Technical Data Sheet

Compressor model **NLY75NRa**

Voltage **115-127V 60Hz ~1**

Refrigerant **R290**

APPLICATION

Application	Low-Medium Back Pressure
Refrigerant	R290
Evaporating Temp.	-40,0 ºC to 0,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC

COMPRESSOR

Displacement	7,36 cm³
Diameter	24,27 mm
Stroke	15,90 mm
Net Weight	9,74 Kg
Oil type	ISO VG 32 ESTER
Oil charge	350 cm³

MOTOR

Nominal Power	1/3 hp
Voltage/Frequency	115-127V 60Hz
Voltage range	98-140 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	29,50 A
Max. Cont. Current (MCC)	5,80 A
Main W. resist. at 25ºC	1,98 Ω
Start W. resist. at 25ºC	7,12 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	347 kCal/h	299 W
COP	1,34 W/W	1,03 W/W
EER	1,15 kCal/Wh	0,89 kCal/Wh
Input Power	302 W	291 W
Current	4,04 A	3,98 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LMBP (B)	**LMBP (A)**
Evaporating temp. (T_e)	-23,3 ºC	-25,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	32,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	32,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	32,0 ºC	32,0 ºC
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	170 µF 160 V			
Relay	Option 1			
Reference	2014 180.			
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 ºC			

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	156	198	3,54	0,92	0,79
40	-35	209	219	3,63	1,11	0,96
40	-30	276	240	3,72	1,34	1,15
40	-25	356	263	3,83	1,58	1,36
40	-23,3	387	270	3,87	1,66	1,43
40	-20	450	285	3,95	1,83	1,58
40	-15	557	309	4,08	2,10	1,81
40	-10	678	332	4,22	2,37	2,04
40	-5	812	356	4,37	2,65	2,28
40	0	960	381	4,53	2,93	2,52
45	-40	148	197	3,53	0,87	0,75
45	-35	200	222	3,64	1,05	0,90
45	-30	265	247	3,75	1,25	1,07
45	-25	344	272	3,88	1,47	1,26
45	-23,3	373	281	3,93	1,55	1,33
45	-20	436	298	4,02	1,70	1,46
45	-15	541	325	4,17	1,94	1,67
45	-10	660	352	4,34	2,18	1,88
45	-5	793	379	4,51	2,43	2,09
45	0	939	407	4,71	2,68	2,31
50	-40	140	197	3,53	0,83	0,71
50	-35	190	224	3,65	0,99	0,85
50	-30	254	253	3,78	1,17	1,00
50	-25	331	282	3,93	1,37	1,18
50	-23,3	360	291	3,98	1,44	1,24
50	-20	422	311	4,09	1,58	1,36
50	-15	526	341	4,27	1,79	1,54
50	-10	643	371	4,46	2,02	1,73
50	-5	774	402	4,67	2,24	1,93
50	0	919	433	4,90	2,47	2,12
55	-40	132	196	3,53	0,78	0,67
55	-35	181	227	3,66	0,92	0,80
55	-30	243	259	3,81	1,09	0,94
55	-25	318	291	3,98	1,27	1,09
55	-23,3	347	302	4,04	1,34	1,15
55	-20	407	324	4,16	1,46	1,26
55	-15	510	357	4,37	1,66	1,43
55	-10	626	390	4,59	1,86	1,60
55	-5	755	424	4,84	2,07	1,78
55	0	898	459	5,10	2,28	1,96
60	-40	124	196	3,53	0,74	0,63
60	-35	171	230	3,68	0,87	0,74
60	-30	232	265	3,84	1,02	0,87
60	-25	306	300	4,03	1,18	1,02
60	-23,3	334	313	4,10	1,24	1,07
60	-20	393	336	4,24	1,36	1,17
60	-15	494	373	4,47	1,54	1,33
60	-10	608	410	4,73	1,73	1,48
60	-5	736	447	5,01	1,92	1,65
60	0	878	485	5,31	2,10	1,81

CECOMAF

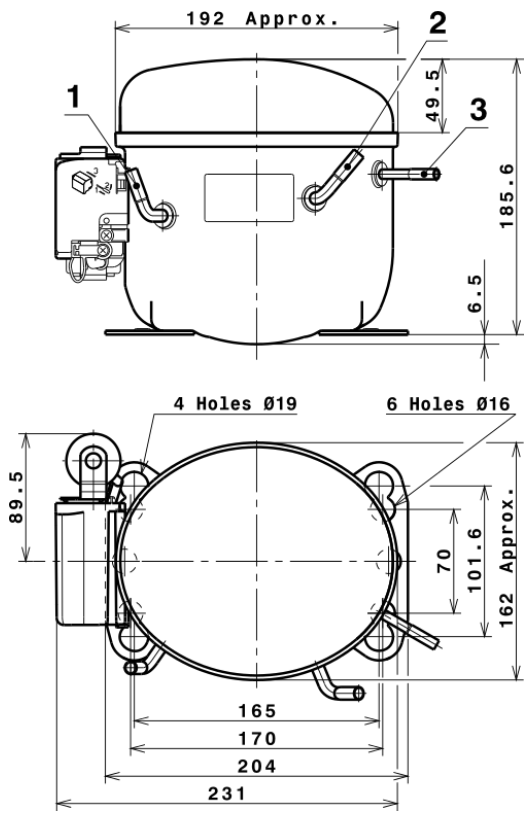
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	169	198	3,54	0,86	0,74
40	-35	234	219	3,63	1,07	0,93
40	-30	312	240	3,72	1,30	1,12
40	-25	403	263	3,83	1,53	1,32
40	-23,3	436	270	3,87	1,61	1,39
40	-20	506	285	3,95	1,77	1,53
40	-15	621	309	4,08	2,01	1,74
40	-10	749	332	4,22	2,25	1,95
40	-5	889	356	4,37	2,49	2,15
40	0	1.041	381	4,53	2,73	2,36
45	-40	154	197	3,53	0,78	0,68
45	-35	213	222	3,64	0,96	0,83
45	-30	284	247	3,75	1,15	1,00
45	-25	368	272	3,88	1,35	1,17
45	-23,3	400	281	3,93	1,42	1,23
45	-20	465	298	4,02	1,56	1,35
45	-15	573	325	4,17	1,77	1,53
45	-10	694	352	4,34	1,98	1,71
45	-5	828	379	4,51	2,18	1,89
45	0	974	407	4,71	2,39	2,07
50	-40	139	197	3,53	0,71	0,61
50	-35	192	224	3,65	0,85	0,74
50	-30	257	253	3,78	1,02	0,88
50	-25	334	282	3,93	1,19	1,02
50	-23,3	363	291	3,98	1,25	1,08
50	-20	424	311	4,09	1,36	1,18
50	-15	526	341	4,27	1,54	1,33
50	-10	640	371	4,46	1,73	1,49
50	-5	767	402	4,67	1,91	1,65
50	0	907	433	4,90	2,09	1,81
55	-40	124	196	3,53	0,63	0,55
55	-35	170	227	3,66	0,75	0,65
55	-30	229	259	3,81	0,88	0,76
55	-25	299	291	3,98	1,03	0,89
55	-23,3	326	302	4,04	1,08	0,93
55	-20	383	324	4,16	1,18	1,02
55	-15	478	357	4,37	1,34	1,16
55	-10	586	390	4,59	1,50	1,30
55	-5	707	424	4,84	1,67	1,44
55	0	840	459	5,10	1,83	1,58
60	-40	109	196	3,53	0,56	0,48
60	-35	149	230	3,68	0,65	0,56
60	-30	201	265	3,84	0,76	0,65
60	-25	265	300	4,03	0,88	0,76
60	-23,3	290	313	4,10	0,93	0,80
60	-20	342	336	4,24	1,02	0,88
60	-15	431	373	4,47	1,16	1,00
60	-10	532	410	4,73	1,30	1,12
60	-5	646	447	5,01	1,45	1,25
60	0	773	485	5,31	1,59	1,38

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.577,7763301155	177,6348671063	2,9379508937	14,287647942467
2	42,0374435571	-0,2452251671	0,0003802898	0,43596135736899
3	-13,8346641848	5,3393139246	0,0410987862	-0,052297417983034
4	0,2431175267	0,0115142239	0,0004047150	0,0036494087418558
5	-0,2710403144	0,1360370247	0,0010379405	-0,00081822906525402

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

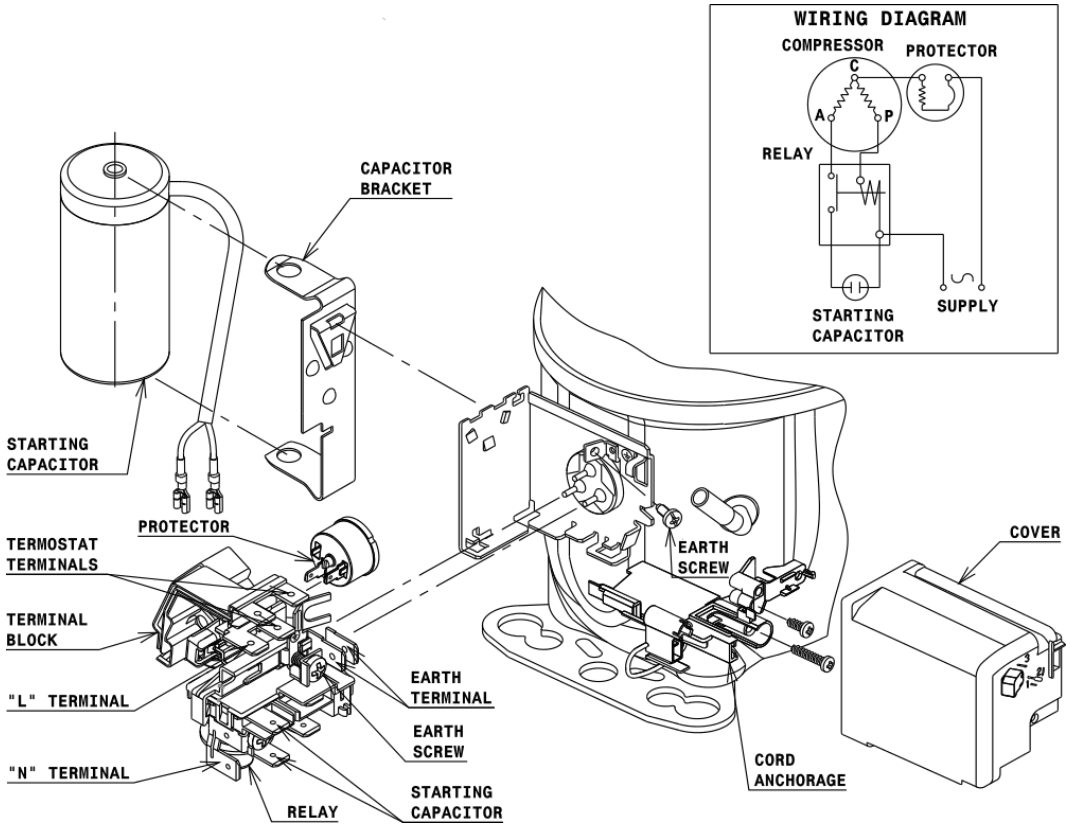
COMPRESSOR DIMENSIONS



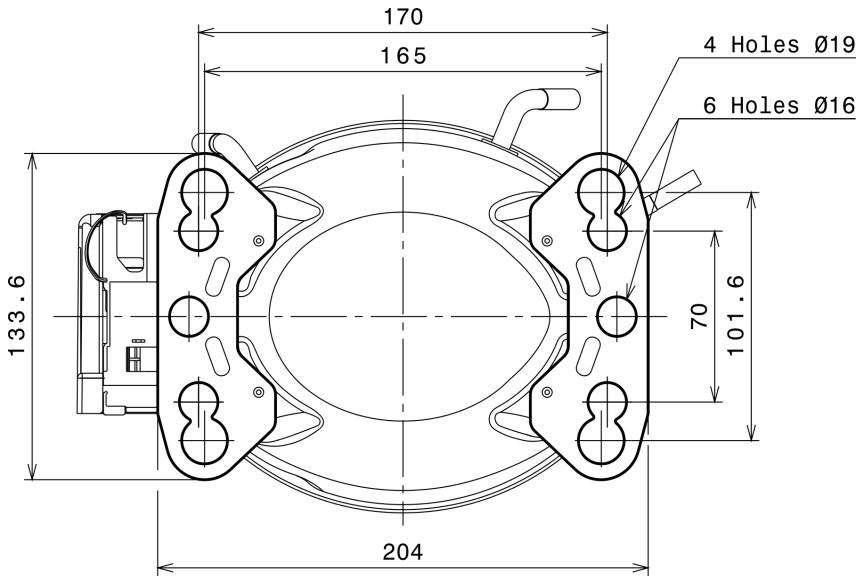
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



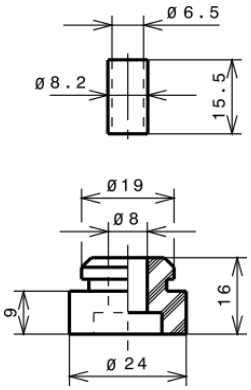
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

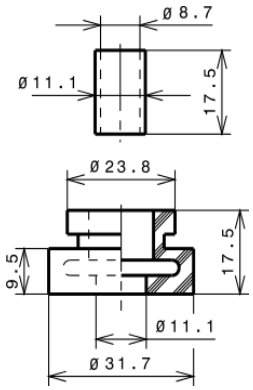
STANDARD

Ø16 holes (170x70 net)



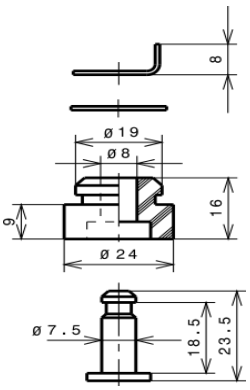
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LMBP