

Technical Data Sheet

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

APPLICATION

COMPRESSOR

MOTOR

Application	Low-Medium Back Pressure.	Displacement	8,10 cm ³	Nominal Power	1/4 hp
Refrigerant	R290	Diameter	24,30 mm	Voltage/Frequency	115-127V 60Hz
Evaporating Temp.	-40,0 °C to -5,0 °C	Stroke	17,50 mm	Voltage range	98-140 V
Expansion	Capillar/Valve	Net Weight	9,52 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 46 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	200 cm ³	Locked Rotor Amps (LRA)	29,30 A
				Max. Cont. Current (MCC)	7,00 A
				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	409 W
COP	1,58 W/W	1,37 W/W
EER	1,36 kCal/Wh	1,18 kCal/Wh
Input Power	309 W	299 W
Current	3,86 A	3,80 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

	Option 1	Option 2		
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	78	197	3,22	0,40	0,34
40	-35	76	218	3,33	0,35	0,30
40	-30	89	241	3,45	0,37	0,32
40	-25	115	265	3,59	0,43	0,37
40	-23,3	127	274	3,64	0,46	0,40
40	-20	155	291	3,75	0,53	0,46
40	-15	208	318	3,92	0,65	0,57
40	-10	276	347	4,11	0,79	0,69
40	-5	357	377	4,32	0,95	0,82

45	-40	113	199	3,23	0,57	0,49
45	-35	133	223	3,36	0,59	0,51
45	-30	166	249	3,50	0,67	0,57
45	-25	213	276	3,66	0,77	0,66
45	-23,3	232	286	3,72	0,81	0,70
45	-20	273	305	3,84	0,90	0,77
45	-15	348	335	4,03	1,04	0,90
45	-10	436	367	4,25	1,19	1,03
45	-5	538	400	4,49	1,34	1,16

50	-40	149	202	3,24	0,74	0,64
50	-35	189	229	3,39	0,83	0,71
50	-30	243	257	3,55	0,94	0,82
50	-25	311	288	3,73	1,08	0,93
50	-23,3	337	298	3,79	1,13	0,98
50	-20	392	319	3,93	1,23	1,06
50	-15	487	353	4,15	1,38	1,19
50	-10	596	387	4,40	1,54	1,33
50	-5	719	424	4,67	1,70	1,47

55	-40	185	204	3,26	0,90	0,78
55	-35	245	234	3,42	1,05	0,91
55	-30	320	266	3,60	1,20	1,04
55	-25	409	299	3,80	1,37	1,18
55	-23,3	442	311	3,87	1,42	1,23
55	-20	511	334	4,02	1,53	1,32
55	-15	627	370	4,27	1,69	1,46
55	-10	757	408	4,55	1,86	1,60
55	-5	900	447	4,85	2,02	1,74

60	-40	220	207	3,27	1,07	0,92
60	-35	302	240	3,45	1,26	1,09
60	-30	397	274	3,65	1,45	1,25
60	-25	507	310	3,87	1,63	1,41
60	-23,3	547	323	3,95	1,69	1,46
60	-20	630	348	4,12	1,81	1,56
60	-15	766	387	4,39	1,98	1,71
60	-10	917	428	4,70	2,14	1,85
60	-5	1.081	470	5,04	2,30	1,99

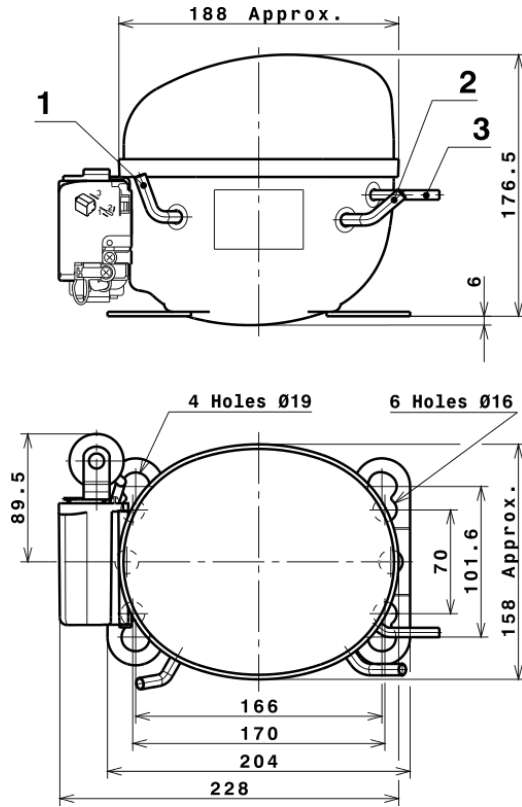
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	-1.104,5342053913	205,9210278244	2,9565065762	-19,93265198043
2	-11,9150742428	1,9227193521	0,0160689735	-0,25067747542794
3	38,7801608146	5,3519001079	0,0423360014	0,62256791828077
4	0,2694165836	0,0320242976	0,0005117809	0,0040305506222628
5	0,7985890762	0,1209591031	0,0009921500	0,012904980559226

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Technical Data Sheet

COMPRESSOR DIMENSIONS

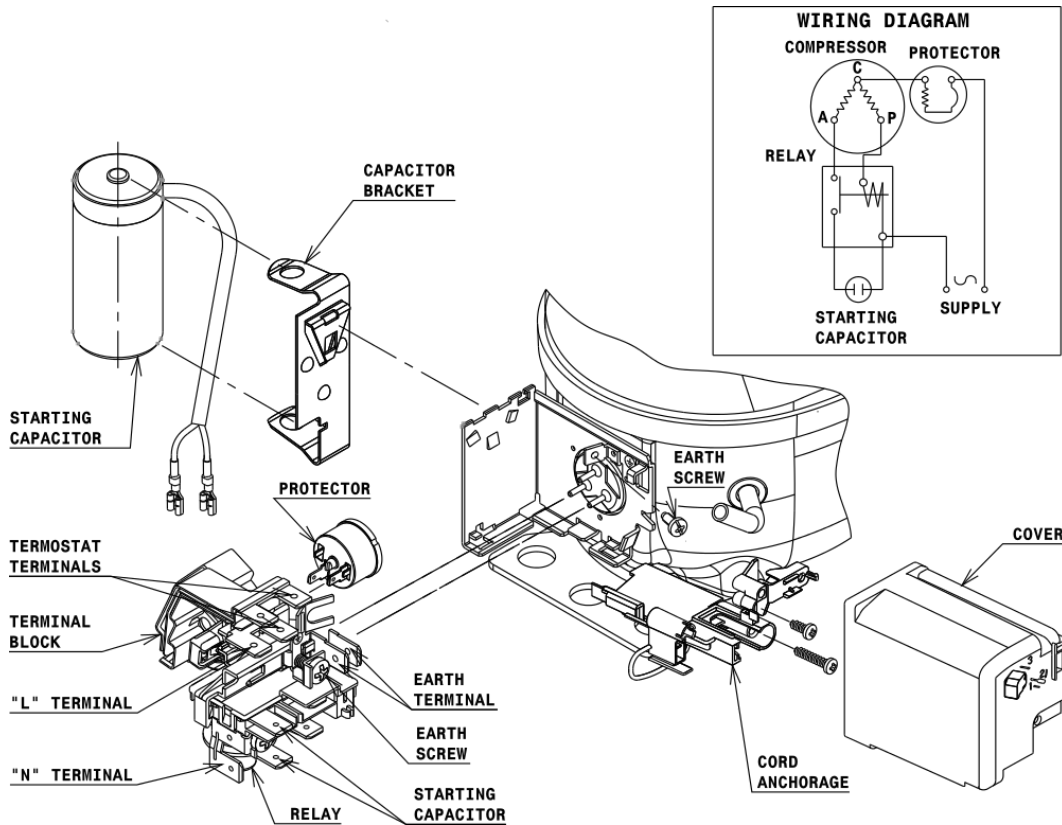


DESIGNATION INTERNAL DIAM.

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

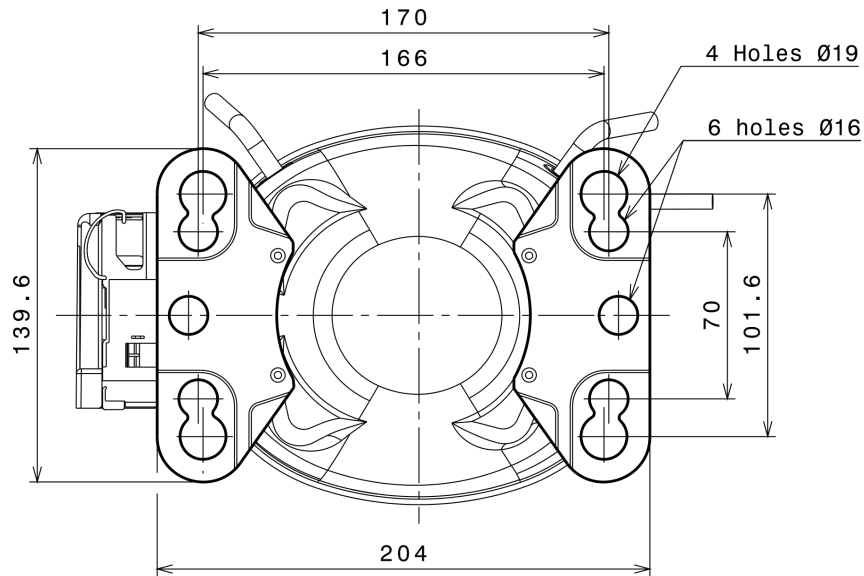
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

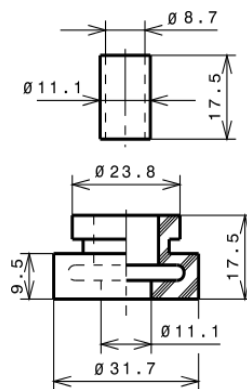
STANDARD

Ø16 holes (170x70 net)



AMERICAN FEET

Ø19 holes (166x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LMBP.

