

Technical Data Sheet

Compressor model **NUY45NRa**
 Voltage **115-127V 60Hz ~1**
 Refrigerant **R290**
 Compressor status

APPLICATION

COMPRESSOR

MOTOR

Application	Low-Medium Back Pressure	Displacement	4,50 cm ³	Voltage/Frequency	115-127V 60Hz
Refrigerant	R290	Diameter	21,99 mm	Voltage range	98-140 V
Evaporating Temp.	-40,0 °C to 0,0 °C	Stroke	11,80 mm	Type	CSIR
Expansion	Capillar/Valve	Net Weight	8,42 Kg	Phase number	1 PH
Comp. Cooling	Fan cooled	Oil type	ISO VG 22 ESTER	Locked Rotor Amps (LRA)	15,30 A
Max. ambient temp.	43,0 °C	Oil charge	200 cm ³	Max. Cont. Current (MCC)	3,90 A
		HP	1/5 hp	Main W. resist. at 25°C	3,92 Ω
				Start W. resist. at 25°C	13,52 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	209 kCal/h	180 W
COP	1,50 W/W	1,15 W/W
EER	1,29 kCal/Wh	1,00 kCal/Wh
Input Power	162 W	156 W
Current	1,87 A	1,83 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	125 µF 160 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	T0269	B96-105		
Current	9,60 A	9,60 A		
Time check	7,5-14 seg	7,5-16 seg		
Disc temp. (Open/Close)	105,00 / 52,00 °C	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	93	98	1,45	1,11	0,95
40	-35	126	110	1,52	1,34	1,15
40	-30	168	122	1,60	1,60	1,38
40	-25	221	135	1,68	1,89	1,63
40	-23,3	240	140	1,72	2,00	1,72
40	-20	282	149	1,78	2,20	1,89
40	-15	353	164	1,88	2,51	2,16
40	-10	434	179	1,99	2,83	2,43
40	-5	525	194	2,12	3,15	2,70
40	0	625	210	2,25	3,46	2,97

45	-40	89	100	1,46	1,04	0,89
45	-35	120	114	1,54	1,23	1,06
45	-30	161	128	1,63	1,46	1,26
45	-25	211	142	1,73	1,72	1,48
45	-23,3	230	147	1,77	1,81	1,56
45	-20	270	158	1,84	2,00	1,72
45	-15	340	173	1,95	2,28	1,96
45	-10	419	190	2,08	2,57	2,21
45	-5	507	207	2,22	2,86	2,45
45	0	605	224	2,37	3,14	2,70

50	-40	85	103	1,48	0,96	0,83
50	-35	114	117	1,57	1,13	0,97
50	-30	153	133	1,67	1,34	1,15
50	-25	201	149	1,78	1,57	1,35
50	-23,3	219	155	1,82	1,65	1,42
50	-20	259	166	1,90	1,82	1,56
50	-15	326	183	2,03	2,07	1,78
50	-10	403	201	2,17	2,33	2,01
50	-5	489	219	2,32	2,60	2,23
50	0	586	238	2,49	2,86	2,46

55	-40	81	105	1,49	0,90	0,77
55	-35	108	121	1,59	1,04	0,89
55	-30	145	138	1,70	1,22	1,05
55	-25	191	156	1,83	1,43	1,23
55	-23,3	209	162	1,87	1,50	1,29
55	-20	247	174	1,96	1,65	1,42
55	-15	312	193	2,10	1,89	1,62
55	-10	387	212	2,26	2,13	1,83
55	-5	472	232	2,43	2,37	2,04
55	0	566	252	2,62	2,61	2,25

60	-40	77	108	1,51	0,83	0,72
60	-35	102	125	1,62	0,95	0,82
60	-30	137	144	1,74	1,11	0,95
60	-25	181	163	1,88	1,30	1,11
60	-23,3	199	169	1,92	1,36	1,17
60	-20	235	182	2,02	1,50	1,29
60	-15	299	202	2,18	1,72	1,48
60	-10	372	223	2,36	1,94	1,67
60	-5	454	244	2,55	2,16	1,86
60	0	547	266	2,75	2,39	2,05

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	101	98	1,45	1,03	0,89
40	-35	142	110	1,52	1,29	1,12
40	-30	192	122	1,60	1,57	1,35
40	-25	250	135	1,68	1,85	1,60
40	-23,3	272	140	1,72	1,94	1,68
40	-20	318	149	1,78	2,13	1,84
40	-15	394	164	1,88	2,41	2,08
40	-10	480	179	1,99	2,69	2,32
40	-5	574	194	2,12	2,96	2,56
40	0	677	210	2,25	3,22	2,78

45	-40	93	100	1,46	0,93	0,80
45	-35	129	114	1,54	1,13	0,98
45	-30	173	128	1,63	1,36	1,17
45	-25	227	142	1,73	1,59	1,38
45	-23,3	247	147	1,77	1,68	1,45
45	-20	289	158	1,84	1,84	1,59
45	-15	361	173	1,95	2,08	1,80
45	-10	441	190	2,08	2,32	2,01
45	-5	530	207	2,22	2,57	2,22
45	0	628	224	2,37	2,80	2,42

50	-40	84	103	1,48	0,82	0,71
50	-35	115	117	1,57	0,98	0,85
50	-30	155	133	1,67	1,16	1,01
50	-25	203	149	1,78	1,36	1,18
50	-23,3	222	155	1,82	1,43	1,24
50	-20	261	166	1,90	1,57	1,36
50	-15	327	183	2,03	1,79	1,54
50	-10	402	201	2,17	2,00	1,73
50	-5	486	219	2,32	2,22	1,92
50	0	579	238	2,49	2,43	2,10

55	-40	76	105	1,49	0,73	0,63
55	-35	102	121	1,59	0,84	0,73
55	-30	136	138	1,70	0,99	0,85
55	-25	180	156	1,83	1,15	1,00
55	-23,3	196	162	1,87	1,21	1,05
55	-20	232	174	1,96	1,33	1,15
55	-15	293	193	2,10	1,52	1,31
55	-10	363	212	2,26	1,71	1,48
55	-5	442	232	2,43	1,91	1,65
55	0	529	252	2,62	2,10	1,81

60	-40	68	108	1,51	0,63	0,55
60	-35	89	125	1,62	0,71	0,61
60	-30	118	144	1,74	0,82	0,71
60	-25	156	163	1,88	0,96	0,83
60	-23,3	171	169	1,92	1,01	0,87
60	-20	203	182	2,02	1,12	0,96
60	-15	259	202	2,18	1,28	1,11
60	-10	324	223	2,36	1,45	1,26
60	-5	398	244	2,55	1,63	1,41
60	0	480	266	2,75	1,81	1,56

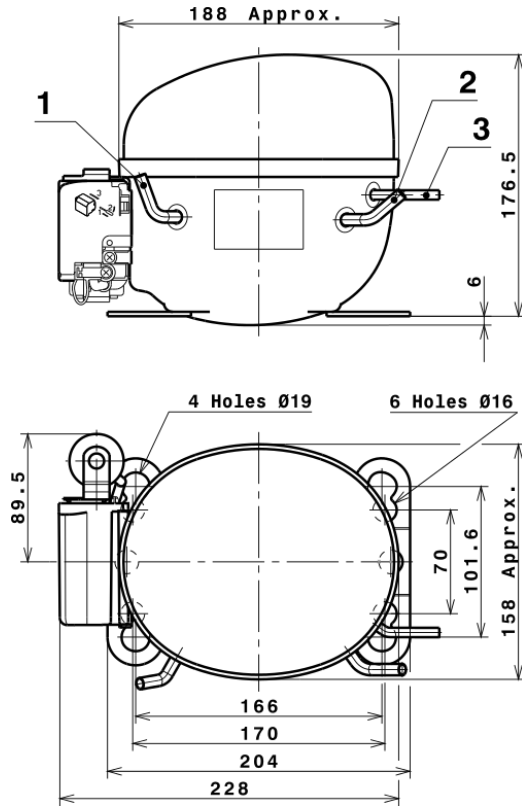
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.068,0754337429	100,6255316556	1,2319348666	9,9251411372868
2	29,5001809584	1,0294823485	0,0076085134	0,31266328910966
3	-10,0583809015	2,8750151902	0,0263951358	-0,049685900539763
4	0,1730046905	0,0123332726	0,0002544949	0,0025680354064195
5	-0,2101680615	0,0591044969	0,0005830732	-0,0009974709958082

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

COMPRESSOR DIMENSIONS

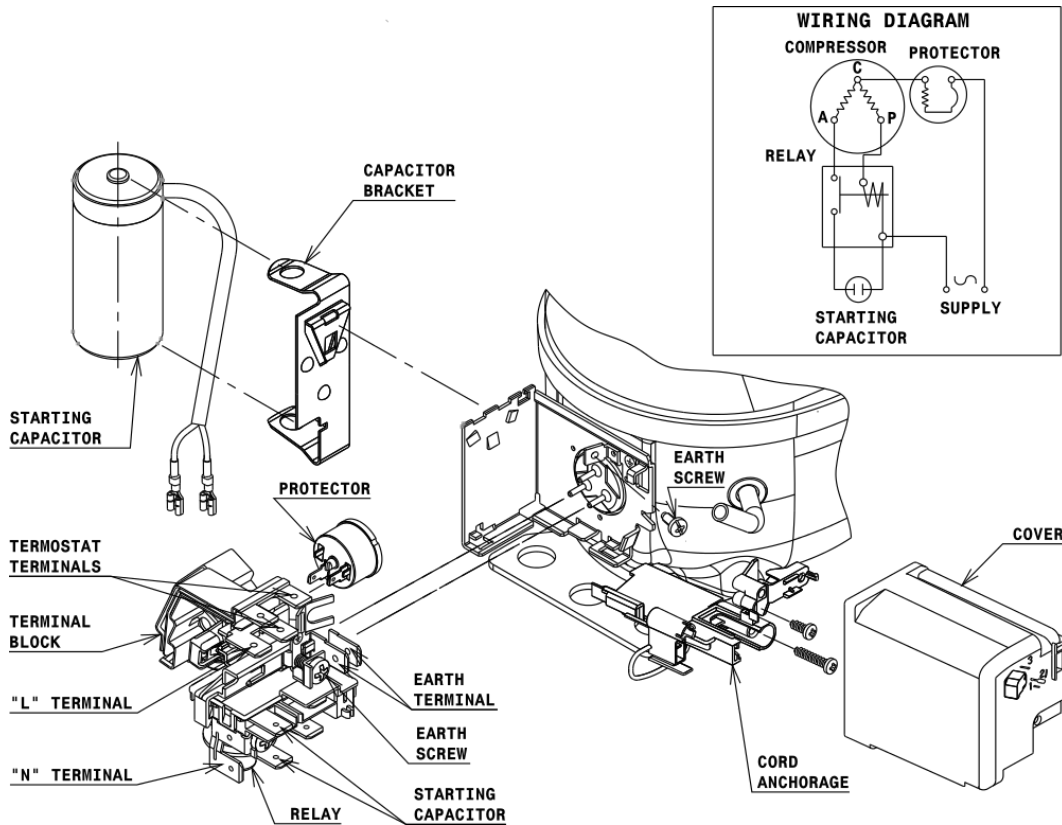


DESIGNATION INTERNAL DIAM.

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

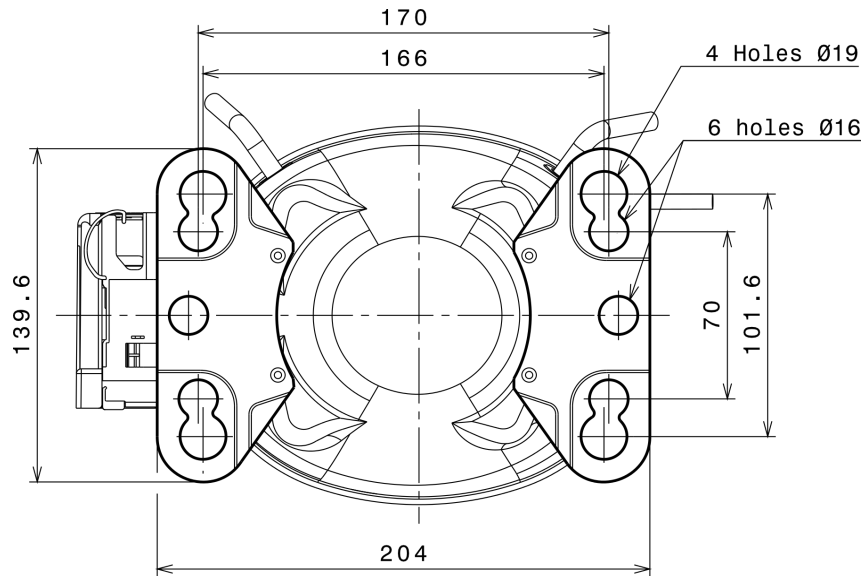
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

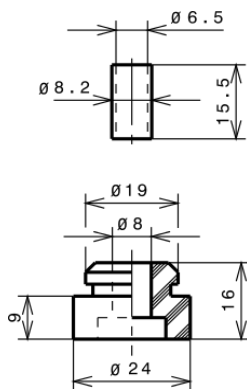
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

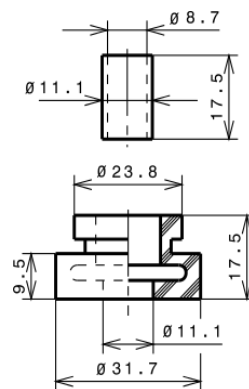
STANDARD

Ø16 holes (170x70 net)



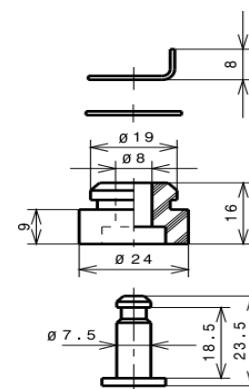
AMERICAN FEET

Ø19 holes (166x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LMBP

