

Technical Data Sheet

Compressor model **NUY80RAa**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**

APPLICATION

Application High Back Pressure
 Refrigerant R290
 Evaporating Temp. -15,0 °C to 10,0 °C
 Expansion Capillar/Valve
 Comp. Cooling Fan cooled
 Max. ambient temp. 43,0 °C

COMPRESSOR

Displacement 8,10 cm³
 Diameter 24,28 mm
 Stroke 17,50 mm
 Net Weight 9,43 Kg
 Oil type ISO VG 32 ESTER
 Oil charge 220 cm³

MOTOR

Nominal Power 1/3 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-254 V
 Type CSIR
 Phase number 1 PH
 Main W. resist. at 25°C 5,89 Ω
 Start W. resist. at 25°C 25,80 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	946 kCal/h	938 W
COP	2,60 W/W	2,24 W/W
EER	2,24 kCal/Wh	1,94 kCal/Wh
Input Power	423 W	419 W
Current	2,80 A	2,78 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (C)
Evaporating temp. (T _e)	7,2 °C	5,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq})	46,0 °C	55,0 °C
Ambient temp. (T _{amb})	35,0 °C	32,0 °C
Suction temp. (T _{suction})	35,0 °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	Option 2		
Reference	T0266	B110-105		
Current	11,00 A	11,00 A		
Time check	7,5-14 seg	7,5-16 seg		
Disc temp. (Open/Close)	105,00 / 52,00 °C	105,00 / 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	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-15	638	307	2,41	2,42	2,08
40	-10	764	332	2,47	2,68	2,30
40	-5	896	356	2,53	2,93	2,52
40	0	1.033	379	2,61	3,17	2,73
40	5	1.176	399	2,69	3,42	2,94
40	7,2	1.240	408	2,73	3,53	3,04
40	10	1.323	418	2,78	3,68	3,16

45	-15	573	317	2,43	2,10	1,81
45	-10	692	341	2,49	2,36	2,03
45	-5	817	364	2,56	2,61	2,24
45	0	946	385	2,63	2,86	2,46
45	5	1.081	405	2,72	3,10	2,67
45	7,2	1.142	413	2,75	3,22	2,77
45	10	1.221	423	2,80	3,36	2,89

50	-15	509	328	2,45	1,81	1,55
50	-10	620	351	2,52	2,06	1,77
50	-5	737	372	2,59	2,30	1,98
50	0	859	392	2,66	2,55	2,19
50	5	986	410	2,74	2,79	2,40
50	7,2	1.044	418	2,78	2,90	2,50
50	10	1.119	427	2,82	3,05	2,62

55	-15	444	338	2,48	1,53	1,31
55	-10	548	360	2,54	1,77	1,52
55	-5	657	380	2,62	2,01	1,73
55	0	772	399	2,69	2,25	1,93
55	5	892	416	2,77	2,49	2,14
55	7,2	946	423	2,80	2,60	2,24
55	10	1.017	431	2,84	2,74	2,36

60	-15	380	349	2,51	1,27	1,09
60	-10	476	369	2,58	1,50	1,29
60	-5	578	388	2,65	1,73	1,49
60	0	685	406	2,72	1,96	1,69
60	5	797	422	2,79	2,20	1,89
60	7,2	848	428	2,82	2,30	1,98
60	10	914	436	2,86	2,44	2,10

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-15	685	308	2,41	2,22	1,92
40	-10	822	334	2,47	2,46	2,12
40	-5	963	358	2,54	2,69	2,32
40	0	1.111	381	2,62	2,91	2,52
40	5	1.263	402	2,70	3,14	2,71
40	7,2	1.332	411	2,74	3,24	2,80
40	10	1.421	421	2,79	3,37	2,91

45	-15	613	319	2,43	1,92	1,66
45	-10	740	343	2,49	2,16	1,86
45	-5	873	366	2,57	2,38	2,06
45	0	1.011	388	2,64	2,61	2,25
45	5	1.155	408	2,73	2,83	2,45
45	7,2	1.219	416	2,77	2,93	2,53
45	10	1.303	426	2,81	3,06	2,65

50	-15	540	329	2,46	1,64	1,42
50	-10	659	353	2,52	1,87	1,61
50	-5	783	375	2,59	2,09	1,81
50	0	912	395	2,67	2,31	2,00
50	5	1.046	413	2,75	2,53	2,19
50	7,2	1.107	421	2,79	2,63	2,27
50	10	1.186	430	2,84	2,76	2,38

55	-15	468	340	2,49	1,38	1,19
55	-10	577	362	2,55	1,59	1,38
55	-5	692	383	2,62	1,81	1,56
55	0	812	401	2,70	2,02	1,75
55	5	938	419	2,78	2,24	1,94
55	7,2	995	426	2,81	2,34	2,02
55	10	1.069	434	2,86	2,46	2,13

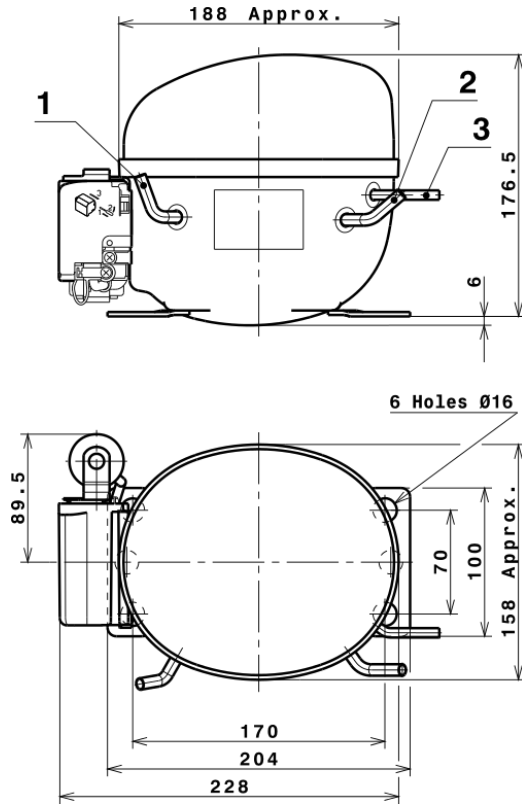
60	-15	395	350	2,51	1,13	0,97
60	-10	496	371	2,58	1,34	1,15
60	-5	602	391	2,66	1,54	1,33
60	0	713	408	2,73	1,75	1,51
60	5	829	424	2,81	1,95	1,69
60	7,2	882	431	2,84	2,05	1,77
60	10	951	439	2,88	2,17	1,87

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.900,1092317445	335,2405053178	2,4494052300	18,372528331575
2	44,7569840344	6,6113608669	0,0179660193	0,43161046462716
3	-20,1806967341	1,4014317219	0,0054496762	-0,13334926170914
4	0,1073708966	-0,0307624823	0,0000804785	0,0024134706360194
5	-0,3775189009	-0,0507545657	-0,0000122618	-0,0013255349735192

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

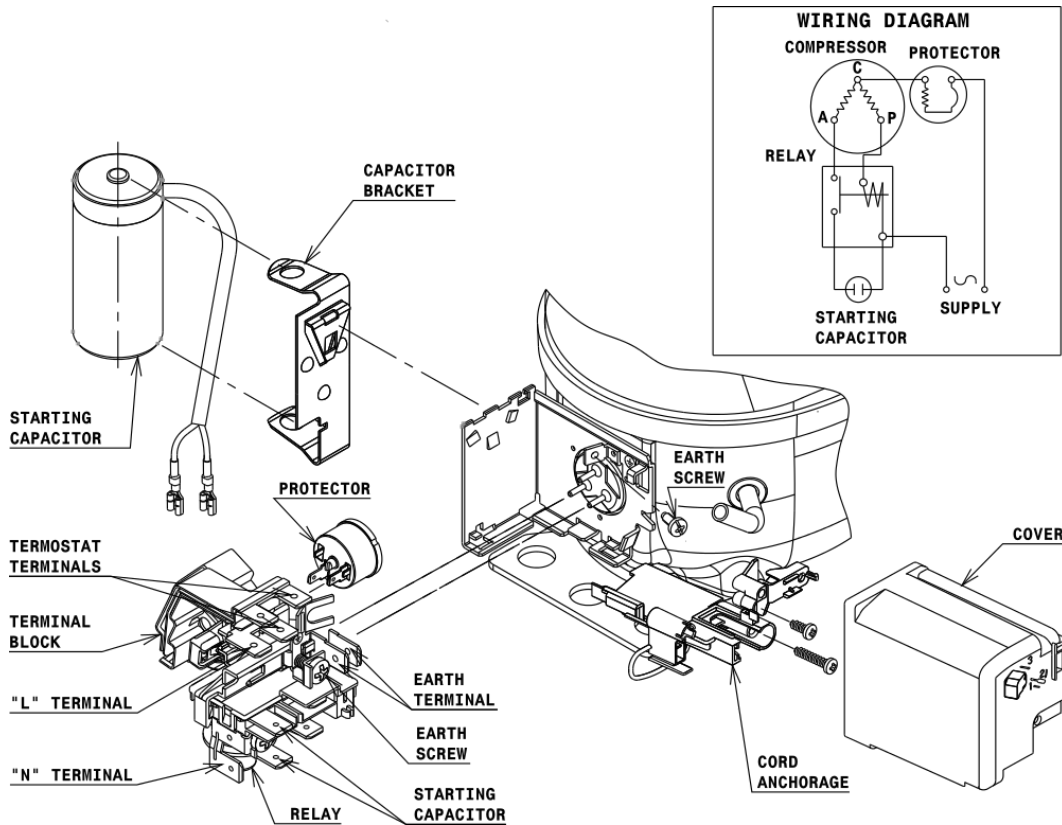


DESIGNATION INTERNAL DIAM.

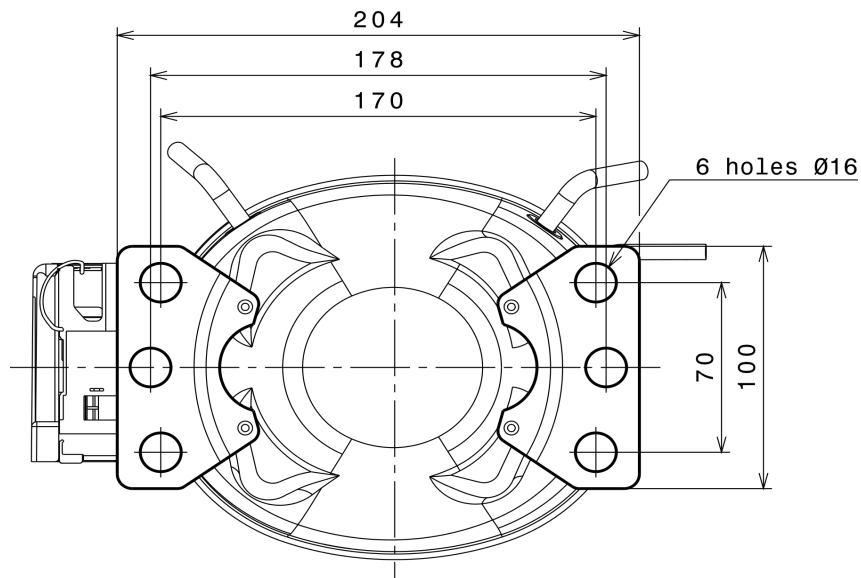
DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction	6,2 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)

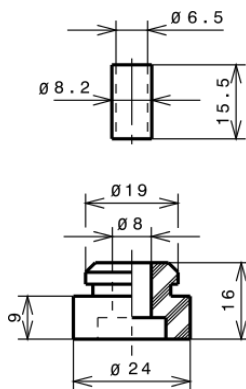


FIXINGS

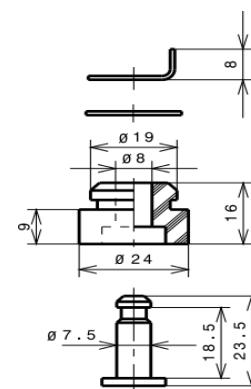


SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD



SNAP-ON



SOA