

Technical Data Sheet

Compressor model **NUY80NRa**
Voltage **115-127V 60Hz ~1**
Refrigerant **R290**
Compressor status

APPLICATION

COMPRESSOR

MOTOR

Application	Low-Medium Back Pressure.	Displacement	8,10 cm ³	Voltage/Frequency	115-127V 60Hz
Refrigerant	R290	Diameter	24,30 mm	Voltage range	98-140 V
Evaporating Temp.	-40,0 °C to -5,0 °C	Stroke	17,50 mm	Type	CSIR
Expansion	Capillar/Valve	Net Weight	9,52 Kg	Phase number	1 PH
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Locked Rotor Amps (LRA)	29,30 A
Max. ambient temp.	43,0 °C	Oil charge	200 cm ³	Max. Cont. Current (MCC)	7,00 A
		HP	1/4 hp	Main W. resist. at 25°C	1,72 Ω
				Start W. resist. at 25°C	10,10 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	419 kCal/h	364 W
COP	1,58 W/W	1,23 W/W
EER	1,36 kCal/Wh	1,06 kCal/Wh
Input Power	309 W	297 W
Current	3,86 A	3,79 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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	150 µF 160 V			
Relay	Option 1	Option 2		
Reference	2014 170.	QLZ-12.1A		
Pick-Up	12,10 A	12.1 A		
Drop-Out	10,30 A	10.3 A		
Protector	Option 1	Option 2		
Reference	T0535	B170-105		
Current	18,00 A	17,00 A		
Time check	7,5-14 seg	7,5-16 seg		
Disc temp. (Open/Close)	135,00 / 52,00 °C	110,00 / 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	205	196	3,21	1,22	1,05
40	-35	276	217	3,32	1,48	1,27
40	-30	360	239	3,44	1,75	1,50
40	-25	457	264	3,58	2,02	1,73
40	-23,3	493	272	3,63	2,11	1,81
40	-20	568	289	3,74	2,28	1,96
40	-15	691	316	3,91	2,54	2,19
40	-10	828	345	4,10	2,79	2,40
40	-5	978	375	4,31	3,03	2,61

45	-40	195	198	3,22	1,15	0,98
45	-35	262	222	3,35	1,37	1,18
45	-30	341	248	3,49	1,60	1,38
45	-25	434	275	3,65	1,84	1,58
45	-23,3	469	284	3,71	1,92	1,65
45	-20	540	303	3,82	2,07	1,78
45	-15	659	334	4,02	2,30	1,98
45	-10	792	365	4,24	2,52	2,17
45	-5	937	398	4,48	2,74	2,35

50	-40	185	201	3,24	1,07	0,92
50	-35	247	228	3,38	1,26	1,09
50	-30	322	256	3,54	1,46	1,26
50	-25	411	286	3,72	1,67	1,44
50	-23,3	444	297	3,78	1,74	1,50
50	-20	512	318	3,92	1,88	1,61
50	-15	627	351	4,14	2,08	1,79
50	-10	755	385	4,38	2,28	1,96
50	-5	896	421	4,65	2,48	2,13

55	-40	175	203	3,25	1,00	0,86
55	-35	233	233	3,41	1,16	1,00
55	-30	303	265	3,59	1,33	1,15
55	-25	387	297	3,79	1,51	1,30
55	-23,3	419	309	3,86	1,58	1,36
55	-20	485	332	4,01	1,70	1,46
55	-15	595	368	4,26	1,88	1,62
55	-10	718	405	4,53	2,06	1,77
55	-5	855	444	4,83	2,24	1,93

60	-40	165	206	3,26	0,93	0,80
60	-35	218	238	3,44	1,06	0,92
60	-30	285	273	3,64	1,21	1,04
60	-25	364	309	3,86	1,37	1,18
60	-23,3	394	321	3,94	1,43	1,23
60	-20	457	346	4,11	1,54	1,32
60	-15	563	385	4,38	1,70	1,46
60	-10	682	425	4,68	1,86	1,60
60	-5	814	467	5,02	2,03	1,74

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	222	196	3,21	1,14	0,98
40	-35	305	217	3,32	1,41	1,22
40	-30	400	239	3,44	1,67	1,44
40	-25	508	264	3,58	1,93	1,66
40	-23,3	547	272	3,63	2,01	1,74
40	-20	627	289	3,74	2,17	1,87
40	-15	759	316	3,91	2,40	2,07
40	-10	903	345	4,10	2,62	2,26
40	-5	1.059	375	4,31	2,82	2,44

45	-40	203	198	3,22	1,03	0,89
45	-35	276	222	3,35	1,24	1,08
45	-30	362	248	3,49	1,46	1,26
45	-25	460	275	3,65	1,67	1,45
45	-23,3	496	284	3,71	1,74	1,51
45	-20	570	303	3,82	1,88	1,62
45	-15	692	334	4,02	2,08	1,79
45	-10	826	365	4,24	2,26	1,96
45	-5	973	398	4,48	2,44	2,11

50	-40	184	201	3,24	0,92	0,79
50	-35	248	228	3,38	1,09	0,94
50	-30	324	256	3,54	1,26	1,09
50	-25	412	286	3,72	1,44	1,24
50	-23,3	445	297	3,78	1,50	1,30
50	-20	513	318	3,92	1,61	1,39
50	-15	625	351	4,14	1,78	1,54
50	-10	750	385	4,38	1,95	1,68
50	-5	887	421	4,65	2,11	1,82

55	-40	165	203	3,25	0,81	0,70
55	-35	219	233	3,41	0,94	0,81
55	-30	286	265	3,59	1,08	0,93
55	-25	364	297	3,79	1,23	1,06
55	-23,3	394	309	3,86	1,27	1,10
55	-20	455	332	4,01	1,37	1,19
55	-15	558	368	4,26	1,52	1,31
55	-10	673	405	4,53	1,66	1,44
55	-5	801	444	4,83	1,80	1,56

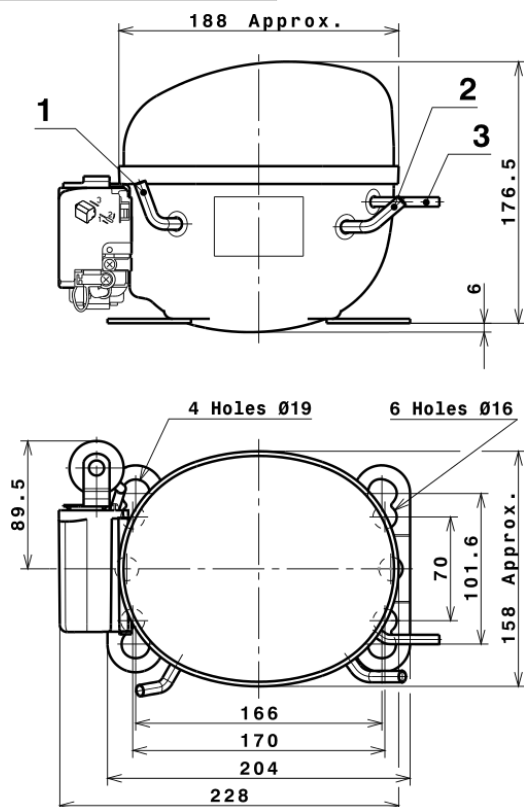
60	-40	146	206	3,26	0,71	0,61
60	-35	191	238	3,44	0,80	0,69
60	-30	248	273	3,64	0,91	0,78
60	-25	317	309	3,86	1,03	0,89
60	-23,3	343	321	3,94	1,07	0,92
60	-20	398	346	4,11	1,15	0,99
60	-15	491	385	4,38	1,28	1,10
60	-10	597	425	4,68	1,40	1,21
60	-5	715	467	5,02	1,53	1,32

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.982,0691274902	204,5752921397	2,9531928972	19,038418607574
2	49,7720301759	1,8928375299	0,0157767266	0,53121354869255
3	-19,4133167443	5,3190148898	0,0419064337	-0,11484295126039
4	0,2376397653	0,0315258779	0,0005036979	0,0035579132212688
5	-0,3892145119	0,1202044894	0,0009819234	-0,0022595169174243

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

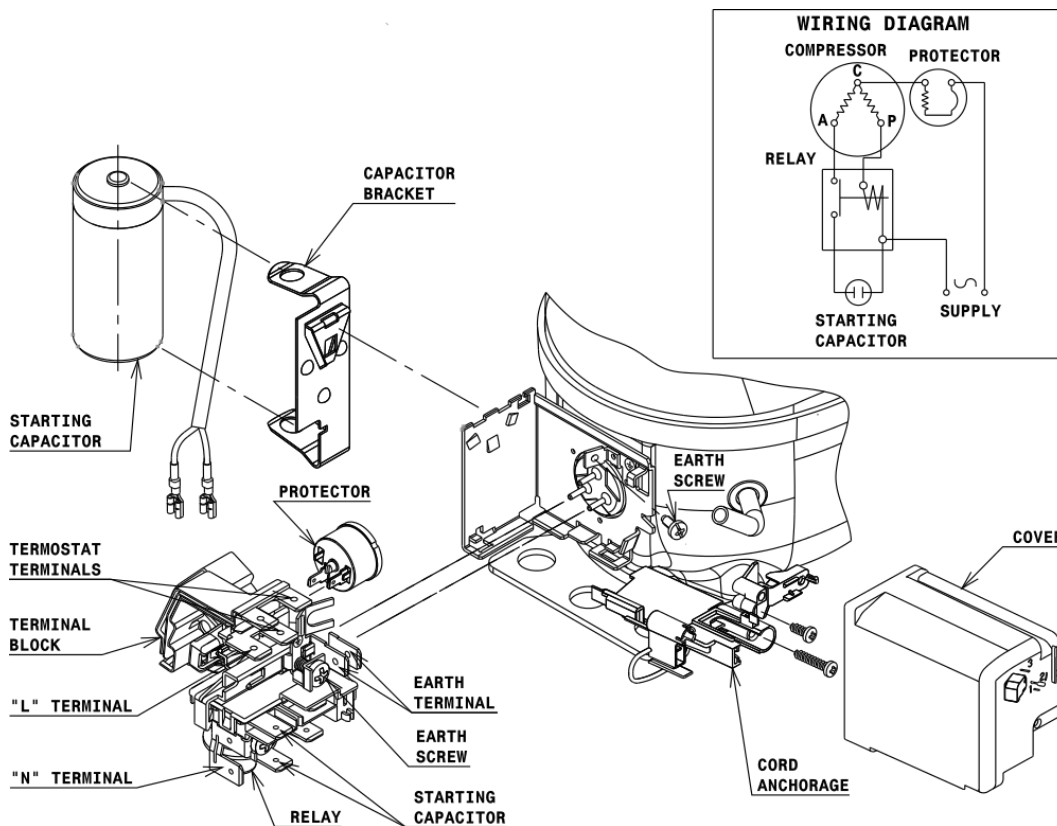


DESIGNATION INTERNAL DIAM.

1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

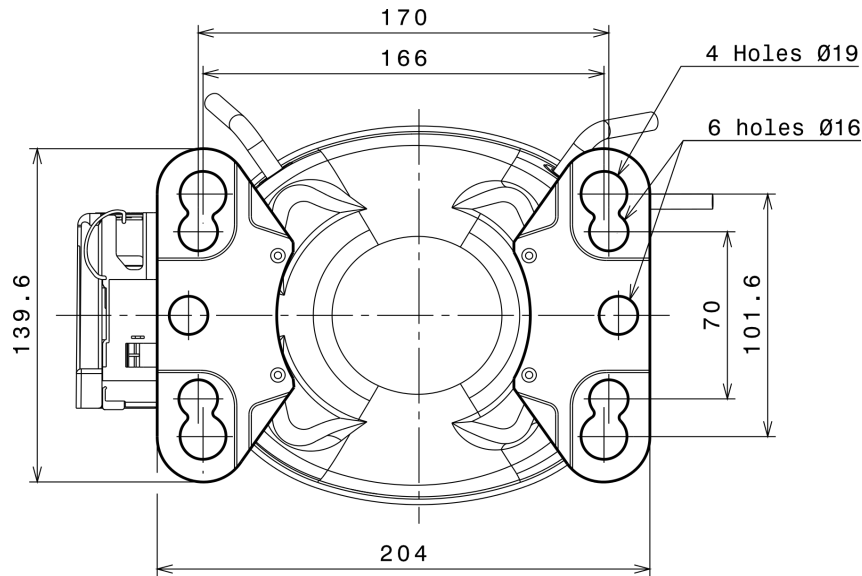
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

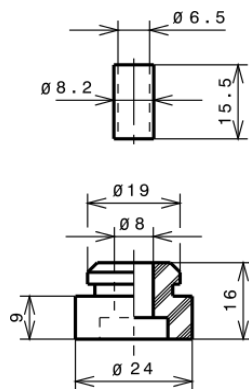
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

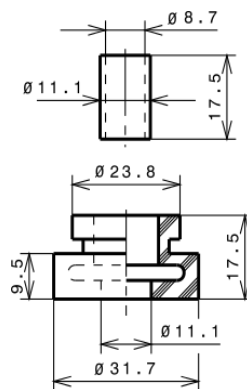
STANDARD

Ø16 holes (170x70 net)



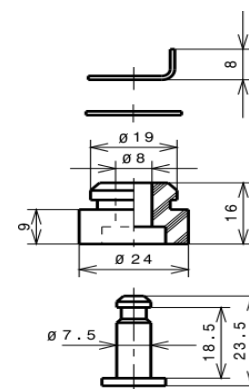
AMERICAN FEET

Ø19 holes (166x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LMBP.

