	1,18
55	-15	566	420	2,02	1,57	1,35
55	-10	696	454	2,17	1,78	1,53
55	-5	843	486	2,31	2,02	1,73
55	0	1.007	516	2,45	2,27	1,95
55	5	1.188	544	2,58	2,54	2,18
55	7,2	1.273	556	2,63	2,66	2,29
55	10	1.386	571	2,70	2,83	2,43

60	-25	334	356	1,72	1,09	0,94
60	-20	420	395	1,90	1,24	1,06
60	-15	523	433	2,07	1,41	1,21
60	-10	644	469	2,24	1,60	1,37
60	-5	782	504	2,39	1,81	1,55
60	0	937	536	2,54	2,03	1,75
60	5	1.109	567	2,68	2,28	1,96
60	7,2	1.191	580	2,74	2,39	2,05
60	10	1.299	596	2,81	2,53	2,18

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	469	327	1,58	1,43	1,24
40	-20	601	357	1,72	1,68	1,45
40	-15	751	385	1,85	1,95	1,69
40	-10	919	411	1,97	2,24	1,93
40	-5	1.105	435	2,08	2,54	2,19
40	0	1.309	458	2,19	2,86	2,47
40	5	1.531	479	2,28	3,20	2,76
40	7,2	1.634	487	2,32	3,35	2,90
40	10	1.770	498	2,37	3,56	3,07

45	-25	439	335	1,62	1,31	1,13
45	-20	560	367	1,77	1,53	1,32
45	-15	700	397	1,91	1,76	1,52
45	-10	857	426	2,04	2,01	1,74
45	-5	1.032	453	2,17	2,28	1,97
45	0	1.226	478	2,28	2,56	2,21
45	5	1.437	502	2,39	2,86	2,47
45	7,2	1.535	511	2,43	3,00	2,59
45	10	1.666	523	2,48	3,18	2,75

50	-25	409	342	1,65	1,19	1,03
50	-20	519	377	1,82	1,38	1,19
50	-15	648	410	1,97	1,58	1,37
50	-10	795	441	2,11	1,80	1,56
50	-5	960	471	2,25	2,04	1,76
50	0	1.142	499	2,37	2,29	1,98
50	5	1.343	525	2,49	2,56	2,21
50	7,2	1.437	536	2,54	2,68	2,32
50	10	1.562	549	2,60	2,84	2,46

55	-25	379	350	1,69	1,08	0,93
55	-20	479	387	1,86	1,24	1,07
55	-15	597	423	2,03	1,41	1,22
55	-10	733	457	2,18	1,61	1,39
55	-5	887	489	2,33	1,82	1,57
55	0	1.059	519	2,46	2,04	1,76
55	5	1.249	548	2,59	2,28	1,97
55	7,2	1.339	560	2,65	2,39	2,07
55	10	1.457	575	2,71	2,54	2,19

60	-25	349	357	1,72	0,98	0,84
60	-20	438	397	1,91	1,10	0,95
60	-15	546	436	2,09	1,25	1,08
60	-10	671	472	2,25	1,42	1,23
60	-5	815	507	2,41	1,61	1,39
60	0	976	540	2,56	1,81	1,56
60	5	1.155	571	2,70	2,02	1,75
60	7,2	1.240	584	2,75	2,12	1,83
60	10	1.353	600	2,83	2,25	1,95

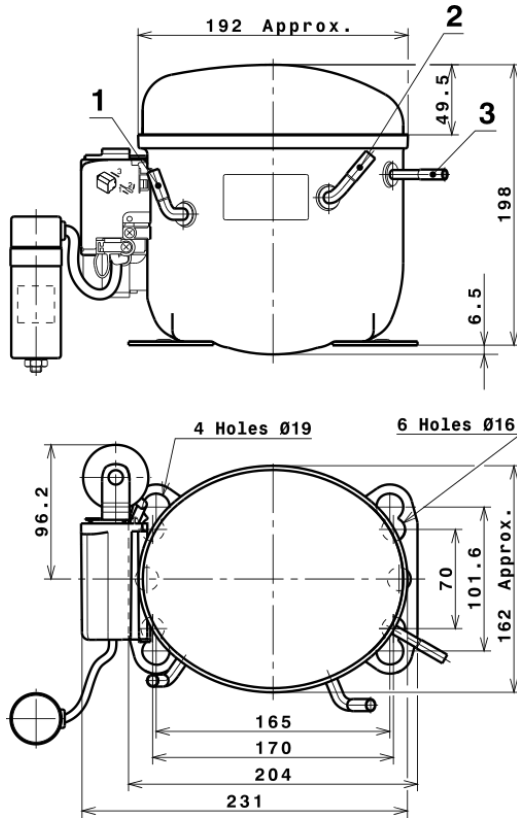
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.979,6770629339	301,8485522753	1,4926807304	17,33444824581
2	59,7995617390	0,3290731102	0,0021622756	0,58665971289615
3	-17,2580344575	4,2058081649	0,0188319850	-0,052686770583058
4	0,3529477458	-0,0329130927	-0,0001747967	0,0057461289814793
5	-0,4446339384	0,1065258765	0,0004646305	-0,0011636962173104

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

Technical Data Sheet

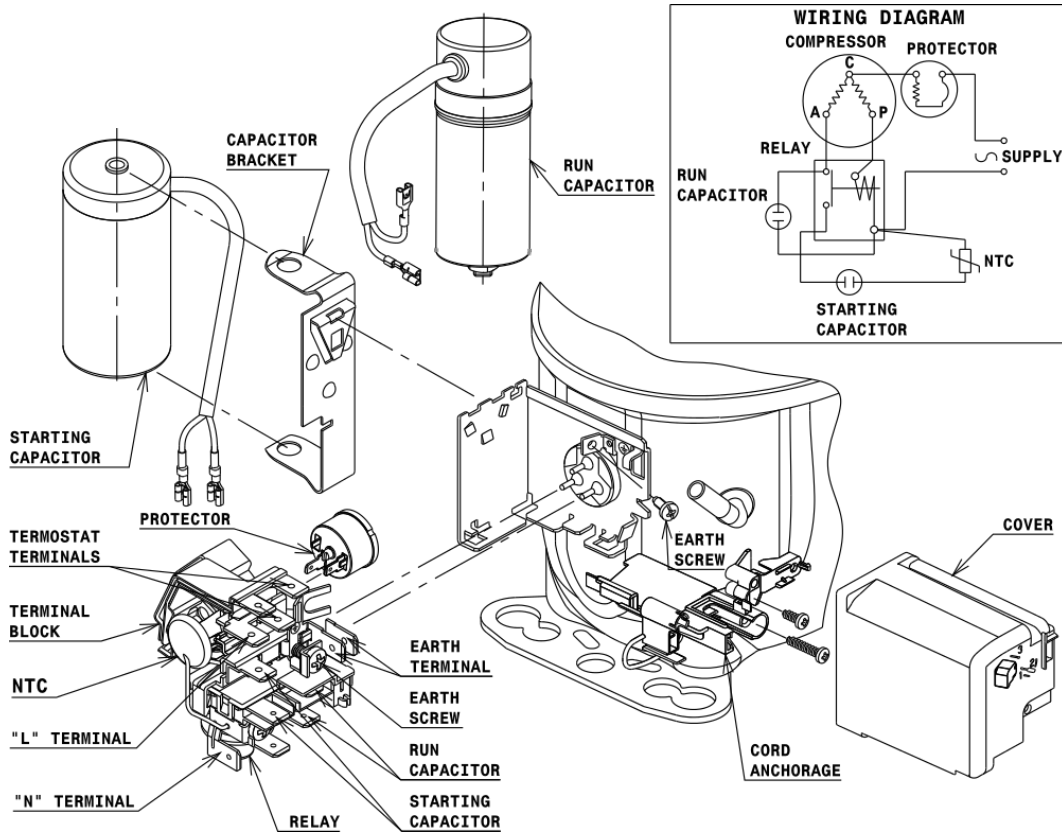
COMPRESSOR DIMENSIONS



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

