Technical Data Sheet

Compressor model **NLY75LAb**

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

Refrigerant **R290**

APPLICATION

Application	Low Back Pressure
Refrigerant	R290
Evaporating Temp.	-40,0 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	10,34 Kg
Oil type	ISO VG 46 MINER
Oil charge	300 cm³

MOTOR

Nominal Power	1/4 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	198-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	10,50 A
Max. Cont. Current (MCC)	2,20 A
Main W. resist. at 25ºC	11,04 Ω
Start W. resist. at 25ºC	12,00 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	294 kCal/h	254 W
COP	1,52 W/W	1,17 W/W
EER	1,31 kCal/Wh	1,01 kCal/Wh
Input Power	225 W	217 W
Current	1,03 A	0,99 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LBP (B)	**LBP (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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Run capacitor	10 µF 420 V			
Relay	Option 1			
Reference	2014 131. + NTC15Ω			
Pick-Up	5.30 A			
Drop-Out	4.50 A			
Protector	Option 1			
Reference	T0069			
Current	7,10 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 62,00 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	129	149	0,68	1,01	0,87
40	-35	173	165	0,76	1,22	1,05
40	-30	227	182	0,84	1,45	1,25
40	-25	293	200	0,92	1,71	1,47
40	-23,3	318	206	0,94	1,79	1,54
40	-20	370	218	1,00	1,97	1,69
40	-15	457	238	1,09	2,24	1,92
40	-10	556	258	1,18	2,51	2,16
45	-40	125	149	0,69	0,98	0,84
45	-35	167	167	0,77	1,17	1,00
45	-30	221	186	0,85	1,38	1,19
45	-25	285	205	0,94	1,62	1,39
45	-23,3	310	212	0,97	1,70	1,46
45	-20	361	226	1,03	1,86	1,60
45	-15	447	247	1,13	2,11	1,81
45	-10	545	269	1,22	2,36	2,03
50	-40	121	150	0,69	0,94	0,81
50	-35	162	169	0,78	1,11	0,96
50	-30	215	190	0,87	1,31	1,13
50	-25	278	211	0,97	1,53	1,32
50	-23,3	302	219	1,00	1,61	1,38
50	-20	352	233	1,07	1,76	1,51
50	-15	438	256	1,17	1,99	1,71
50	-10	534	280	1,27	2,22	1,91
55	-40	117	150	0,69	0,91	0,78
55	-35	157	172	0,79	1,07	0,92
55	-30	208	194	0,89	1,25	1,07
55	-25	270	217	0,99	1,45	1,25
55	-23,3	294	225	1,03	1,52	1,31
55	-20	344	241	1,10	1,66	1,43
55	-15	428	266	1,21	1,87	1,61
55	-10	523	291	1,32	2,09	1,80
60	-40	113	151	0,69	0,87	0,75
60	-35	152	174	0,80	1,02	0,87
60	-30	202	198	0,91	1,19	1,02
60	-25	263	223	1,02	1,37	1,18
60	-23,3	286	231	1,06	1,44	1,24
60	-20	335	248	1,13	1,57	1,35
60	-15	418	275	1,25	1,77	1,52
60	-10	512	302	1,37	1,97	1,70

CECOMAF

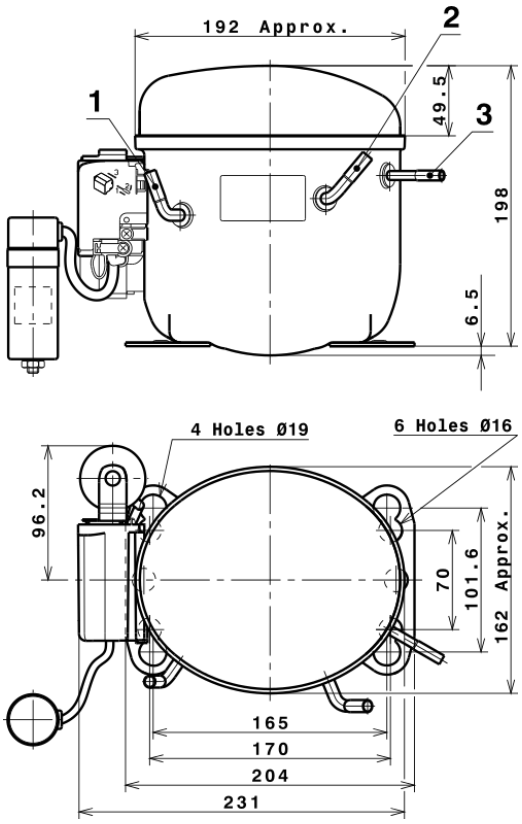
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	140	149	0,68	0,94	0,82
40	-35	192	165	0,76	1,16	1,01
40	-30	254	182	0,84	1,40	1,21
40	-25	326	200	0,92	1,63	1,41
40	-23,3	353	206	0,94	1,71	1,48
40	-20	408	218	1,00	1,87	1,62
40	-15	501	238	1,09	2,11	1,82
40	-10	604	258	1,18	2,34	2,02
45	-40	130	149	0,69	0,87	0,75
45	-35	177	167	0,77	1,06	0,92
45	-30	235	186	0,85	1,26	1,09
45	-25	302	205	0,94	1,47	1,27
45	-23,3	327	212	0,97	1,54	1,33
45	-20	380	226	1,03	1,68	1,45
45	-15	468	247	1,13	1,89	1,64
45	-10	566	269	1,22	2,10	1,82
50	-40	120	150	0,69	0,80	0,69
50	-35	163	169	0,78	0,96	0,83
50	-30	215	190	0,87	1,13	0,98
50	-25	278	211	0,97	1,32	1,14
50	-23,3	302	219	1,00	1,38	1,19
50	-20	351	233	1,07	1,51	1,30
50	-15	435	256	1,17	1,70	1,47
50	-10	528	280	1,27	1,89	1,63
55	-40	110	150	0,69	0,73	0,63
55	-35	148	172	0,79	0,86	0,75
55	-30	196	194	0,89	1,01	0,87
55	-25	254	217	0,99	1,17	1,01
55	-23,3	276	225	1,03	1,23	1,06
55	-20	323	241	1,10	1,34	1,16
55	-15	402	266	1,21	1,51	1,31
55	-10	490	291	1,32	1,69	1,46
60	-40	100	151	0,69	0,67	0,58
60	-35	133	174	0,80	0,77	0,66
60	-30	177	198	0,91	0,89	0,77
60	-25	230	223	1,02	1,03	0,89
60	-23,3	251	231	1,06	1,08	0,94
60	-20	294	248	1,13	1,18	1,02
60	-15	368	275	1,25	1,34	1,16
60	-10	453	302	1,37	1,50	1,29

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.213,1645499222	189,8509465732	0,8790814133	11,267499673954
2	32,8590635605	1,7347176373	0,0070956484	0,34927821363044
3	-9,7006935790	2,9717800349	0,0128788523	-0,033598372126326
4	0,1996596355	0,0169807281	0,0000524070	0,002919448042772
5	-0,1919179203	0,0717403243	0,0003102168	-0,00059510680421234

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

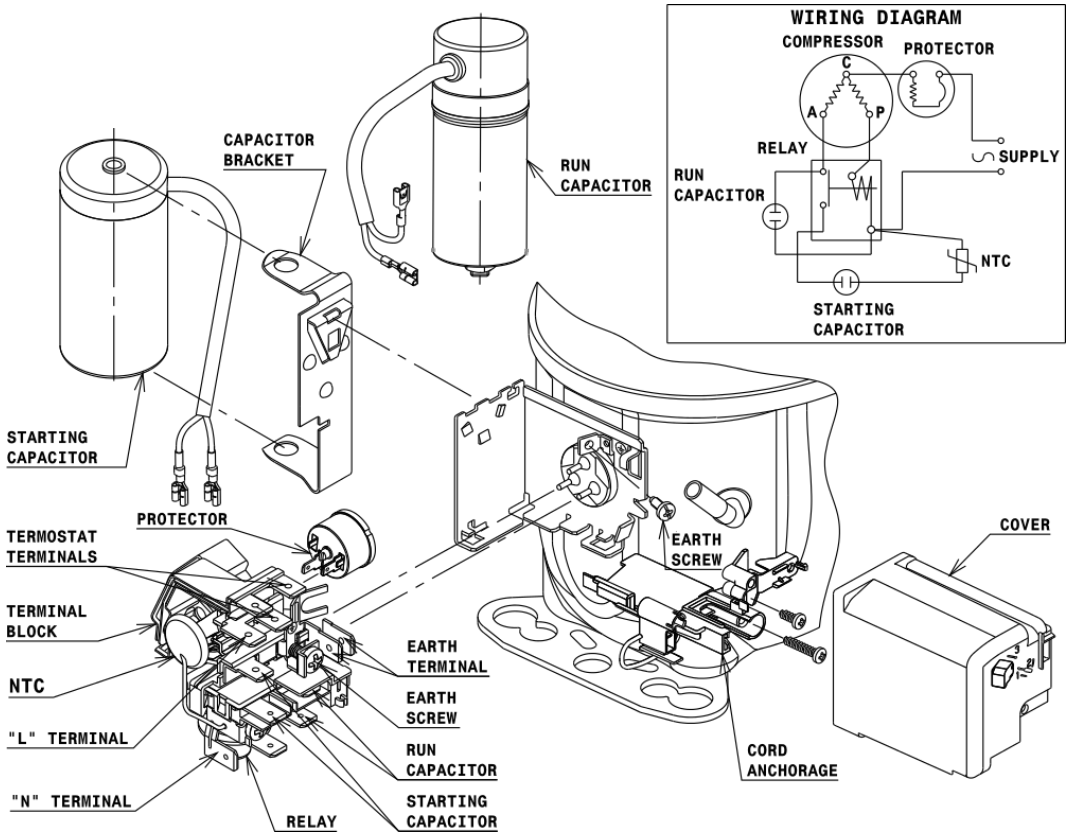
COMPRESSOR DIMENSIONS



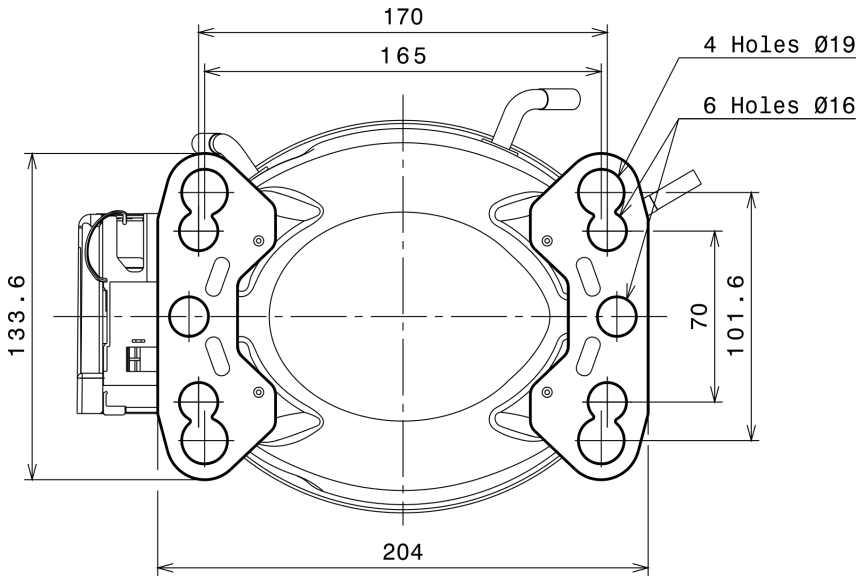
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



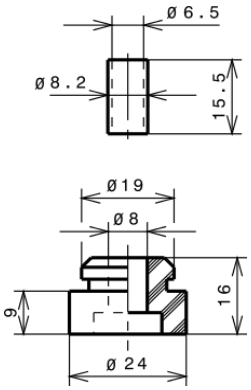
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

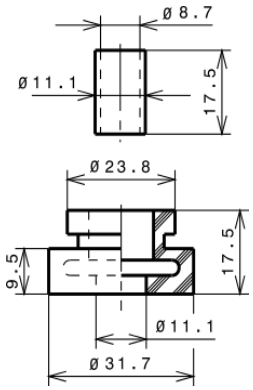
STANDARD

Ø16 holes (170x70 net)



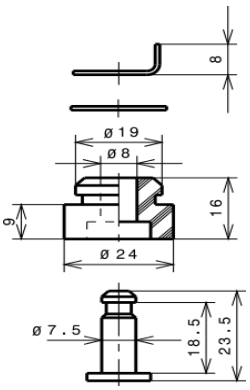
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LBP