Technical Data Sheet

Compressor model **NLY90RRa**

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

Refrigerant **R290**

APPLICATION		COMPRESSOR		MOTOR	
Application	High-Medium Back Pressure	Displacement	9,09 cm³	Nominal Power	1/3 hp
Refrigerant	R290	Diameter	24,29 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-25,0 ºC to 10,0 ºC	Stroke	19,62 mm	Voltage range	98-135 V
Expansion	Capillar/Valve	Net Weight	10,55 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 ºC	Oil charge	400 cm³	Locked Rotor Amps (LRA)	38,00 A
				Max. Cont. Current (MCC)	10,50 A
				Main W. resist. at 25ºC	1,45 Ω
				Start W. resist. at 25ºC	6,54 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.269 kCal/h	1.239 W
COP	2,35 W/W	2,03 W/W
EER	2,02 kCal/Wh	1,75 kCal/Wh
Input Power	628 W	610 W
Current	7,09 A	6,92 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HMBP (D)	**HMBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
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	T0257			
Current	24,00 A			
Time check	6,0-16 seg			
Disc temp. (Open/Close)	120,00 / 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	-25	415	341	4,98	1,42	1,22
40	-20	531	360	5,08	1,71	1,47
40	-15	667	381	5,20	2,04	1,75
40	-10	825	404	5,34	2,37	2,04
40	-5	1.002	429	5,49	2,72	2,34
40	0	1.201	455	5,67	3,07	2,64
40	5	1.420	483	5,87	3,42	2,94
40	7,2	1.523	496	5,96	3,57	3,07
40	10	1.659	513	6,09	3,76	3,23
45	-25	388	342	4,98	1,32	1,13
45	-20	495	368	5,13	1,56	1,35
45	-15	623	396	5,29	1,83	1,57
45	-10	771	425	5,47	2,11	1,81
45	-5	940	457	5,68	2,39	2,06
45	0	1.129	490	5,92	2,68	2,31
45	5	1.339	524	6,18	2,97	2,55
45	7,2	1.438	540	6,31	3,10	2,66
45	10	1.570	561	6,48	3,26	2,80
50	-25	362	344	4,99	1,22	1,05
50	-20	460	376	5,17	1,42	1,22
50	-15	578	411	5,38	1,64	1,41
50	-10	718	447	5,61	1,87	1,61
50	-5	877	485	5,88	2,11	1,81
50	0	1.058	524	6,18	2,35	2,02
50	5	1.259	565	6,52	2,59	2,23
50	7,2	1.354	584	6,69	2,70	2,32
50	10	1.480	608	6,91	2,83	2,43
55	-25	335	345	5,00	1,13	0,97
55	-20	424	384	5,22	1,28	1,10
55	-15	534	425	5,47	1,46	1,26
55	-10	664	468	5,76	1,65	1,42
55	-5	815	512	6,09	1,85	1,59
55	0	986	559	6,47	2,05	1,77
55	5	1.178	606	6,89	2,26	1,94
55	7,2	1.269	628	7,09	2,35	2,02
55	10	1.391	656	7,36	2,47	2,12
60	-25	309	347	5,01	1,04	0,89
60	-20	389	392	5,27	1,15	0,99
60	-15	489	440	5,57	1,29	1,11
60	-10	610	489	5,91	1,45	1,25
60	-5	752	540	6,31	1,62	1,39
60	0	915	593	6,77	1,79	1,54
60	5	1.098	648	7,28	1,97	1,69
60	7,2	1.185	672	7,52	2,05	1,76
60	10	1.301	704	7,85	2,15	1,85

CECOMAF

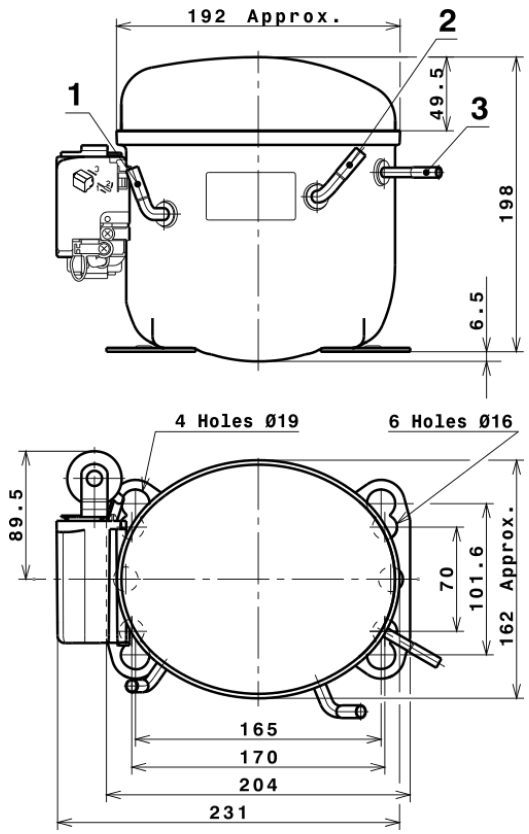
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	446	342	4,99	1,30	1,13
40	-20	572	362	5,09	1,58	1,37
40	-15	720	383	5,21	1,88	1,62
40	-10	890	406	5,35	2,19	1,89
40	-5	1.080	431	5,51	2,50	2,16
40	0	1.293	458	5,69	2,82	2,44
40	5	1.526	486	5,89	3,14	2,71
40	7,2	1.636	499	5,99	3,28	2,83
40	10	1.782	516	6,12	3,45	2,98
45	-25	415	344	4,99	1,21	1,04
45	-20	531	370	5,14	1,43	1,24
45	-15	668	398	5,30	1,68	1,45
45	-10	826	428	5,49	1,93	1,67
45	-5	1.006	459	5,70	2,19	1,89
45	0	1.208	493	5,94	2,45	2,12
45	5	1.431	528	6,21	2,71	2,34
45	7,2	1.535	544	6,34	2,82	2,44
45	10	1.675	564	6,52	2,97	2,56
50	-25	384	345	5,00	1,11	0,96
50	-20	489	378	5,18	1,29	1,12
50	-15	615	413	5,39	1,49	1,29
50	-10	763	449	5,63	1,70	1,47
50	-5	932	487	5,90	1,91	1,65
50	0	1.123	527	6,21	2,13	1,84
50	5	1.335	569	6,55	2,35	2,03
50	7,2	1.435	588	6,72	2,44	2,11
50	10	1.568	612	6,94	2,56	2,21
55	-25	353	347	5,01	1,02	0,88
55	-20	447	386	5,23	1,16	1,00
55	-15	563	428	5,49	1,32	1,14
55	-10	699	471	5,78	1,49	1,28
55	-5	858	516	6,11	1,66	1,44
55	0	1.038	562	6,50	1,85	1,59
55	5	1.239	610	6,92	2,03	1,75
55	7,2	1.334	632	7,13	2,11	1,82
55	10	1.462	660	7,41	2,21	1,91
60	-25	322	348	5,02	0,93	0,80
60	-20	405	395	5,28	1,03	0,89
60	-15	510	442	5,58	1,15	1,00
60	-10	636	492	5,94	1,29	1,12
60	-5	784	544	6,34	1,44	1,25
60	0	953	597	6,80	1,60	1,38
60	5	1.143	652	7,32	1,75	1,52
60	7,2	1.234	676	7,57	1,82	1,58
60	10	1.355	708	7,90	1,91	1,65

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.978,0369960679	184,2685449102	3,0461344592	17,356925736079
2	62,0922348024	-5,1568727168	-0,0533925590	0,61301033008938
3	-17,6106886119	7,1472415842	0,0652950300	-0,058380102166736
4	0,4216349658	0,0394439222	0,0009281206	0,006698136783568
5	-0,4525305055	0,2735483734	0,0025454518	-0,0011802212088387

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

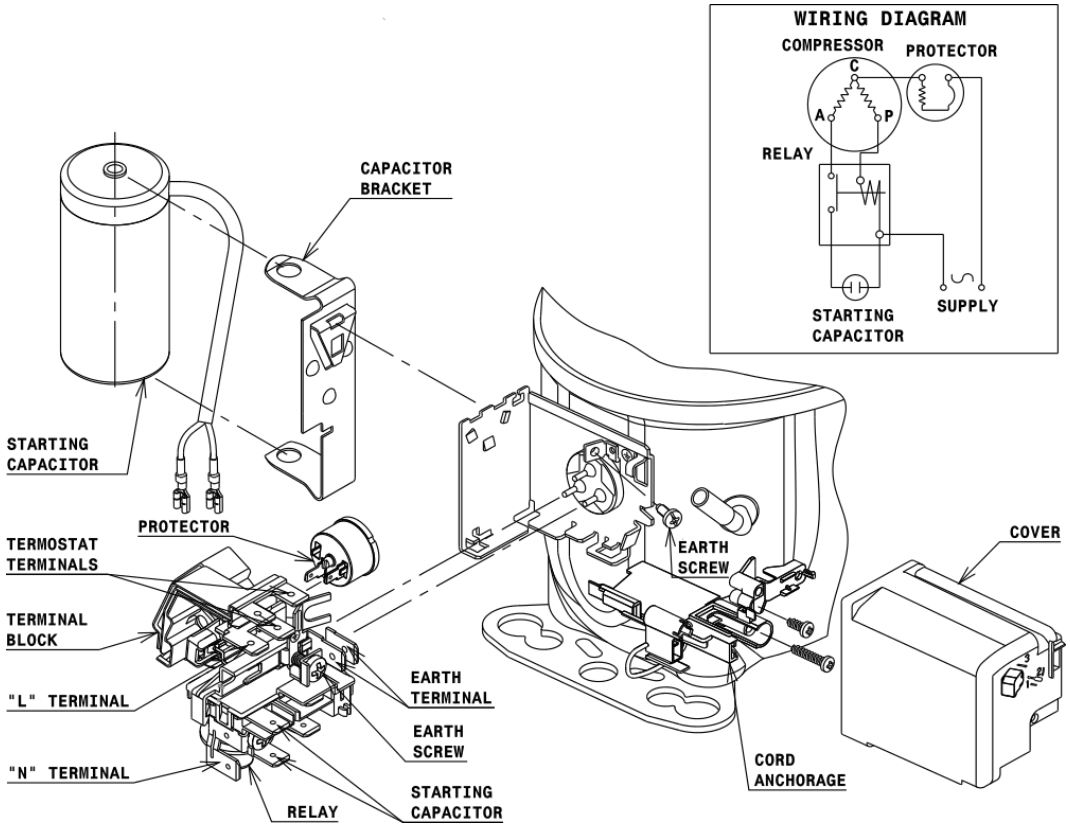
COMPRESSOR DIMENSIONS



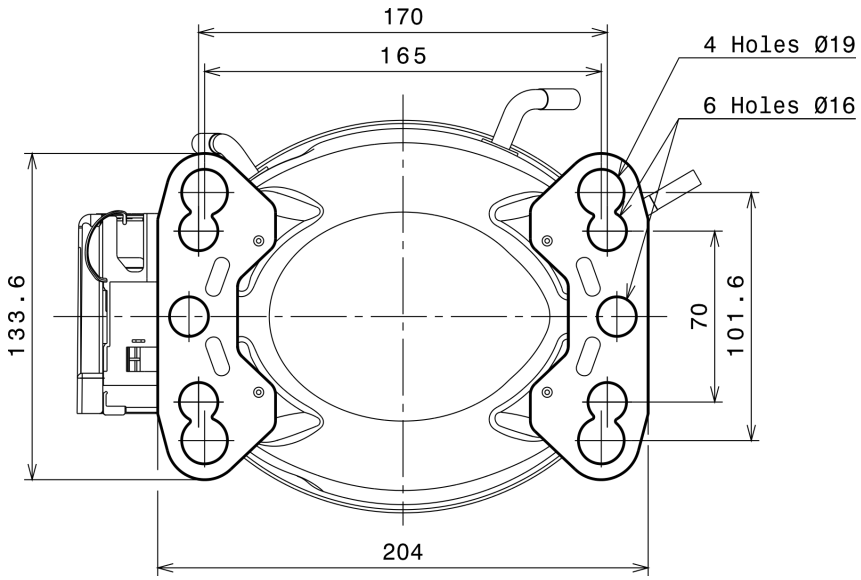
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



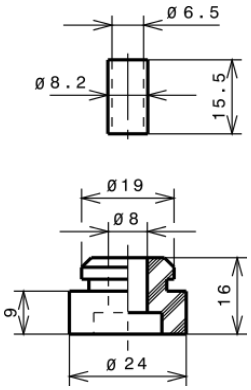
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

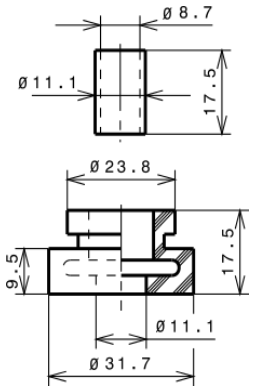
STANDARD

Ø16 holes (170x70 net)



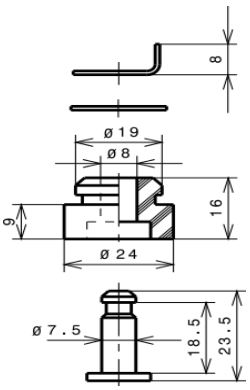
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 HMBP