

Technical Data Sheet

Compressor model **NLY12RGb**
 Voltage **200-220/220-230V 50/60Hz ~1**
 Refrigerant **R290**

APPLICATION		COMPRESSOR		MOTOR	
Application	High-Medium Back Pressure	Displacement	10,70 cm ³	Nominal Power	1/2 hp
Refrigerant	R290	Diameter	25,40 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,12 mm	Voltage range	170-242 V
Expansion	Capillar/Valve	Net Weight	12,24 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)	21,00 A
				Max. Cont. Current (MCC)	5,00 A
				Main W. resist. at 25°C	2,87 Ω
				Start W. resist. at 25°C	7,59 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.257 kCal/h	1.226 W
COP	2,58 W/W	2,20 W/W
EER	2,22 kCal/Wh	1,90 kCal/Wh
Input Power	567 W	556 W
Current	3,03 A	2,98 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	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	-25	411	328	2,11	1,46	1,25
40	-20	522	351	2,18	1,73	1,49
40	-15	654	375	2,26	2,03	1,75
40	-10	809	399	2,35	2,36	2,03
40	-5	985	424	2,44	2,71	2,33
40	0	1.184	449	2,54	3,07	2,64
40	5	1.404	475	2,64	3,44	2,96
40	7,2	1.508	486	2,68	3,61	3,10
40	10	1.646	501	2,74	3,82	3,29

45	-25	386	339	2,14	1,32	1,14
45	-20	488	365	2,23	1,56	1,34
45	-15	611	391	2,32	1,82	1,56
45	-10	757	418	2,42	2,11	1,81
45	-5	924	445	2,52	2,42	2,08
45	0	1.113	472	2,63	2,74	2,36
45	5	1.324	500	2,74	3,08	2,65
45	7,2	1.424	513	2,80	3,23	2,78
45	10	1.557	529	2,86	3,42	2,94

50	-25	362	351	2,18	1,20	1,03
50	-20	454	379	2,28	1,40	1,20
50	-15	569	407	2,38	1,62	1,40
50	-10	705	436	2,49	1,88	1,62
50	-5	863	466	2,60	2,15	1,85
50	0	1.043	496	2,72	2,45	2,10
50	5	1.245	526	2,85	2,75	2,36
50	7,2	1.341	540	2,91	2,89	2,48
50	10	1.468	557	2,99	3,06	2,63

55	-25	337	362	2,22	1,08	0,93
55	-20	421	393	2,33	1,25	1,07
55	-15	526	424	2,44	1,44	1,24
55	-10	653	455	2,56	1,67	1,44
55	-5	802	487	2,69	1,92	1,65
55	0	973	519	2,82	2,18	1,87
55	5	1.165	552	2,96	2,45	2,11
55	7,2	1.257	567	3,03	2,58	2,22
55	10	1.380	586	3,12	2,74	2,36

60	-25	313	374	2,26	0,97	0,84
60	-20	387	406	2,38	1,11	0,95
60	-15	483	440	2,50	1,28	1,10
60	-10	601	474	2,63	1,48	1,27
60	-5	741	508	2,77	1,70	1,46
60	0	902	543	2,92	1,93	1,66
60	5	1.086	578	3,08	2,18	1,88
60	7,2	1.174	594	3,15	2,30	1,98
60	10	1.291	614	3,25	2,45	2,10

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	442	329	2,11	1,34	1,16
40	-20	563	353	2,19	1,60	1,38
40	-15	706	377	2,27	1,88	1,62
40	-10	873	401	2,36	2,18	1,88
40	-5	1.062	426	2,45	2,49	2,15
40	0	1.274	452	2,55	2,82	2,44
40	5	1.509	478	2,65	3,16	2,73
40	7,2	1.620	489	2,70	3,31	2,86
40	10	1.767	504	2,76	3,50	3,03

45	-25	413	341	2,15	1,21	1,05
45	-20	523	367	2,24	1,43	1,23
45	-15	656	393	2,33	1,67	1,44
45	-10	811	420	2,43	1,93	1,67
45	-5	990	447	2,53	2,21	1,91
45	0	1.191	475	2,64	2,51	2,16
45	5	1.415	504	2,76	2,81	2,43
45	7,2	1.520	516	2,81	2,94	2,54
45	10	1.662	533	2,88	3,12	2,69

50	-25	384	352	2,19	1,09	0,94
50	-20	483	381	2,28	1,27	1,10
50	-15	605	409	2,39	1,48	1,28
50	-10	750	439	2,50	1,71	1,48
50	-5	917	469	2,61	1,96	1,69
50	0	1.107	499	2,74	2,22	1,92
50	5	1.320	530	2,87	2,49	2,15
50	7,2	1.421	544	2,93	2,61	2,26
50	10	1.556	561	3,00	2,77	2,40

55	-25	355	364	2,23	0,98	0,84
55	-20	443	395	2,33	1,12	0,97
55	-15	554	426	2,45	1,30	1,12
55	-10	688	458	2,57	1,50	1,30
55	-5	844	490	2,70	1,72	1,49
55	0	1.024	523	2,84	1,96	1,69
55	5	1.226	556	2,98	2,20	1,90
55	7,2	1.322	571	3,05	2,32	2,00
55	10	1.450	590	3,13	2,46	2,12

60	-25	327	376	2,27	0,87	0,75
60	-20	404	409	2,38	0,99	0,85
60	-15	504	442	2,51	1,14	0,98
60	-10	626	476	2,65	1,31	1,14
60	-5	772	511	2,79	1,51	1,30
60	0	940	546	2,94	1,72	1,49
60	5	1.131	582	3,10	1,94	1,68
60	7,2	1.222	598	3,17	2,04	1,77
60	10	1.345	618	3,27	2,18	1,88

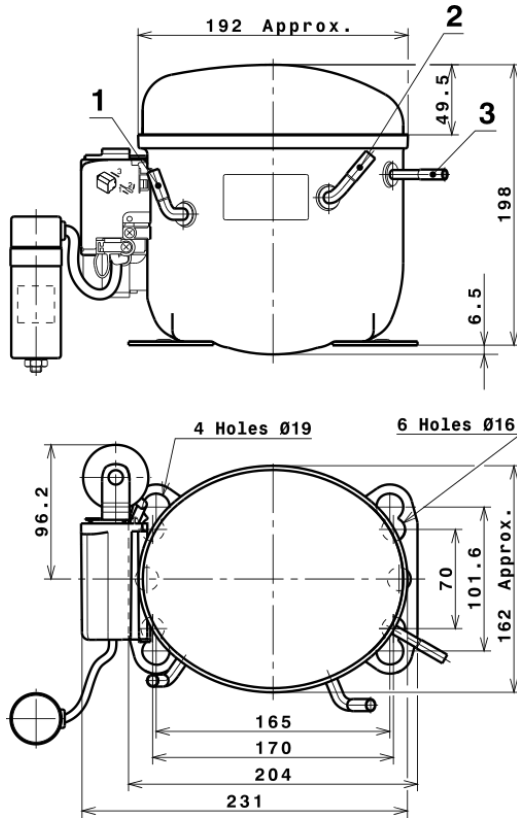
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.949,0149367580	268,9037302611	1,7354901574	17,051221439501
2	62,4024134156	1,4051775264	0,0011951466	0,61988004864972
3	-17,3321998632	4,8723858650	0,0211362483	-0,056289489425234
4	0,4473275134	0,0134776391	0,0001713740	0,0070399218430613
5	-0,4579479112	0,1002788778	0,0005235049	-0,0013085769184425

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

COMPRESSOR DIMENSIONS

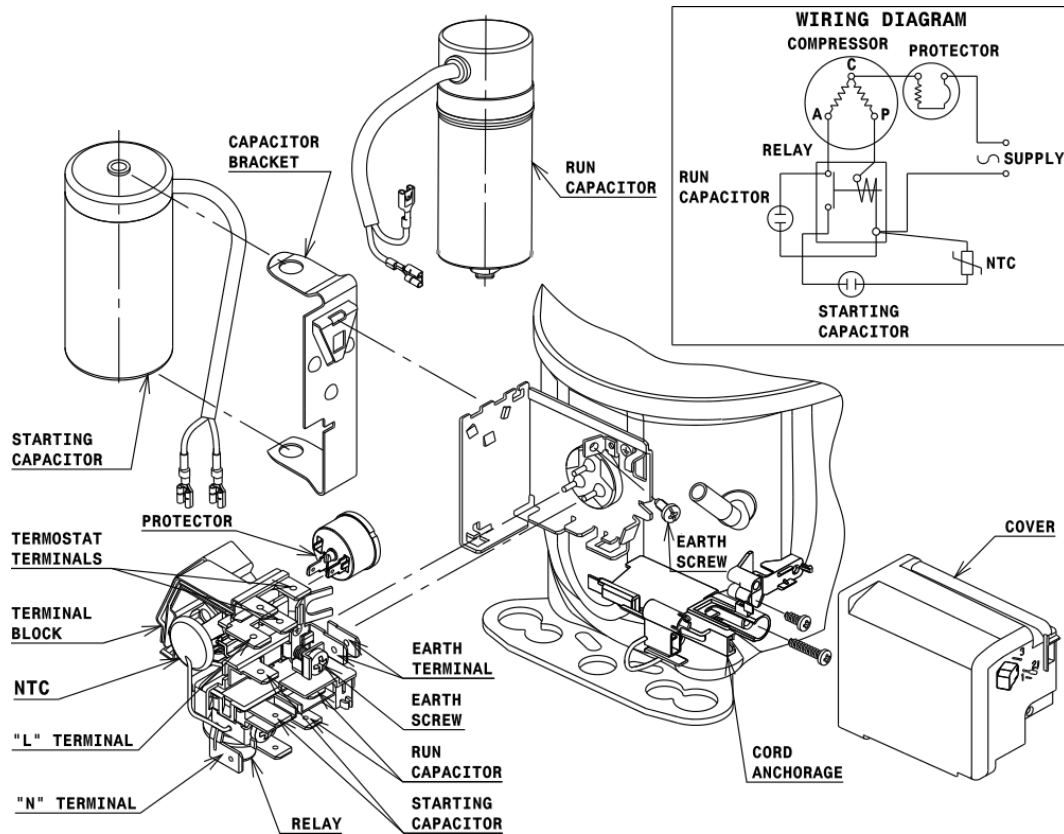


DESIGNATION INTERNAL DIAM.

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)



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

