

Technical Data Sheet

Compressor model **NLY80RRb**
 Voltage **115-127V 60Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	8,10 cm ³	Nominal Power	1/4 hp
Refrigerant	R290	Diameter	24,29 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	17,47 mm	Voltage range	98-140 V
Expansion	Capillar/Valve	Net Weight	10,13 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	345 cm ³	Locked Rotor Amps (LRA)	31,00 A
				Max. Cont. Current (MCC)	7,60 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	1.125 kCal/h	1.098 W
COP	2,67 W/W	2,31 W/W
EER	2,30 kCal/Wh	1,99 kCal/Wh
Input Power	490 W	476 W
Current	4,68 A	4,55 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		
Run capacitor	15 µF 250 V		
Relay	Option 1		
Reference	2014 180. + NTC3î©		
Pick-Up	16,70 A		
Drop-Out	14,00 A		
Protector	Option 1	Option 2	
Reference	MRA38123	T0534	
Current	22,00 A	20,00 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 52,00 °C	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	391	264	2,85	1,73	1,48
40	-20	493	275	2,93	2,09	1,79
40	-15	613	287	3,02	2,48	2,13
40	-10	752	302	3,13	2,90	2,49
40	-5	911	318	3,25	3,33	2,86
40	0	1.088	336	3,39	3,76	3,23
40	5	1.283	356	3,55	4,19	3,60
40	7,2	1.376	366	3,62	4,38	3,76
40	10	1.498	378	3,72	4,61	3,97

45	-25	360	266	2,86	1,57	1,35
45	-20	453	283	2,99	1,86	1,60
45	-15	566	302	3,13	2,18	1,87
45	-10	697	323	3,29	2,51	2,16
45	-5	847	345	3,46	2,85	2,45
45	0	1.016	369	3,65	3,20	2,75
45	5	1.203	395	3,86	3,54	3,05
45	7,2	1.292	407	3,96	3,69	3,17
45	10	1.410	423	4,09	3,88	3,34

50	-25	329	269	2,88	1,43	1,23
50	-20	414	292	3,05	1,65	1,42
50	-15	518	317	3,24	1,90	1,64
50	-10	641	343	3,45	2,17	1,87
50	-5	783	372	3,67	2,45	2,11
50	0	944	402	3,92	2,73	2,35
50	5	1.124	434	4,19	3,01	2,59
50	7,2	1.209	449	4,31	3,13	2,69
50	10	1.322	468	4,48	3,29	2,83

55	-25	298	271	2,90	1,28	1,10
55	-20	375	300	3,12	1,45	1,25
55	-15	471	331	3,35	1,65	1,42
55	-10	586	364	3,61	1,87	1,61
55	-5	720	398	3,89	2,10	1,81
55	0	872	435	4,20	2,33	2,01
55	5	1.044	473	4,53	2,57	2,21
55	7,2	1.125	490	4,68	2,67	2,30
55	10	1.234	512	4,88	2,80	2,41

60	-25	267	274	2,92	1,14	0,98
60	-20	336	309	3,18	1,27	1,09
60	-15	424	346	3,47	1,43	1,23
60	-10	531	385	3,78	1,60	1,38
60	-5	656	425	4,11	1,79	1,54
60	0	800	468	4,48	1,99	1,71
60	5	964	512	4,88	2,19	1,88
60	7,2	1.042	532	5,06	2,28	1,96
60	10	1.146	557	5,30	2,39	2,06

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	421	265	2,86	1,59	1,37
40	-20	531	276	2,94	1,92	1,66
40	-15	661	289	3,03	2,29	1,98
40	-10	811	304	3,14	2,67	2,31
40	-5	981	320	3,27	3,06	2,65
40	0	1.171	338	3,41	3,46	2,99
40	5	1.380	359	3,57	3,85	3,32
40	7,2	1.478	368	3,64	4,02	3,47
40	10	1.608	380	3,74	4,23	3,65

45	-25	385	267	2,87	1,44	1,24
45	-20	486	285	3,00	1,71	1,47
45	-15	606	304	3,14	2,00	1,73
45	-10	747	325	3,30	2,30	1,99
45	-5	907	347	3,48	2,61	2,26
45	0	1.086	371	3,67	2,92	2,53
45	5	1.286	398	3,88	3,23	2,79
45	7,2	1.380	410	3,98	3,37	2,91
45	10	1.505	426	4,12	3,54	3,05

50	-25	350	270	2,89	1,30	1,12
50	-20	441	293	3,06	1,50	1,30
50	-15	552	318	3,25	1,73	1,50
50	-10	682	345	3,46	1,98	1,71
50	-5	832	374	3,69	2,23	1,92
50	0	1.002	404	3,94	2,48	2,14
50	5	1.192	437	4,21	2,73	2,36
50	7,2	1.281	451	4,34	2,84	2,45
50	10	1.401	471	4,51	2,98	2,57

55	-25	314	272	2,91	1,15	1,00
55	-20	396	302	3,13	1,31	1,13
55	-15	497	333	3,37	1,49	1,29
55	-10	617	366	3,63	1,69	1,46
55	-5	758	401	3,91	1,89	1,63
55	0	918	437	4,22	2,10	1,81
55	5	1.098	476	4,55	2,31	1,99
55	7,2	1.183	493	4,71	2,40	2,07
55	10	1.297	516	4,92	2,51	2,17

60	-25	279	275	2,93	1,01	0,88
60	-20	350	311	3,19	1,13	0,97
60	-15	442	348	3,48	1,27	1,10
60	-10	553	387	3,80	1,43	1,23
60	-5	683	428	4,14	1,60	1,38
60	0	834	470	4,51	1,77	1,53
60	5	1.004	515	4,91	1,95	1,68
60	7,2	1.085	535	5,09	2,03	1,75
60	10	1.193	561	5,34	2,13	1,84

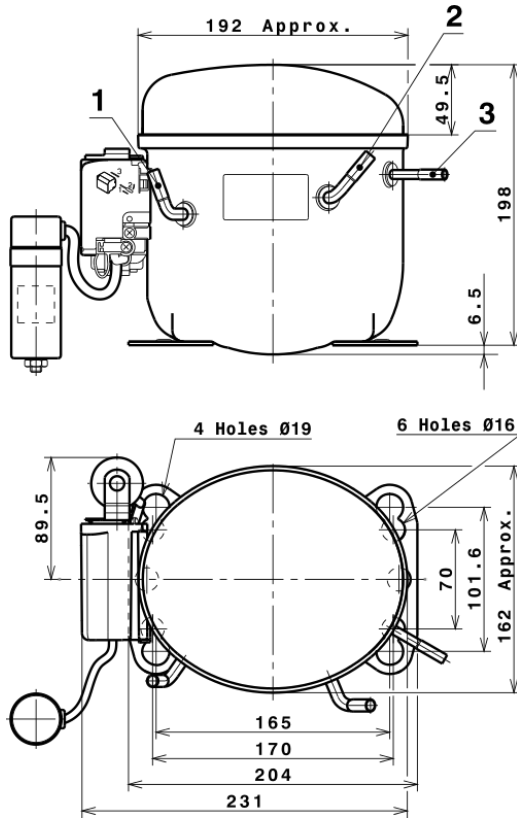
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.847,7868534505	75,8733882634	1,0528552083	16,566576804497
2	55,6296296573	-6,0004166851	-0,0549402340	0,55277808998911
3	-17,3624343803	6,7910605031	0,0595027398	-0,073706991139662
4	0,3864613078	0,0392664606	0,0005170431	0,0061116191874814
5	-0,4082706015	0,2510736034	0,0022297427	-0,0011676634365393

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

COMPRESSOR DIMENSIONS

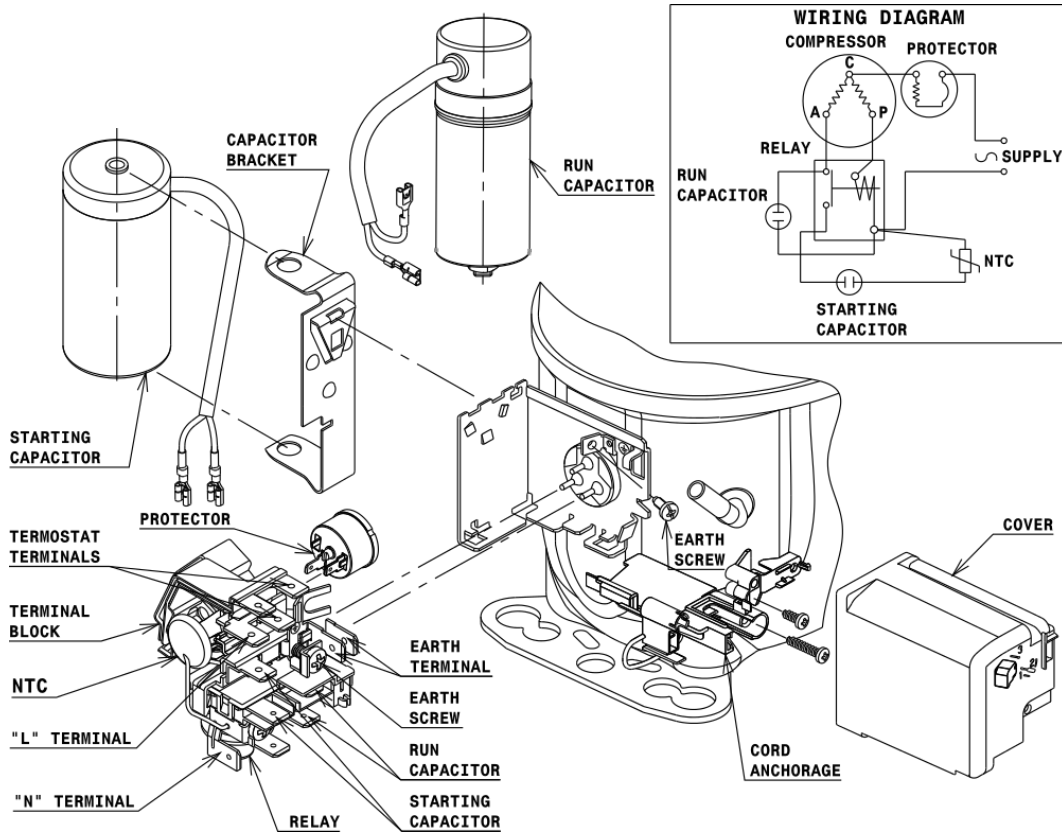


DESIGNATION INTERNAL DIAM.

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

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



AMERICAN FEET

$\varnothing 19$ holes (165x101.6 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R290 HMBP

