

Technical Data Sheet

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

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	10,70 cm³	Voltage/Frequency	220-230V 60Hz
Refrigerant	R290	Diameter	25,40 mm	Voltage range	187-253 V
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	21,12 mm	Type	CSR
Expansion	Capillar/Valve	Net Weight	12,24 Kg	Phase number	1 PH
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Locked Rotor Amps (LRA)	21,00 A
Max. ambient temp.	43,0 °C	Oil charge	395 cm³	Max. Cont. Current (MCC)	5,00 A
		HP	1/2 hp	Main W. resist. at 25°C	2,87 Ω
				Start W. resist. at 25°C	7,59 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.502 kCal/h	1.469 W
COP	2,63 W/W	2,25 W/W
EER	2,26 kCal/Wh	1,94 kCal/Wh
Input Power	665 W	653 W
Current	2,95 A	2,90 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	230 V 60 Hz	230 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	72- 88 µF 330 V			
Run capacitor	12 µF 420 V			
Relay	Option 1	Option 2		
Reference	2014 158. + NTC15Î©	QLZ-9.05A + NTC15Î©		
Pick-Up	9,05 A	9,05 A		
Drop-Out	7,70 A	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	503	376	1,69	1,56	1,34
40	-20	642	412	1,84	1,81	1,56
40	-15	803	446	1,99	2,09	1,80
40	-10	988	479	2,13	2,40	2,06
40	-5	1.196	509	2,26	2,73	2,35
40	0	1.427	538	2,38	3,08	2,65
40	5	1.681	565	2,50	3,46	2,97
40	7,2	1.801	577	2,55	3,63	3,12
40	10	1.959	590	2,62	3,86	3,32

45	-25	471	381	1,71	1,44	1,24
45	-20	599	421	1,88	1,66	1,42
45	-15	751	459	2,04	1,90	1,64
45	-10	925	495	2,20	2,17	1,87
45	-5	1.122	530	2,35	2,46	2,12
45	0	1.343	562	2,49	2,78	2,39
45	5	1.586	593	2,63	3,11	2,68
45	7,2	1.701	606	2,68	3,26	2,81
45	10	1.853	622	2,76	3,47	2,98

50	-25	439	386	1,73	1,32	1,14
50	-20	557	430	1,91	1,51	1,30
50	-15	698	472	2,09	1,72	1,48
50	-10	861	512	2,27	1,96	1,68
50	-5	1.048	550	2,44	2,22	1,91
50	0	1.258	586	2,60	2,50	2,15
50	5	1.492	621	2,75	2,79	2,40
50	7,2	1.602	636	2,82	2,93	2,52
50	10	1.748	654	2,90	3,11	2,67

55	-25	407	391	1,75	1,21	1,04
55	-20	514	438	1,95	1,36	1,17
55	-15	645	484	2,15	1,55	1,33
55	-10	798	528	2,34	1,76	1,51
55	-5	974	570	2,53	1,99	1,71
55	0	1.174	610	2,70	2,24	1,92
55	5	1.397	649	2,88	2,50	2,15
55	7,2	1.502	665	2,95	2,63	2,26
55	10	1.642	685	3,04	2,79	2,40

60	-25	375	396	1,77	1,10	0,95
60	-20	472	447	1,99	1,23	1,05
60	-15	592	497	2,20	1,39	1,19
60	-10	735	544	2,41	1,57	1,35
60	-5	901	590	2,61	1,77	1,53
60	0	1.090	634	2,81	2,00	1,72
60	5	1.302	677	3,00	2,24	1,92
60	7,2	1.403	695	3,08	2,35	2,02
60	10	1.537	717	3,19	2,49	2,14

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	541	378	1,70	1,43	1,24
40	-20	692	414	1,85	1,67	1,44
40	-15	867	449	2,00	1,93	1,67
40	-10	1.066	482	2,14	2,21	1,91
40	-5	1.289	512	2,27	2,52	2,17
40	0	1.536	542	2,40	2,84	2,45
40	5	1.808	569	2,52	3,18	2,75
40	7,2	1.935	580	2,57	3,33	2,88
40	10	2.103	594	2,63	3,54	3,06

45	-25	504	383	1,72	1,32	1,14
45	-20	642	423	1,89	1,52	1,31
45	-15	804	462	2,05	1,74	1,51
45	-10	991	498	2,21	1,99	1,72
45	-5	1.201	533	2,36	2,25	1,95
45	0	1.436	566	2,51	2,54	2,19
45	5	1.695	597	2,64	2,84	2,45
45	7,2	1.816	610	2,70	2,98	2,57
45	10	1.978	626	2,78	3,16	2,73

50	-25	466	388	1,74	1,20	1,04
50	-20	592	432	1,92	1,37	1,18
50	-15	742	474	2,11	1,56	1,35
50	-10	916	515	2,28	1,78	1,54
50	-5	1.114	553	2,45	2,01	1,74
50	0	1.336	590	2,61	2,26	1,96
50	5	1.582	625	2,77	2,53	2,19
50	7,2	1.698	640	2,84	2,65	2,29
50	10	1.852	658	2,92	2,81	2,43

55	-25	429	393	1,76	1,09	0,94
55	-20	542	441	1,96	1,23	1,06
55	-15	679	487	2,16	1,40	1,21
55	-10	841	531	2,35	1,58	1,37
55	-5	1.026	573	2,54	1,79	1,55
55	0	1.235	614	2,72	2,01	1,74
55	5	1.469	653	2,90	2,25	1,94
55	7,2	1.579	669	2,97	2,36	2,04
55	10	1.727	690	3,06	2,50	2,16

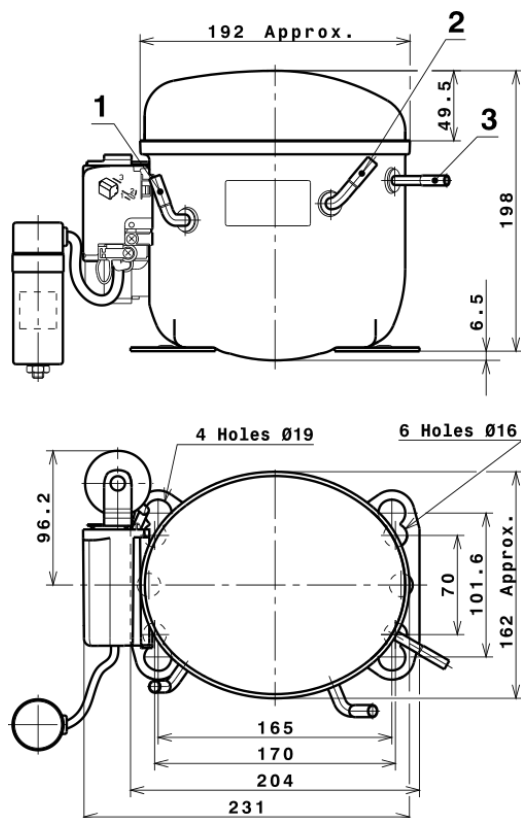
60	-25	392	398	1,78	0,98	0,85
60	-20	492	450	2,00	1,09	0,95
60	-15	617	500	2,22	1,23	1,07
60	-10	765	548	2,43	1,40	1,21
60	-5	938	594	2,63	1,58	1,37
60	0	1.135	638	2,83	1,78	1,54
60	5	1.356	681	3,02	1,99	1,72
60	7,2	1.461	699	3,11	2,09	1,81
60	10	1.601	722	3,21	2,22	1,92

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2,345,5607173570	357,1100075634	1,5621500361	20,58730290142
2	72,2505020401	-0,3659931227	-0,0023873133	0,71164954143674
3	-20,7952731625	4,9756088278	0,0224181861	-0,068127987216451
4	0,4733487539	-0,0331259443	-0,0001032279	0,0075697285861032
5	-0,5274110376	0,1578867197	0,0007223061	-0,0013417304673944

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

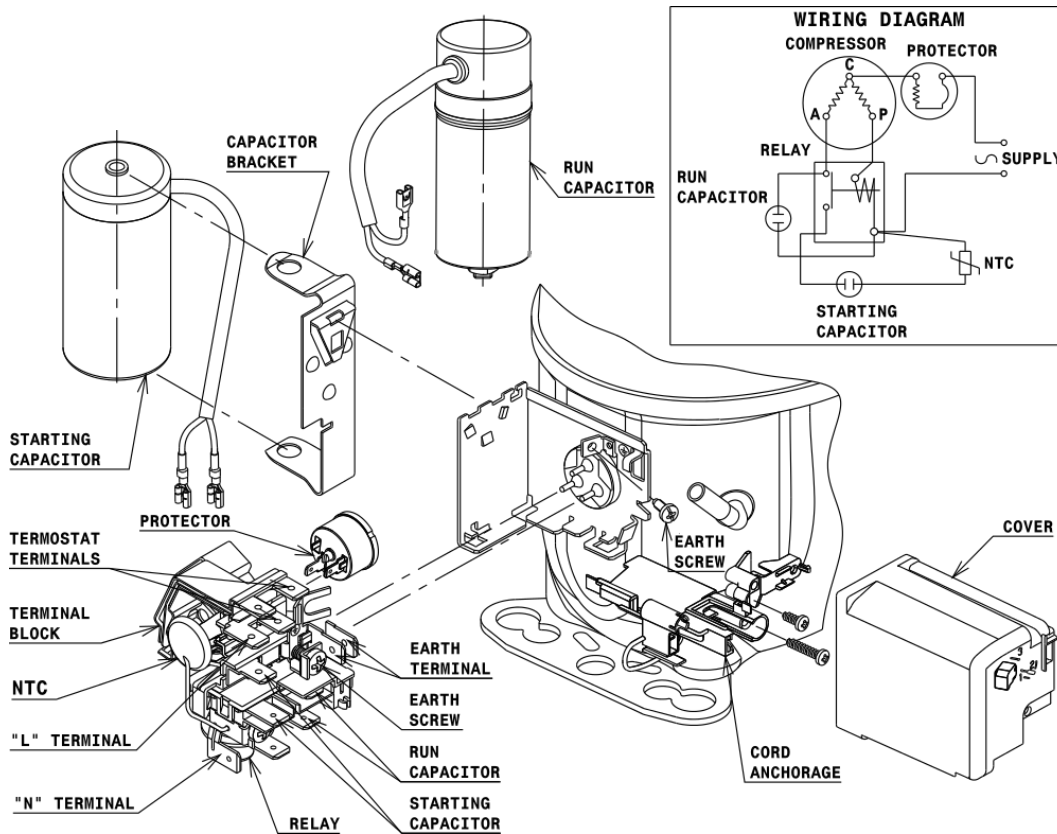


DESIGNATION INTERNAL DIAM.

1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

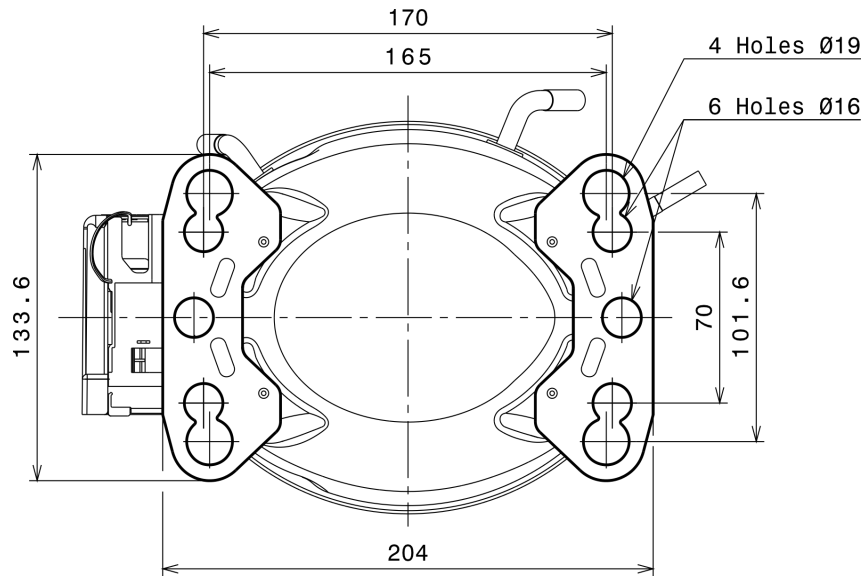
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



Technical Data Sheet

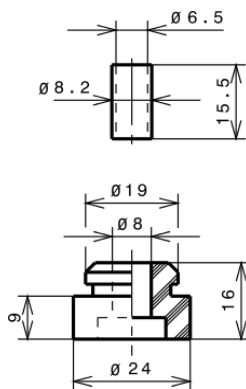
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

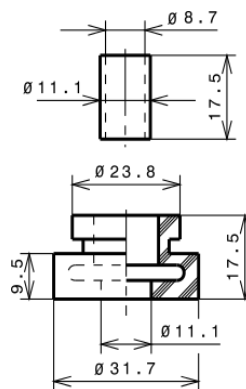
STANDARD

Ø16 holes (170x70 net)



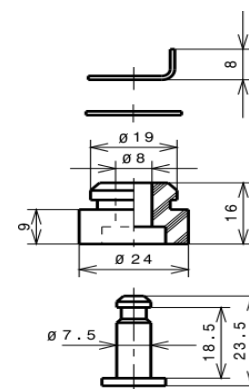
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 HMBP

