Technical Data Sheet

Compressor model **NLY75RAb**

Voltage **220-240V 50Hz ~1**

Refrigerant **R290**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R290
Evaporating Temp.	-25,0 ºC to 10,0 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	10,59 Kg
Oil type	ISO VG 46 MINER
Oil charge	400 cm³

MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	13,50 A
Max. Cont. Current (MCC)	3,10 A
Main W. resist. at 25ºC	8,62 Ω
Start W. resist. at 25ºC	11,60 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	883 kCal/h	862 W
COP	2,84 W/W	2,42 W/W
EER	2,44 kCal/Wh	2,09 kCal/Wh
Input Power	362 W	357 W
Current	1,85 A	1,83 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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	64- 77 µF 330 V			
Run capacitor	10 µF 420 V			
Relay	Option 1			
Reference	2014 149. + NTC15Ω			
Pick-Up	7,70 A			
Drop-Out	6,50 A			
Protector	Option 1			
Reference	T0269			
Current	9,60 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	-25	319	220	1,30	1,68	1,45
40	-20	401	234	1,35	1,99	1,71
40	-15	497	248	1,40	2,33	2,00
40	-10	607	260	1,44	2,71	2,33
40	-5	732	272	1,49	3,13	2,69
40	0	871	283	1,53	3,59	3,08
40	5	1.024	292	1,56	4,08	3,51
40	7,2	1.096	296	1,58	4,31	3,70
40	10	1.191	301	1,60	4,61	3,96
45	-25	289	223	1,31	1,51	1,30
45	-20	365	240	1,37	1,76	1,52
45	-15	455	257	1,43	2,06	1,77
45	-10	559	272	1,49	2,39	2,05
45	-5	677	287	1,54	2,75	2,36
45	0	809	300	1,60	3,13	2,70
45	5	956	313	1,65	3,55	3,06
45	7,2	1.025	318	1,67	3,75	3,22
45	10	1.117	324	1,69	4,00	3,44
50	-25	260	226	1,32	1,34	1,15
50	-20	329	246	1,39	1,55	1,33
50	-15	412	266	1,46	1,80	1,55
50	-10	510	284	1,53	2,09	1,79
50	-5	622	302	1,60	2,40	2,06
50	0	748	318	1,67	2,73	2,35
50	5	888	334	1,73	3,10	2,66
50	7,2	954	340	1,76	3,26	2,81
50	10	1.042	348	1,79	3,48	2,99
55	-25	230	229	1,33	1,17	1,00
55	-20	293	252	1,41	1,35	1,16
55	-15	370	275	1,50	1,57	1,35
55	-10	461	296	1,58	1,81	1,56
55	-5	566	316	1,66	2,08	1,79
55	0	686	336	1,74	2,38	2,04
55	5	820	354	1,82	2,69	2,31
55	7,2	883	362	1,85	2,84	2,44
55	10	968	372	1,89	3,03	2,60
60	-25	201	232	1,34	1,01	0,86
60	-20	257	258	1,44	1,16	0,99
60	-15	327	284	1,53	1,34	1,15
60	-10	412	308	1,63	1,56	1,34
60	-5	511	331	1,72	1,79	1,54
60	0	624	354	1,81	2,05	1,77
60	5	751	375	1,91	2,33	2,00
60	7,2	812	384	1,95	2,46	2,11
60	10	893	395	2,00	2,63	2,26

CECOMAF

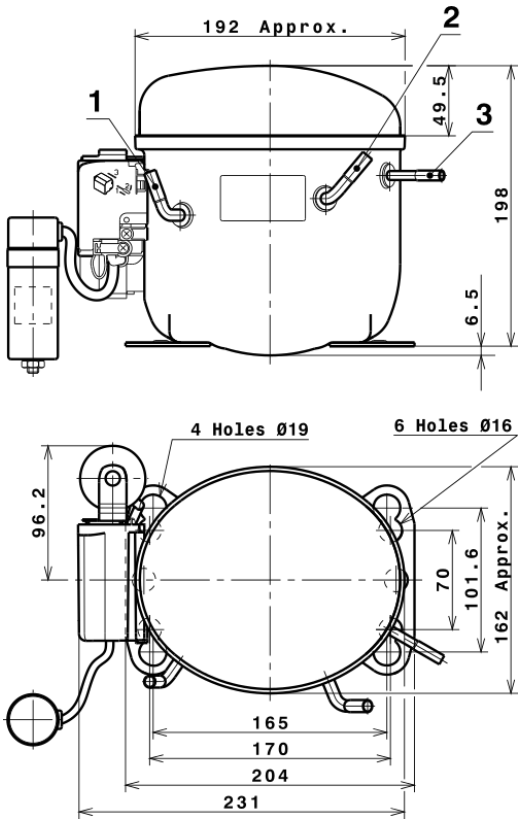
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	342	221	1,30	1,55	1,34
40	-20	432	236	1,35	1,83	1,58
40	-15	536	249	1,40	2,15	1,86
40	-10	655	262	1,45	2,50	2,16
40	-5	789	274	1,49	2,88	2,49
40	0	937	284	1,53	3,30	2,85
40	5	1.101	294	1,57	3,74	3,24
40	7,2	1.177	298	1,59	3,95	3,41
40	10	1.279	303	1,61	4,22	3,65
45	-25	309	224	1,31	1,38	1,19
45	-20	391	242	1,38	1,62	1,40
45	-15	487	258	1,44	1,89	1,63
45	-10	599	274	1,49	2,19	1,89
45	-5	725	288	1,55	2,51	2,17
45	0	866	302	1,60	2,86	2,47
45	5	1.021	315	1,65	3,24	2,80
45	7,2	1.094	320	1,68	3,42	2,95
45	10	1.192	327	1,70	3,65	3,15
50	-25	276	227	1,32	1,21	1,05
50	-20	350	248	1,40	1,41	1,22
50	-15	439	267	1,47	1,64	1,42
50	-10	542	286	1,54	1,90	1,64
50	-5	660	303	1,61	2,18	1,88
50	0	794	320	1,68	2,48	2,14
50	5	942	336	1,74	2,81	2,42
50	7,2	1.011	342	1,77	2,96	2,55
50	10	1.104	350	1,80	3,15	2,72
55	-25	243	230	1,33	1,05	0,91
55	-20	309	254	1,42	1,22	1,05
55	-15	390	276	1,50	1,41	1,22
55	-10	486	298	1,59	1,63	1,41
55	-5	596	318	1,67	1,87	1,62
55	0	722	338	1,75	2,14	1,85
55	5	862	357	1,83	2,42	2,09
55	7,2	928	364	1,86	2,55	2,20
55	10	1.017	374	1,90	2,72	2,35
60	-25	209	233	1,35	0,90	0,77
60	-20	268	260	1,44	1,03	0,89
60	-15	341	285	1,54	1,20	1,03
60	-10	429	310	1,63	1,39	1,20
60	-5	532	333	1,73	1,60	1,38
60	0	650	356	1,82	1,83	1,58
60	5	782	377	1,92	2,07	1,79
60	7,2	845	387	1,96	2,19	1,89
60	10	930	398	2,01	2,34	2,02

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.513,7571441082	144,8170887468	0,9382222914	13,807768221677
2	43,6899560594	-2,7179202871	-0,0122548257	0,43418325398829
3	-14,7567051573	3,6771036587	0,0154153645	-0,072151233425027
4	0,2908854144	-0,0179051077	-0,0000199581	0,0046279427138159
5	-0,3227107611	0,1224015663	0,0005285288	-0,00094647645448933

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

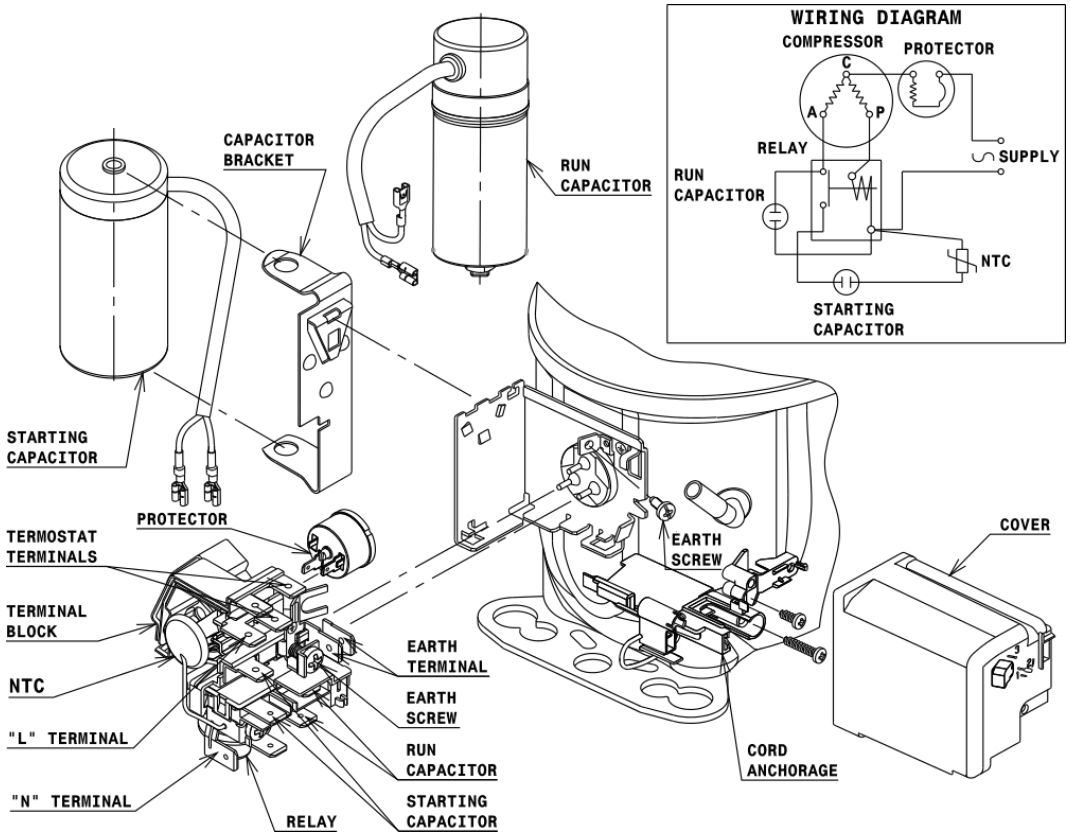
COMPRESSOR DIMENSIONS



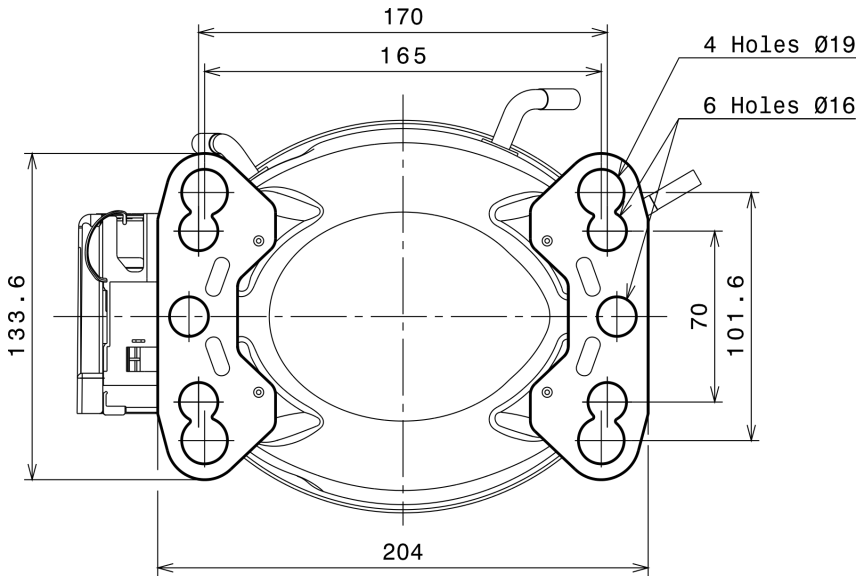
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



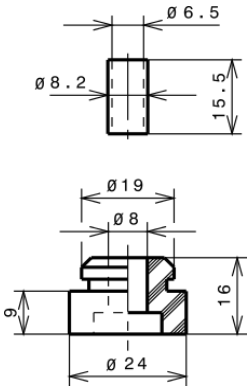
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

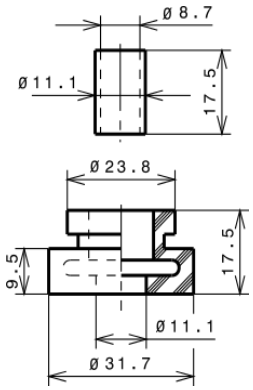
STANDARD

Ø16 holes (170x70 net)



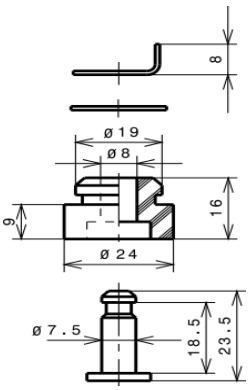
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 HMBP