

Technical Data Sheet

Compressor model **NLY75NRb**
 Voltage **115-127V 60Hz ~1**
 Refrigerant **R290**

APPLICATION		COMPRESSOR		MOTOR	
Application	Low-Medium Back Pressure	Displacement	7,36 cm ³	Nominal Power	1/3 hp
Refrigerant	R290	Diameter	24,27 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-40,0 °C to 0,0 °C	Stroke	15,90 mm	Voltage range	98-140 V
Expansion	Capillar/Valve	Net Weight	9,84 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	350 cm ³	Locked Rotor Amps (LRA)	29,50 A
				Max. Cont. Current (MCC)	5,80 A
				Main W. resist. at 25°C	1,98 Ω
				Start W. resist. at 25°C	7,12 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	347 kCal/h	299 W
COP	1,47 W/W	1,13 W/W
EER	1,26 kCal/Wh	0,97 kCal/Wh
Input Power	275 W	265 W
Current	2,88 A	2,81 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE LMBP (B)	CECOMAF LMBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	32,0 °C	32,0 °C
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	170 µF 160 V			
Run capacitor	15 µF 250 V			
Relay	Option 1			
Reference	2014 180. + NTC3Ω			
Pick-Up	16,70 A			
Drop-Out	14,00 A			
Protector	Option 1			
Reference	T0348			
Current	15,40 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	-40	155	193	2,34	0,93	0,80
40	-35	205	209	2,43	1,14	0,98
40	-30	270	225	2,54	1,39	1,20
40	-25	349	243	2,66	1,67	1,43
40	-23,3	379	250	2,70	1,77	1,52
40	-20	442	262	2,79	1,96	1,69
40	-15	550	283	2,93	2,26	1,95
40	-10	672	304	3,09	2,57	2,21
40	-5	808	326	3,27	2,88	2,48
40	0	959	350	3,46	3,19	2,74

45	-40	148	191	2,32	0,90	0,77
45	-35	197	210	2,44	1,09	0,94
45	-30	261	230	2,57	1,32	1,14
45	-25	339	251	2,71	1,57	1,35
45	-23,3	369	258	2,76	1,66	1,43
45	-20	431	273	2,86	1,84	1,58
45	-15	538	296	3,04	2,11	1,81
45	-10	658	321	3,22	2,39	2,05
45	-5	794	346	3,42	2,67	2,29
45	0	943	373	3,65	2,94	2,53

50	-40	141	189	2,31	0,87	0,75
50	-35	189	211	2,45	1,04	0,90
50	-30	252	234	2,60	1,25	1,08
50	-25	328	258	2,76	1,48	1,27
50	-23,3	358	267	2,82	1,56	1,34
50	-20	419	283	2,94	1,72	1,48
50	-15	525	310	3,14	1,97	1,69
50	-10	645	337	3,35	2,22	1,91
50	-5	779	366	3,59	2,47	2,13
50	0	927	396	3,84	2,72	2,34

55	-40	134	187	2,30	0,83	0,72
55	-35	181	212	2,45	0,99	0,85
55	-30	242	238	2,62	1,18	1,02
55	-25	318	265	2,81	1,39	1,20
55	-23,3	347	275	2,88	1,47	1,26
55	-20	408	294	3,02	1,61	1,39
55	-15	512	323	3,24	1,84	1,58
55	-10	631	354	3,49	2,07	1,78
55	-5	764	386	3,76	2,30	1,98
55	0	911	419	4,05	2,53	2,17

60	-40	127	185	2,29	0,80	0,69
60	-35	173	213	2,46	0,94	0,81
60	-30	233	242	2,65	1,12	0,96
60	-25	308	273	2,86	1,31	1,13
60	-23,3	336	283	2,94	1,38	1,19
60	-20	396	304	3,10	1,51	1,30
60	-15	500	337	3,35	1,72	1,48
60	-10	617	371	3,63	1,94	1,66
60	-5	749	406	3,93	2,15	1,85
60	0	895	442	4,26	2,36	2,02

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	168	193	2,34	0,87	0,75
40	-35	231	209	2,43	1,11	0,96
40	-30	307	225	2,54	1,36	1,18
40	-25	396	243	2,66	1,63	1,41
40	-23,3	430	250	2,70	1,72	1,49
40	-20	499	262	2,79	1,90	1,64
40	-15	615	283	2,93	2,18	1,88
40	-10	744	304	3,09	2,45	2,11
40	-5	886	326	3,27	2,71	2,35
40	0	1.041	350	3,46	2,98	2,57

45	-40	154	191	2,32	0,81	0,70
45	-35	211	210	2,44	1,00	0,87
45	-30	281	230	2,57	1,22	1,06
45	-25	364	251	2,71	1,45	1,25
45	-23,3	395	258	2,76	1,53	1,32
45	-20	460	273	2,86	1,69	1,46
45	-15	570	296	3,04	1,92	1,66
45	-10	693	321	3,22	2,16	1,87
45	-5	829	346	3,42	2,39	2,07
45	0	978	373	3,65	2,62	2,27

50	-40	140	189	2,31	0,74	0,64
50	-35	191	211	2,45	0,90	0,78
50	-30	254	234	2,60	1,09	0,94
50	-25	332	258	2,76	1,28	1,11
50	-23,3	361	267	2,82	1,35	1,17
50	-20	422	283	2,94	1,49	1,29
50	-15	525	310	3,14	1,70	1,46
50	-10	642	337	3,35	1,90	1,64
50	-5	772	366	3,59	2,11	1,82
50	0	915	396	3,84	2,31	2,00

55	-40	126	187	2,30	0,68	0,58
55	-35	171	212	2,45	0,80	0,70
55	-30	228	238	2,62	0,96	0,83
55	-25	299	265	2,81	1,13	0,97
55	-23,3	326	275	2,88	1,19	1,03
55	-20	383	294	3,02	1,30	1,13
55	-15	481	323	3,24	1,49	1,28
55	-10	591	354	3,49	1,67	1,44
55	-5	715	386	3,76	1,85	1,60
55	0	852	419	4,05	2,03	1,76

60	-40	112	185	2,29	0,61	0,52
60	-35	151	213	2,46	0,71	0,61
60	-30	202	242	2,65	0,83	0,72
60	-25	267	273	2,86	0,98	0,84
60	-23,3	292	283	2,94	1,03	0,89
60	-20	345	304	3,10	1,13	0,98
60	-15	436	337	3,35	1,29	1,12
60	-10	540	371	3,63	1,46	1,26
60	-5	658	406	3,93	1,62	1,40
60	0	789	442	4,26	1,78	1,54

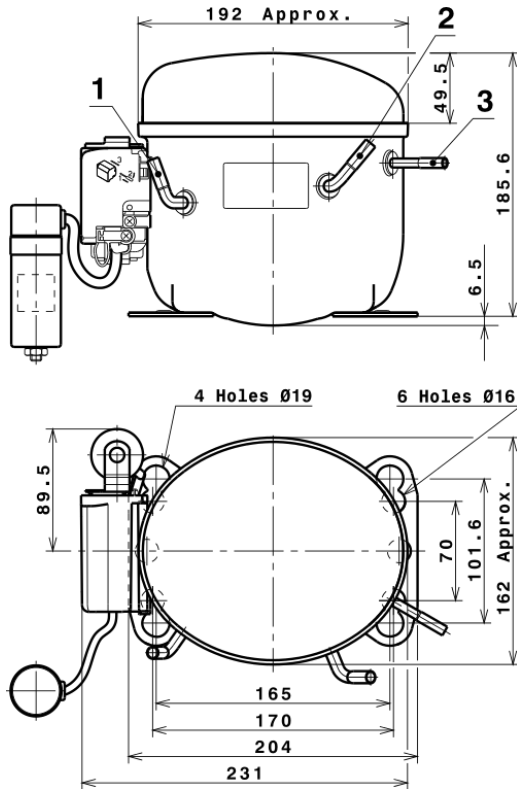
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.546,9414759585	170,4473291309	1,8372411925	13,823872149308
2	42,0892179402	-0,0905501009	0,0010749781	0,43566719602643
3	-13,0590212118	4,7232392410	0,0420997815	-0,040861551782366
4	0,2585423864	0,0246623929	0,0004169329	0,0038632216703867
5	-0,2562192701	0,1282976873	0,0011147105	-0,00059339277346343

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

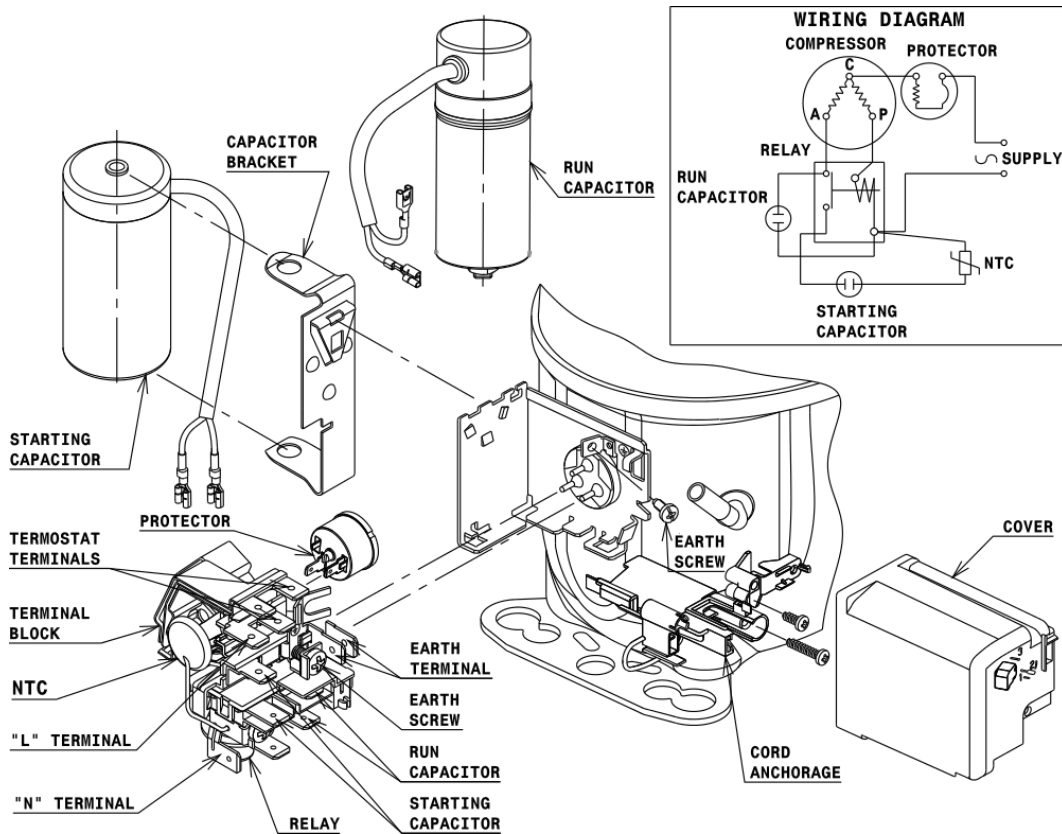
COMPRESSOR DIMENSIONS



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

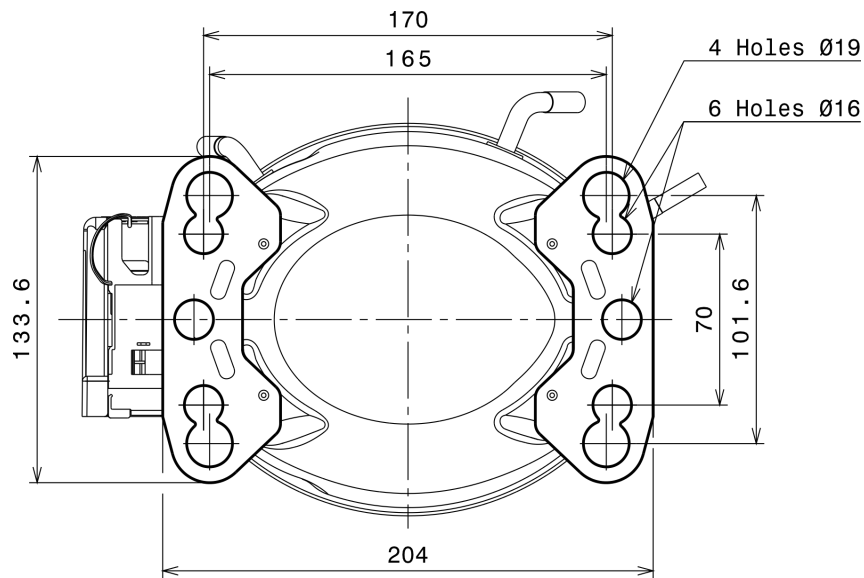
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



Technical Data Sheet

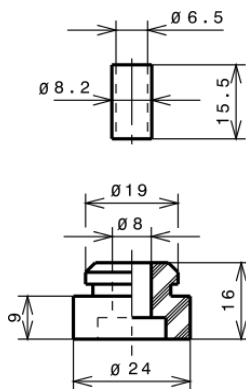
FIXINGS



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 LMBP

