Technical Data Sheet

Compressor model **NUY90NGb**

Voltage **200-220/220-230V 50/60Hz ~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	8,90 cm³
Diameter	24,30 mm
Stroke	19,00 mm
Net Weight	10,32 Kg
Oil type	ISO VG 32 ESTER
Oil charge	200 cm³

MOTOR

Nominal Power	1/3 hp
Voltage/Frequency	200-220V 50Hz
Voltage range	170-242 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	14,50 A
Main W. resist. at 25ºC	6,12 Ω
Start W. resist. at 25ºC	21,11 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	371 kCal/h	322 W
COP	1,56 W/W	1,21 W/W
EER	1,34 kCal/Wh	1,04 kCal/Wh
Input Power	276 W	267 W
Current	1,55 A	1,51 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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	64-77 / 60-61 µF 330 V			
Run capacitor	5 µF 400 V			
Relay	Option 1	Option 2		
Reference	2014 145. + NTC15Ω	QLZ-7.1+NTC15		
Pick-Up	7,00 A	7 A		
Drop-Out	5,90 A	5.9 A		
Protector	Option 1			
Reference	B96-105			
Current	9,60 A			
Time check	7,5-16 seg			
Disc temp. (Open/Close)	115,00 / 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	177	179	1,21	1,15	0,99
40	-35	228	198	1,27	1,34	1,15
40	-30	295	218	1,34	1,57	1,35
40	-25	375	238	1,41	1,83	1,57
40	-23,3	406	245	1,44	1,93	1,66
40	-20	470	258	1,48	2,11	1,82
40	-15	578	279	1,56	2,41	2,07
40	-10	701	300	1,64	2,72	2,34
40	-5	838	321	1,72	3,04	2,61
40	0	990	342	1,81	3,37	2,89
45	-40	170	181	1,22	1,09	0,94
45	-35	220	203	1,29	1,26	1,09
45	-30	285	225	1,37	1,47	1,27
45	-25	364	248	1,44	1,71	1,47
45	-23,3	394	255	1,47	1,80	1,54
45	-20	457	270	1,53	1,97	1,69
45	-15	564	293	1,62	2,24	1,92
45	-10	686	317	1,71	2,52	2,17
45	-5	821	340	1,80	2,81	2,41
45	0	971	364	1,91	3,10	2,67
50	-40	164	183	1,22	1,04	0,89
50	-35	212	207	1,30	1,19	1,02
50	-30	276	232	1,39	1,38	1,19
50	-25	353	257	1,48	1,60	1,37
50	-23,3	383	266	1,51	1,67	1,44
50	-20	445	282	1,57	1,83	1,57
50	-15	550	308	1,67	2,08	1,79
50	-10	670	334	1,78	2,34	2,01
50	-5	804	360	1,89	2,60	2,24
50	0	953	386	2,00	2,87	2,47
55	-40	157	185	1,23	0,99	0,85
55	-35	204	212	1,32	1,12	0,96
55	-30	266	239	1,41	1,29	1,11
55	-25	342	267	1,51	1,49	1,28
55	-23,3	371	276	1,55	1,56	1,34
55	-20	432	294	1,62	1,71	1,47
55	-15	536	322	1,73	1,93	1,66
55	-10	655	351	1,85	2,17	1,87
55	-5	787	379	1,97	2,41	2,08
55	0	934	408	2,10	2,66	2,29
60	-40	151	187	1,24	0,94	0,80
60	-35	196	216	1,34	1,06	0,91
60	-30	257	246	1,44	1,21	1,04
60	-25	331	276	1,55	1,39	1,20
60	-23,3	359	286	1,59	1,46	1,26
60	-20	420	306	1,67	1,59	1,37
60	-15	522	337	1,79	1,80	1,55
60	-10	639	368	1,92	2,02	1,74
60	-5	770	399	2,06	2,25	1,93
60	0	916	430	2,20	2,48	2,13

CECOMAF

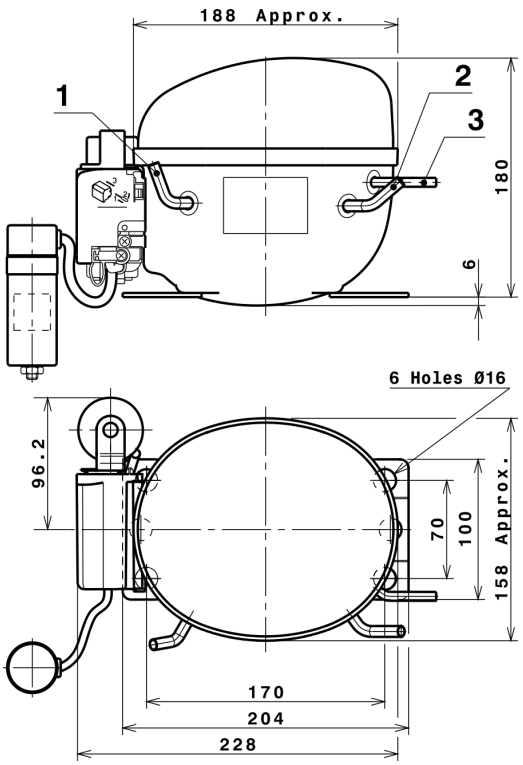
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	192	179	1,21	1,07	0,92
40	-35	256	198	1,27	1,29	1,11
40	-30	334	218	1,34	1,53	1,32
40	-25	424	238	1,41	1,78	1,54
40	-23,3	458	245	1,44	1,87	1,62
40	-20	528	258	1,48	2,04	1,77
40	-15	645	279	1,56	2,31	2,00
40	-10	775	300	1,64	2,59	2,23
40	-5	918	321	1,72	2,86	2,47
40	0	1.074	342	1,81	3,14	2,71
45	-40	177	181	1,22	0,98	0,84
45	-35	235	203	1,29	1,16	1,00
45	-30	306	225	1,37	1,36	1,17
45	-25	390	248	1,44	1,58	1,36
45	-23,3	422	255	1,47	1,65	1,43
45	-20	487	270	1,53	1,80	1,56
45	-15	598	293	1,62	2,04	1,76
45	-10	721	317	1,71	2,28	1,97
45	-5	858	340	1,80	2,52	2,18
45	0	1.007	364	1,91	2,77	2,39
50	-40	162	183	1,22	0,89	0,77
50	-35	214	207	1,30	1,03	0,89
50	-30	278	232	1,39	1,20	1,04
50	-25	356	257	1,48	1,38	1,20
50	-23,3	385	266	1,51	1,45	1,25
50	-20	447	282	1,57	1,58	1,37
50	-15	550	308	1,67	1,79	1,54
50	-10	667	334	1,78	2,00	1,73
50	-5	797	360	1,89	2,22	1,92
50	0	940	386	2,00	2,44	2,11
55	-40	148	185	1,23	0,80	0,69
55	-35	193	212	1,32	0,91	0,79
55	-30	251	239	1,41	1,05	0,91
55	-25	322	267	1,51	1,21	1,04
55	-23,3	349	276	1,55	1,26	1,09
55	-20	406	294	1,62	1,38	1,19
55	-15	503	322	1,73	1,56	1,35
55	-10	613	351	1,85	1,75	1,51
55	-5	737	379	1,97	1,94	1,68
55	0	874	408	2,10	2,14	1,85
60	-40	133	187	1,24	0,71	0,62
60	-35	172	216	1,34	0,79	0,69
60	-30	223	246	1,44	0,91	0,78
60	-25	287	276	1,55	1,04	0,90
60	-23,3	312	286	1,59	1,09	0,94
60	-20	365	306	1,67	1,19	1,03
60	-15	456	337	1,79	1,35	1,17
60	-10	560	368	1,92	1,52	1,32
60	-5	677	399	2,06	1,70	1,47
60	0	807	430	2,20	1,88	1,62

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.609,4517939488	170,4473291309	1,0360135756	14,465921247241
2	42,8441110101	0,3721064277	0,0015592770	0,44527920170763
3	-13,8151714478	4,5178810131	0,0202561194	-0,047221147267584
4	0,2561639754	0,0068557755	0,0001225658	0,0038359585439082
5	-0,2717198444	0,1027303190	0,0004730697	-0,00078280529810364

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

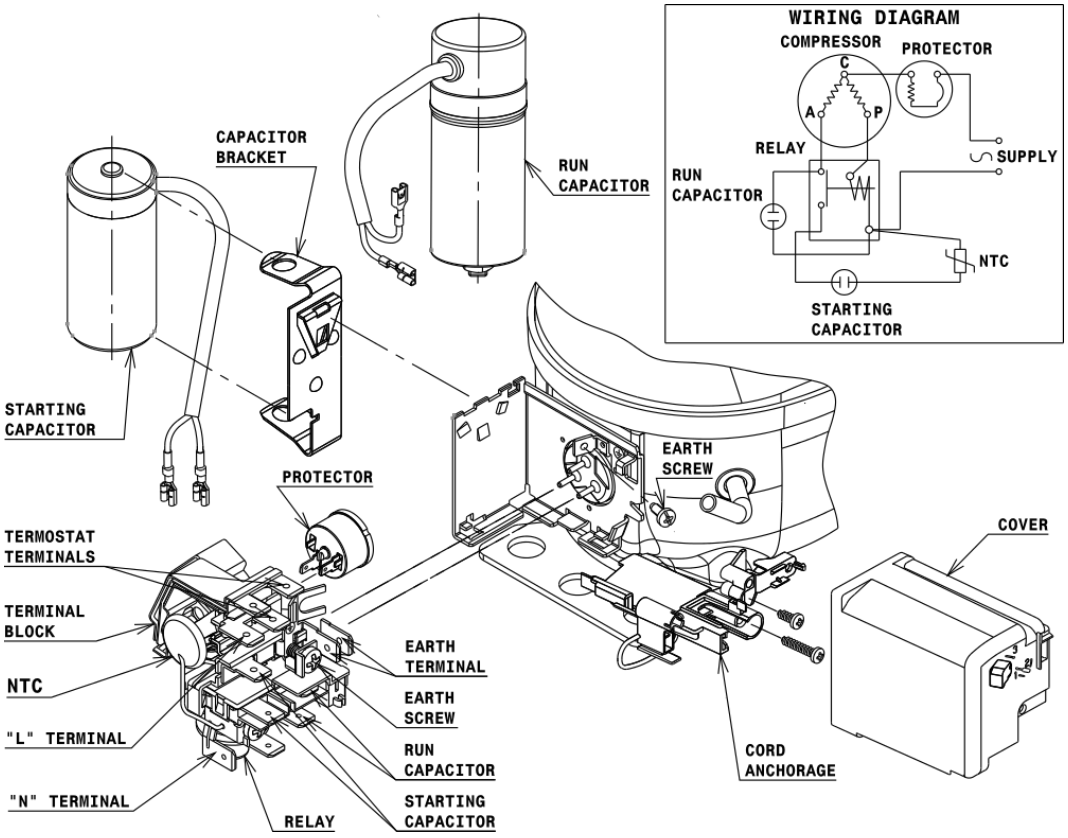
COMPRESSOR DIMENSIONS



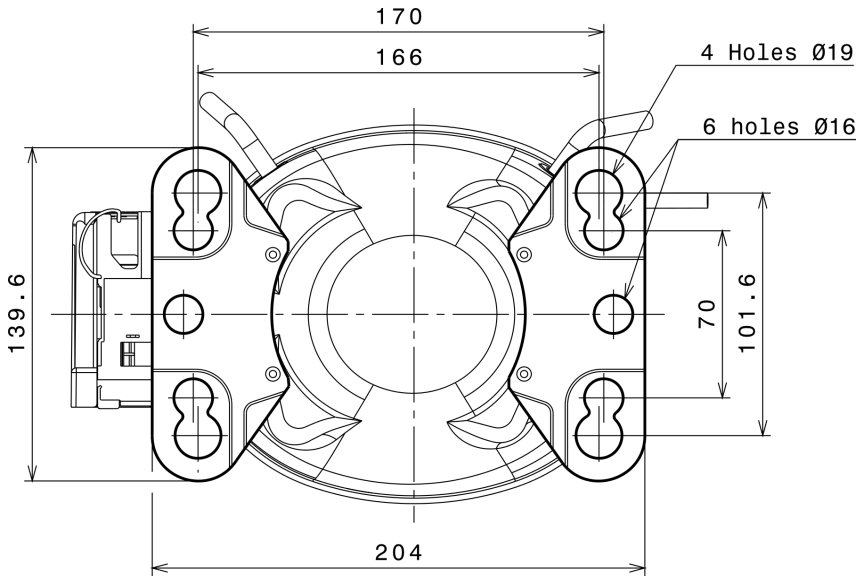
	DESIGNATION	INTERNAL DIAM.
1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (U range)



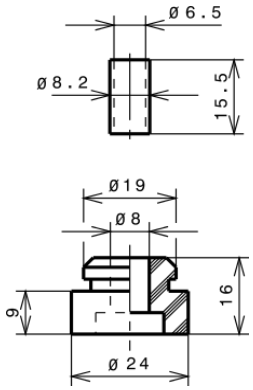
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

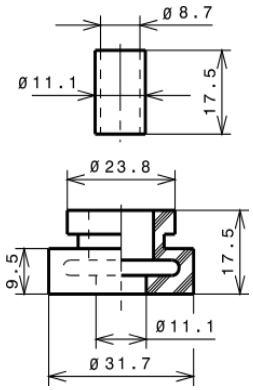
STANDARD

Ø16 holes (170x70 net)



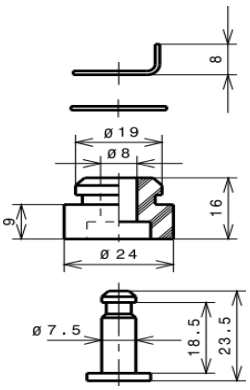
AMERICAN FEET

Ø19 holes (166x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LMBP