Technical Data Sheet

Compressor model **NUY45RAa**

Voltage **220-240V 50Hz ~1**

Refrigerant **R290**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R290
Evaporating Temp.	-25,0 ºC to 10,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC

COMPRESSOR

Displacement	4,50 cm³
Diameter	21,99 mm
Stroke	11,88 mm
Net Weight	9,30 Kg
Oil type	ISO VG 32 ESTER
Oil charge	220 cm³

MOTOR

Nominal Power	1/5 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-255 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	10,50 A
Max. Cont. Current (MCC)	1,80 A
Main W. resist. at 25ºC	9,79 Ω
Start W. resist. at 25ºC	37,10 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	529 kCal/h	516 W
COP	2,77 W/W	2,36 W/W
EER	2,38 kCal/Wh	2,04 kCal/Wh
Input Power	222 W	219 W
Current	1,44 A	1,43 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HMBP (D)	**HMBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Relay	Option 1	Option 2		
Reference	2014 125.	QLZ-4.55A		
Pick-Up	4,55 A	4,55 A		
Drop-Out	3,90 A	3,90 A		
Protector	Option 1			
Reference	T0068			
Current	5,80 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 62,00 ºC			

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

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	177	131	1,17	1,58	1,36
40	-20	226	140	1,19	1,88	1,61
40	-15	283	149	1,21	2,22	1,91
40	-10	350	156	1,23	2,60	2,23
40	-5	424	163	1,24	3,02	2,60
40	0	508	170	1,26	3,48	2,99
40	5	600	175	1,28	3,99	3,43
40	7,2	643	177	1,28	4,23	3,63
40	10	700	179	1,29	4,54	3,90
45	-25	163	134	1,18	1,41	1,22
45	-20	208	145	1,20	1,67	1,43
45	-15	262	156	1,22	1,96	1,68
45	-10	324	165	1,25	2,28	1,96
45	-5	395	174	1,27	2,64	2,27
45	0	475	182	1,30	3,04	2,61
45	5	563	189	1,32	3,46	2,98
45	7,2	605	192	1,33	3,66	3,15
45	10	660	195	1,34	3,93	3,38
50	-25	149	138	1,18	1,26	1,08
50	-20	190	151	1,21	1,47	1,26
50	-15	240	163	1,24	1,72	1,48
50	-10	299	174	1,27	2,00	1,72
50	-5	367	185	1,31	2,31	1,98
50	0	442	194	1,34	2,65	2,28
50	5	527	203	1,37	3,01	2,59
50	7,2	567	207	1,38	3,19	2,74
50	10	620	211	1,40	3,41	2,93
55	-25	135	141	1,19	1,11	0,96
55	-20	173	156	1,22	1,29	1,11
55	-15	219	170	1,26	1,50	1,29
55	-10	274	183	1,30	1,74	1,50
55	-5	338	195	1,34	2,01	1,73
55	0	410	207	1,38	2,30	1,98
55	5	491	218	1,42	2,62	2,26
55	7,2	529	222	1,44	2,77	2,38
55	10	580	227	1,46	2,97	2,55
60	-25	121	145	1,20	0,97	0,84
60	-20	155	161	1,24	1,12	0,96
60	-15	198	177	1,28	1,30	1,12
60	-10	249	192	1,33	1,51	1,30
60	-5	309	206	1,38	1,74	1,50
60	0	377	219	1,43	2,00	1,72
60	5	454	232	1,48	2,28	1,96
60	7,2	491	237	1,50	2,41	2,07
60	10	540	243	1,53	2,58	2,22

CECOMAF

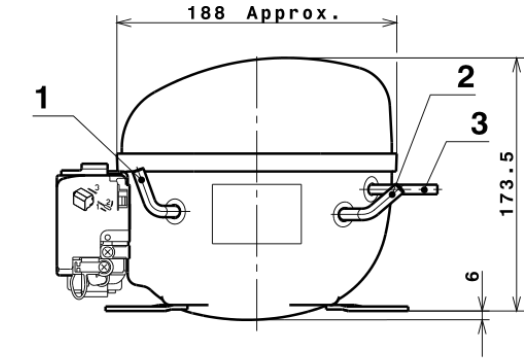
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	190	131	1,17	1,45	1,25
40	-20	244	141	1,19	1,73	1,50
40	-15	306	149	1,21	2,05	1,77
40	-10	377	157	1,23	2,40	2,07
40	-5	457	164	1,25	2,78	2,40
40	0	547	171	1,26	3,20	2,77
40	5	645	176	1,28	3,66	3,16
40	7,2	691	178	1,29	3,88	3,35
40	10	752	181	1,29	4,16	3,60
45	-25	174	135	1,18	1,29	1,12
45	-20	223	146	1,20	1,53	1,32
45	-15	281	157	1,23	1,79	1,55
45	-10	348	166	1,25	2,09	1,81
45	-5	423	175	1,28	2,42	2,09
45	0	508	183	1,30	2,77	2,40
45	5	602	190	1,32	3,16	2,73
45	7,2	646	193	1,33	3,34	2,89
45	10	705	197	1,35	3,58	3,09
50	-25	158	138	1,18	1,15	0,99
50	-20	203	151	1,21	1,34	1,16
50	-15	256	164	1,24	1,56	1,35
50	-10	318	175	1,28	1,82	1,57
50	-5	389	186	1,31	2,10	1,81
50	0	470	196	1,34	2,40	2,07
50	5	559	205	1,37	2,73	2,36
50	7,2	601	208	1,39	2,88	2,49
50	10	657	213	1,40	3,09	2,67
55	-25	142	142	1,19	1,00	0,87
55	-20	182	157	1,23	1,16	1,00
55	-15	231	171	1,26	1,35	1,17
55	-10	289	184	1,30	1,57	1,35
55	-5	355	197	1,34	1,81	1,56
55	0	431	208	1,39	2,07	1,79
55	5	516	219	1,43	2,36	2,04
55	7,2	556	223	1,45	2,49	2,15
55	10	610	229	1,47	2,66	2,30
60	-25	126	145	1,20	0,87	0,75
60	-20	162	162	1,24	1,00	0,86
60	-15	206	178	1,28	1,16	1,00
60	-10	259	193	1,33	1,34	1,16
60	-5	321	207	1,38	1,55	1,34
60	0	393	221	1,43	1,78	1,54
60	5	473	233	1,49	2,03	1,75
60	7,2	511	239	1,51	2,14	1,85
60	10	562	245	1,54	2,30	1,98

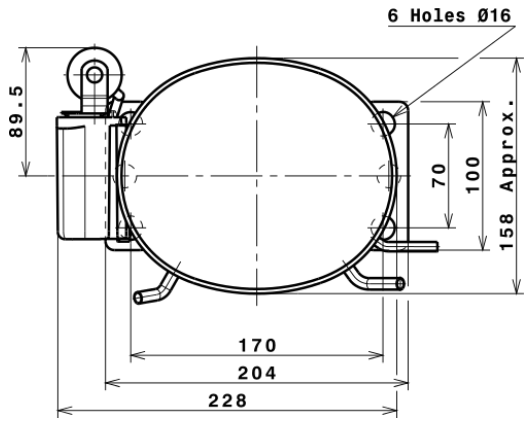
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	855,6041546553	72,2402678010	0,8725792634	7,6311556948489
2	26,0105549305	-1,7188571621	-0,0088481998	0,25678251312793
3	-7,9289021130	2,5740141457	0,0096955906	-0,031855519901354
4	0,1770089044	-0,0156744181	0,0000331698	0,002811609176788
5	-0,1878546588	0,0741642225	0,0003266151	-0,00047198996406994

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

COMPRESSOR DIMENSIONS

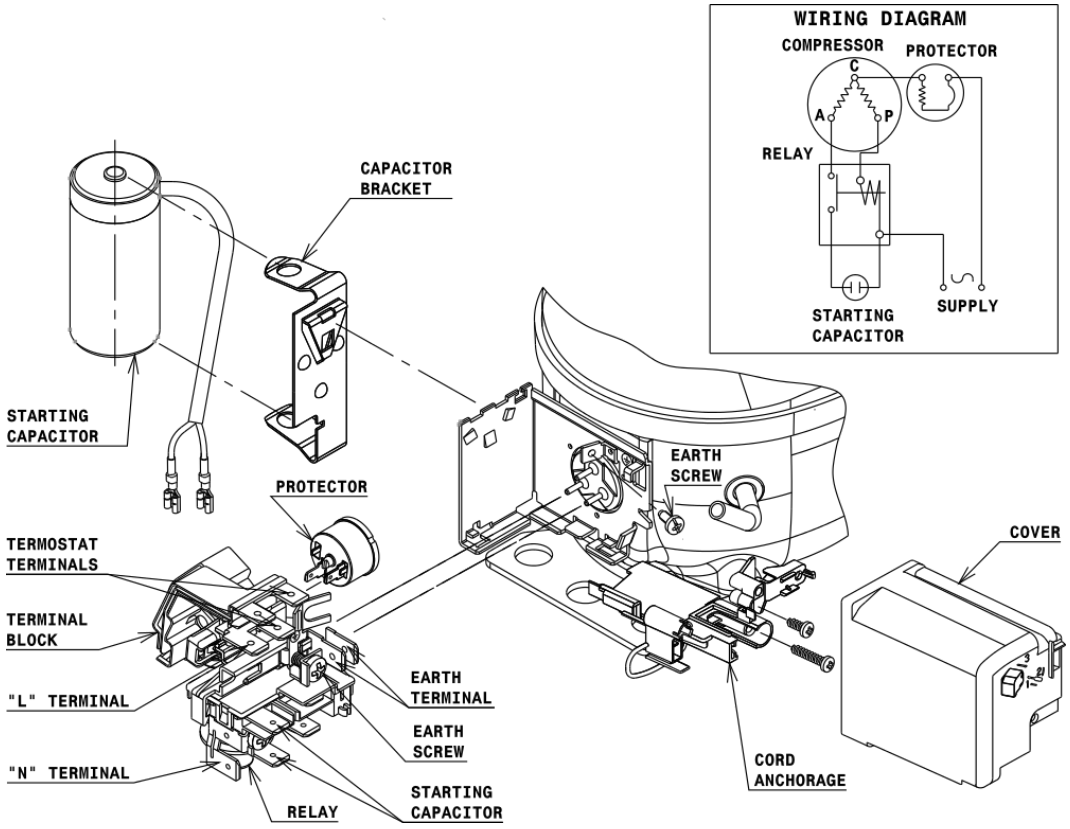




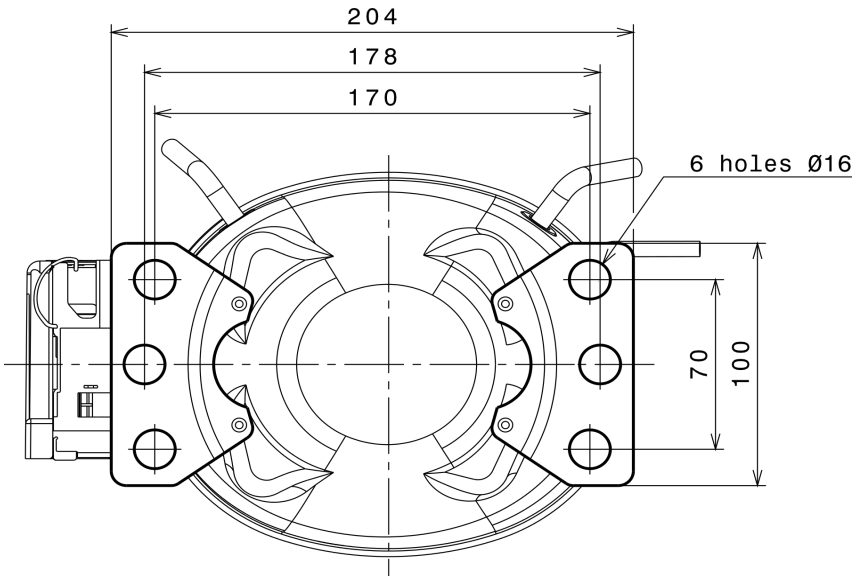
	DESIGNATION	INTERNAL DIAM.
1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



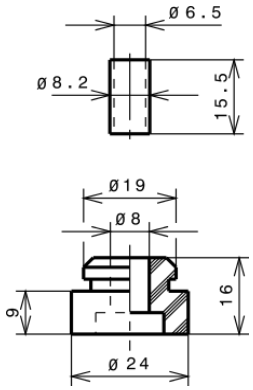
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

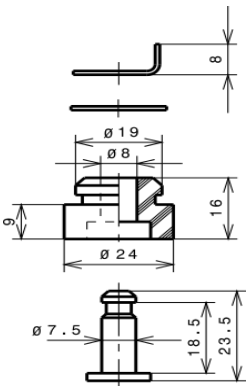
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 HMBP

