

Technical Data Sheet

Compressor model **NUY90NGa**
 Voltage **200-220/220-230V 50/60Hz ~1**
 Refrigerant **R290**

APPLICATION		COMPRESSOR		MOTOR	
Application	Low-Medium Back Pressure	Displacement	8,90 cm ³	Nominal Power	1/3 hp
Refrigerant	R290	Diameter	24,30 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-40,0 °C to 0,0 °C	Stroke	19,00 mm	Voltage range	180-242 V
Expansion	Capillar/Valve	Net Weight	10,21 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	200 cm ³	Locked Rotor Amps (LRA)	14,10 A
				Main W. resist. at 25°C	6,12 Ω
				Start W. resist. at 25°C	21,11 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	370 kCal/h	321 W
COP	1,47 W/W	1,14 W/W
EER	1,27 kCal/Wh	0,98 kCal/Wh
Input Power	292 W	282 W
Current	1,95 A	1,92 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE LMBP (B)	CECOMAF LMBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	64-77 / 60-61 μF 330 V			
Relay	Option 1	Option 2		
Reference	2014 145.	QLZ-7.1A		
Pick-Up	7,10 A	7,10 A		
Drop-Out	6,00 A	6,00 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 °C			

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

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	177	190	1,66	1,09	0,93
40	-35	230	209	1,71	1,28	1,10
40	-30	297	228	1,76	1,51	1,30
40	-25	377	248	1,82	1,77	1,52
40	-23,3	407	255	1,84	1,86	1,60
40	-20	470	268	1,88	2,04	1,75
40	-15	577	289	1,94	2,32	2,00
40	-10	697	310	2,01	2,62	2,25
40	-5	831	332	2,08	2,91	2,51
40	0	978	354	2,16	3,22	2,77

45	-40	170	191	1,66	1,04	0,89
45	-35	222	213	1,72	1,21	1,04
45	-30	287	236	1,78	1,41	1,21
45	-25	365	259	1,85	1,64	1,41
45	-23,3	395	267	1,87	1,72	1,48
45	-20	457	283	1,92	1,88	1,62
45	-15	562	307	2,00	2,13	1,83
45	-10	681	331	2,08	2,39	2,06
45	-5	813	356	2,17	2,66	2,28
45	0	958	381	2,27	2,92	2,51

50	-40	163	193	1,67	0,98	0,85
50	-35	213	218	1,73	1,14	0,98
50	-30	276	244	1,80	1,32	1,13
50	-25	353	271	1,88	1,52	1,31
50	-23,3	382	280	1,91	1,59	1,37
50	-20	443	297	1,97	1,73	1,49
50	-15	547	325	2,06	1,96	1,69
50	-10	664	352	2,16	2,19	1,89
50	-5	794	380	2,27	2,43	2,09
50	0	938	409	2,38	2,67	2,30

55	-40	156	194	1,67	0,94	0,80
55	-35	204	223	1,74	1,07	0,92
55	-30	266	252	1,83	1,23	1,06
55	-25	341	282	1,92	1,41	1,21
55	-23,3	370	292	1,95	1,47	1,27
55	-20	430	312	2,02	1,60	1,38
55	-15	532	342	2,12	1,81	1,55
55	-10	647	373	2,24	2,02	1,73
55	-5	776	404	2,37	2,23	1,92
55	0	918	436	2,50	2,45	2,11

60	-40	149	196	1,67	0,89	0,76
60	-35	196	228	1,76	1,00	0,86
60	-30	256	260	1,85	1,14	0,98
60	-25	330	293	1,95	1,31	1,12
60	-23,3	358	304	1,99	1,37	1,17
60	-20	416	326	2,07	1,48	1,28
60	-15	517	360	2,19	1,67	1,44
60	-10	630	394	2,32	1,86	1,60
60	-5	758	429	2,47	2,06	1,77
60	0	898	464	2,62	2,25	1,94

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	192	190	1,66	1,01	0,88
40	-35	257	209	1,71	1,23	1,07
40	-30	335	228	1,76	1,47	1,27
40	-25	425	248	1,82	1,71	1,48
40	-23,3	459	255	1,84	1,80	1,56
40	-20	528	268	1,88	1,97	1,70
40	-15	643	289	1,94	2,22	1,92
40	-10	770	310	2,01	2,48	2,14
40	-5	910	332	2,08	2,74	2,37
40	0	1.062	354	2,16	3,00	2,59

45	-40	177	191	1,66	0,93	0,80
45	-35	236	213	1,72	1,11	0,95
45	-30	307	236	1,78	1,30	1,12
45	-25	391	259	1,85	1,51	1,30
45	-23,3	422	267	1,87	1,58	1,36
45	-20	487	283	1,92	1,72	1,49
45	-15	595	307	2,00	1,94	1,68
45	-10	715	331	2,08	2,16	1,87
45	-5	848	356	2,17	2,38	2,06
45	0	994	381	2,27	2,61	2,25

50	-40	162	193	1,67	0,84	0,73
50	-35	214	218	1,73	0,98	0,85
50	-30	279	244	1,80	1,14	0,99
50	-25	356	271	1,88	1,32	1,14
50	-23,3	385	280	1,91	1,38	1,19
50	-20	445	297	1,97	1,50	1,29
50	-15	547	325	2,06	1,69	1,46
50	-10	661	352	2,16	1,88	1,62
50	-5	787	380	2,27	2,07	1,79
50	0	926	409	2,38	2,27	1,96

55	-40	147	194	1,67	0,76	0,65
55	-35	193	223	1,74	0,86	0,75
55	-30	251	252	1,83	0,99	0,86
55	-25	321	282	1,92	1,14	0,98
55	-23,3	348	292	1,95	1,19	1,03
55	-20	404	312	2,02	1,30	1,12
55	-15	499	342	2,12	1,46	1,26
55	-10	607	373	2,24	1,63	1,40
55	-5	726	404	2,37	1,80	1,55
55	0	859	436	2,50	1,97	1,70

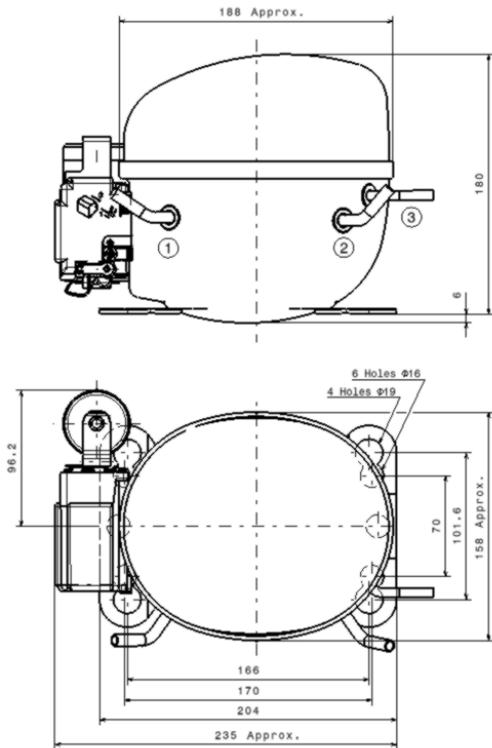
60	-40	132	196	1,67	0,67	0,58
60	-35	171	228	1,76	0,75	0,65
60	-30	223	260	1,85	0,86	0,74
60	-25	286	293	1,95	0,98	0,84
60	-23,3	311	304	1,99	1,02	0,88
60	-20	363	326	2,07	1,11	0,96
60	-15	451	360	2,19	1,25	1,08
60	-10	552	394	2,32	1,40	1,21
60	-5	665	429	2,47	1,55	1,34
60	0	791	464	2,62	1,71	1,47

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.602,2121243915	137,0766171023	1,2285513274	14,472125063041
2	41,9747359260	-0,7305279493	-0,0028141952	0,43587192219554
3	-13,9481678750	5,6473512664	0,0240599007	-0,051030656598289
4	0,2415250337	0,0094055012	0,0001858570	0,0036312456255452
5	-0,2727597400	0,1335212519	0,0005824278	-0,0008475128497582

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

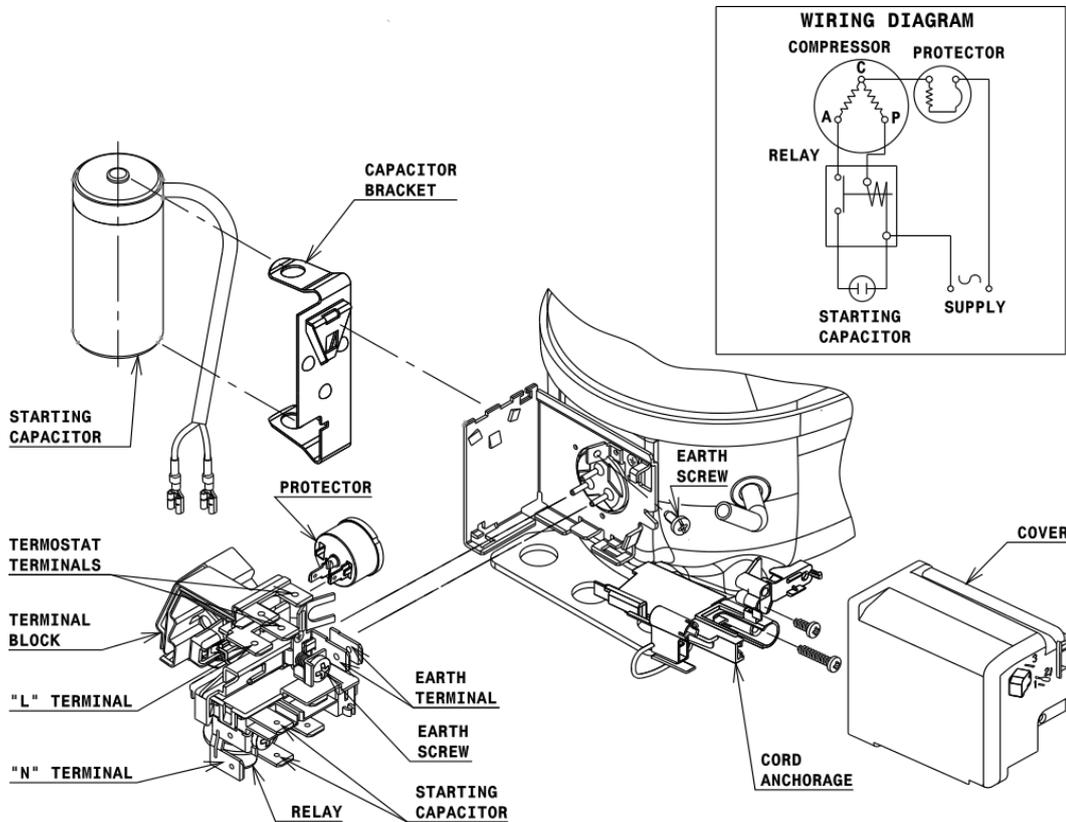


DESIGNATION INTERNAL DIAM.

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

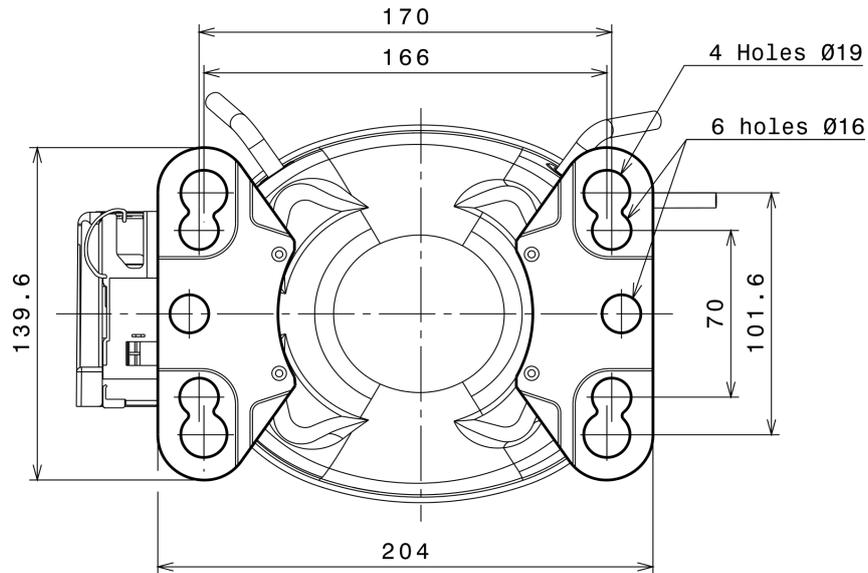
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

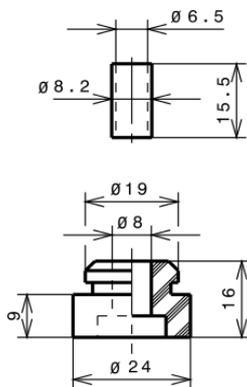
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

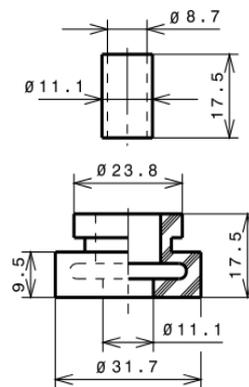
STANDARD

$\varnothing 16$ holes (170x70 net)



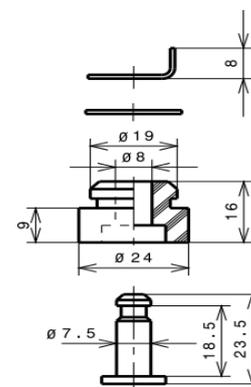
AMERICAN FEET

$\varnothing 19$ holes (166x101.6 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R290 LMBP

