

Technical Data Sheet

Compressor model **NLY75RRa**
 Voltage **115-127V 60Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	7,57 cm ³	Nominal Power	3/8 hp
Refrigerant	R290	Diameter	25,40 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	14,92 mm	Voltage range	98-140 V
Expansion	Capillar/Valve	Net Weight	10,07 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)	32,00 A
				Max. Cont. Current (MCC)	7,50 A
				Main W. resist. at 25°C	1,65 Ω
				Start W. resist. at 25°C	6,70 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.038 kCal/h	1.010 W
COP	2,50 W/W	2,14 W/W
EER	2,15 kCal/Wh	1,85 kCal/Wh
Input Power	482 W	473 W
Current	5,49 A	5,42 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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	150 µF 160 V			
Relay	Option 1			
Reference	2014 180.			
Pick-Up	16,70 A			
Drop-Out	14,00 A			
Protector	Option 1			
Reference	T0534			
Current	20,00 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	356	280	4,20	1,48	1,27
40	-20	441	302	4,33	1,70	1,46
40	-15	546	324	4,45	1,96	1,69
40	-10	669	344	4,57	2,26	1,94
40	-5	810	364	4,69	2,59	2,23
40	0	970	382	4,80	2,95	2,54
40	5	1.149	400	4,92	3,34	2,87
40	7,2	1.233	407	4,97	3,52	3,03
40	10	1.346	416	5,03	3,76	3,23

45	-25	325	280	4,20	1,35	1,16
45	-20	406	306	4,35	1,54	1,32
45	-15	505	332	4,50	1,77	1,52
45	-10	622	356	4,64	2,03	1,75
45	-5	758	379	4,79	2,32	2,00
45	0	913	402	4,93	2,64	2,27
45	5	1.086	423	5,07	2,99	2,57
45	7,2	1.168	432	5,13	3,14	2,70
45	10	1.278	443	5,21	3,35	2,88

50	-25	295	281	4,21	1,22	1,05
50	-20	370	311	4,37	1,38	1,19
50	-15	463	340	4,54	1,59	1,36
50	-10	576	368	4,72	1,82	1,56
50	-5	706	395	4,89	2,08	1,79
50	0	856	421	5,06	2,36	2,03
50	5	1.023	446	5,23	2,67	2,29
50	7,2	1.103	457	5,31	2,81	2,41
50	10	1.210	470	5,40	2,99	2,57

55	-25	264	281	4,21	1,09	0,94
55	-20	334	315	4,40	1,23	1,06
55	-15	422	348	4,59	1,41	1,21
55	-10	529	380	4,79	1,62	1,39
55	-5	654	411	4,99	1,85	1,59
55	0	798	441	5,19	2,11	1,81
55	5	961	470	5,40	2,38	2,05
55	7,2	1.038	482	5,49	2,50	2,15
55	10	1.142	497	5,61	2,67	2,29

60	-25	234	282	4,21	0,96	0,83
60	-20	298	319	4,42	1,09	0,93
60	-15	381	356	4,64	1,24	1,07
60	-10	482	392	4,87	1,43	1,23
60	-5	602	427	5,10	1,64	1,41
60	0	741	460	5,33	1,87	1,61
60	5	898	493	5,57	2,12	1,82
60	7,2	973	507	5,68	2,23	1,92
60	10	1.074	525	5,81	2,38	2,05

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	382	281	4,21	1,36	1,18
40	-20	476	304	4,33	1,57	1,35
40	-15	589	326	4,46	1,81	1,56
40	-10	722	346	4,58	2,08	1,80
40	-5	873	366	4,70	2,39	2,06
40	0	1.045	385	4,82	2,72	2,35
40	5	1.235	402	4,93	3,07	2,65
40	7,2	1.325	410	4,98	3,23	2,79
40	10	1.445	419	5,04	3,45	2,98

45	-25	348	282	4,21	1,23	1,07
45	-20	435	308	4,36	1,41	1,22
45	-15	541	334	4,51	1,62	1,40
45	-10	667	358	4,65	1,86	1,61
45	-5	812	382	4,80	2,13	1,84
45	0	976	404	4,95	2,42	2,09
45	5	1.160	426	5,09	2,72	2,35
45	7,2	1.247	435	5,15	2,87	2,48
45	10	1.363	446	5,23	3,06	2,64

50	-25	313	282	4,22	1,11	0,96
50	-20	393	312	4,38	1,26	1,09
50	-15	493	342	4,55	1,44	1,25
50	-10	612	370	4,73	1,65	1,43
50	-5	750	398	4,90	1,89	1,63
50	0	908	424	5,08	2,14	1,85
50	5	1.085	449	5,25	2,42	2,09
50	7,2	1.169	460	5,33	2,54	2,20
50	10	1.282	474	5,43	2,71	2,34

55	-25	278	283	4,22	0,99	0,85
55	-20	352	317	4,41	1,11	0,96
55	-15	445	350	4,60	1,27	1,10
55	-10	557	382	4,80	1,46	1,26
55	-5	689	413	5,01	1,67	1,44
55	0	840	444	5,21	1,89	1,64
55	5	1.010	473	5,42	2,14	1,85
55	7,2	1.091	485	5,51	2,25	1,94
55	10	1.200	501	5,63	2,40	2,07

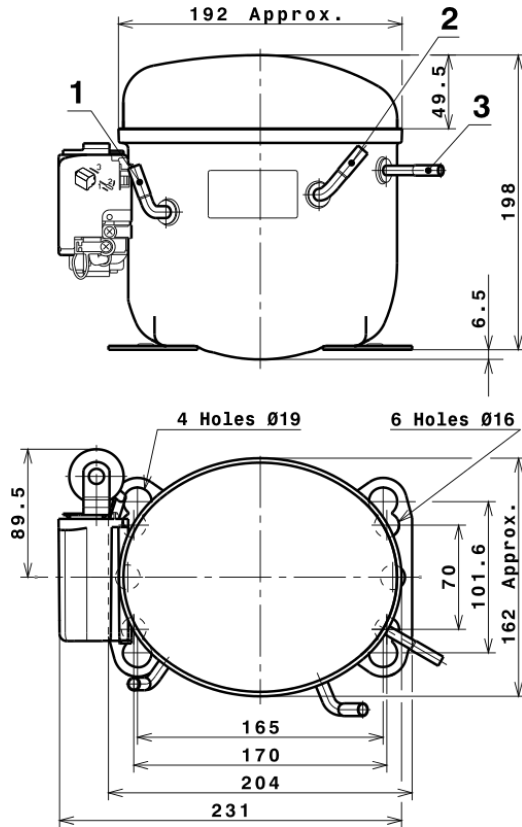
60	-25	244	283	4,22	0,86	0,74
60	-20	311	321	4,43	0,97	0,84
60	-15	397	358	4,65	1,11	0,96
60	-10	502	394	4,88	1,27	1,10
60	-5	627	429	5,11	1,46	1,26
60	0	772	463	5,35	1,67	1,44
60	5	935	496	5,60	1,89	1,63
60	7,2	1.014	510	5,70	1,99	1,72
60	10	1.118	528	5,84	2,12	1,83

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.594,9542966685	233,1542281546	3,6781161221	13,901308776956
2	47,1377920729	-2,4655686730	-0,0193965168	0,45546019344295
3	-14,1421658707	4,0447308553	0,0294310669	-0,044514225745029
4	0,3797042891	-0,0183327920	0,0000950316	0,0059621222604392
5	-0,2867024181	0,1576754709	0,0011548691	0,0001048793677103

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

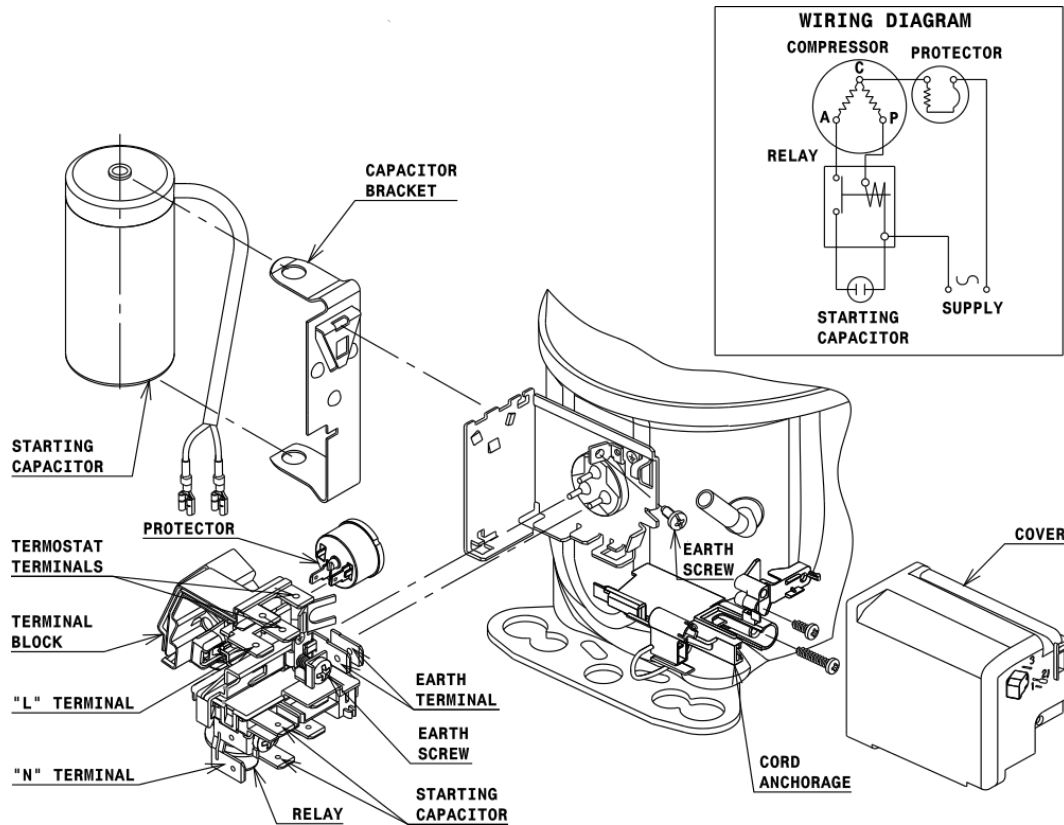


DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



Technical Data Sheet

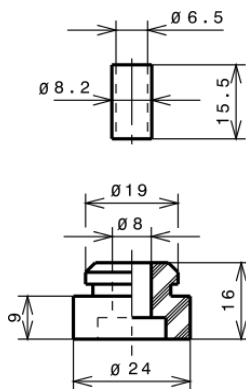
FIXINGS



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 HMBP

