Technical Data Sheet

Compressor model **NUY45LAa**

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

Refrigerant **R290**

APPLICATION

Application	Low Back Pressure
Refrigerant	R290
Evaporating Temp.	-40,0 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)	7,50 A
Max. Cont. Current (MCC)	1,20 A
Main W. resist. at 25ºC	16,20 Ω
Start W. resist. at 25ºC	41,30 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	184 kCal/h	159 W
COP	1,57 W/W	1,21 W/W
EER	1,35 kCal/Wh	1,05 kCal/Wh
Input Power	136 W	131 W
Current	0,87 A	0,85 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LBP (B)	**LBP (A)**
Evaporating temp. (T_e)	-23,3 ºC	-25,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	32,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	32,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	32,0 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			
Reference	2014 108.			
Pick-Up	2,70 A			
Drop-Out	2,30 A			
Protector	Option 1			
Reference	T0066			
Current	5,10 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	-40	83	86	0,71	1,12	0,96
40	-35	111	97	0,74	1,33	1,15
40	-30	145	107	0,77	1,57	1,35
40	-25	186	118	0,81	1,83	1,58
40	-23,3	202	122	0,82	1,93	1,66
40	-20	234	129	0,85	2,11	1,81
40	-15	287	140	0,88	2,39	2,06
40	-10	347	151	0,92	2,68	2,31
45	-40	78	86	0,71	1,05	0,91
45	-35	106	98	0,75	1,26	1,08
45	-30	140	110	0,78	1,48	1,27
45	-25	181	122	0,82	1,72	1,48
45	-23,3	196	127	0,84	1,80	1,55
45	-20	227	135	0,87	1,97	1,69
45	-15	281	147	0,91	2,22	1,91
45	-10	340	159	0,95	2,49	2,14
50	-40	74	86	0,71	0,99	0,85
50	-35	101	100	0,75	1,18	1,01
50	-30	135	113	0,79	1,39	1,19
50	-25	175	127	0,84	1,61	1,38
50	-23,3	190	131	0,85	1,68	1,45
50	-20	221	140	0,88	1,83	1,58
50	-15	274	154	0,93	2,07	1,78
50	-10	333	168	0,99	2,31	1,99
55	-40	69	86	0,71	0,93	0,80
55	-35	96	101	0,75	1,11	0,95
55	-30	129	116	0,80	1,30	1,12
55	-25	169	131	0,85	1,50	1,29
55	-23,3	184	136	0,87	1,57	1,35
55	-20	215	146	0,91	1,71	1,47
55	-15	267	161	0,96	1,93	1,66
55	-10	326	176	1,02	2,15	1,85
60	-40	64	86	0,71	0,87	0,75
60	-35	91	102	0,76	1,04	0,89
60	-30	124	119	0,81	1,22	1,04
60	-25	163	135	0,87	1,41	1,21
60	-23,3	178	141	0,89	1,47	1,27
60	-20	209	152	0,93	1,60	1,38
60	-15	261	168	0,99	1,81	1,55
60	-10	319	185	1,05	2,01	1,73

CECOMAF

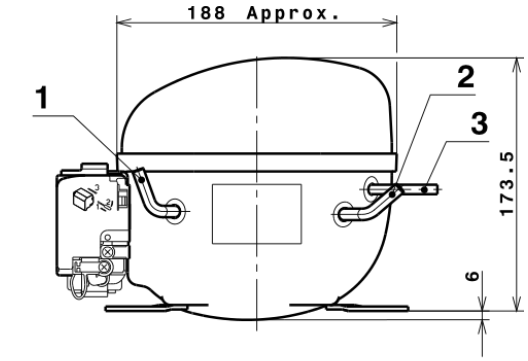
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	89	86	0,71	1,04	0,90
40	-35	123	97	0,74	1,27	1,10
40	-30	162	107	0,77	1,51	1,30
40	-25	207	118	0,81	1,75	1,51
40	-23,3	223	122	0,82	1,83	1,58
40	-20	258	129	0,85	2,00	1,73
40	-15	314	140	0,88	2,25	1,94
40	-10	377	151	0,92	2,50	2,16
45	-40	81	86	0,71	0,94	0,82
45	-35	112	98	0,75	1,14	0,99
45	-30	148	110	0,78	1,35	1,16
45	-25	191	122	0,82	1,56	1,35
45	-23,3	207	127	0,84	1,63	1,41
45	-20	239	135	0,87	1,78	1,54
45	-15	293	147	0,91	2,00	1,73
45	-10	353	159	0,95	2,22	1,92
50	-40	73	86	0,71	0,85	0,73
50	-35	101	100	0,75	1,02	0,88
50	-30	135	113	0,79	1,20	1,03
50	-25	175	127	0,84	1,38	1,19
50	-23,3	190	131	0,85	1,45	1,25
50	-20	221	140	0,88	1,57	1,36
50	-15	272	154	0,93	1,77	1,53
50	-10	329	168	0,99	1,97	1,70
55	-40	65	86	0,71	0,76	0,65
55	-35	90	101	0,75	0,90	0,77
55	-30	122	116	0,80	1,05	0,91
55	-25	159	131	0,85	1,21	1,05
55	-23,3	173	136	0,87	1,27	1,10
55	-20	202	146	0,91	1,38	1,20
55	-15	251	161	0,96	1,56	1,35
55	-10	306	176	1,02	1,74	1,50
60	-40	57	86	0,71	0,66	0,57
60	-35	80	102	0,76	0,78	0,67
60	-30	109	119	0,81	0,91	0,79
60	-25	143	135	0,87	1,06	0,91
60	-23,3	156	141	0,89	1,11	0,96
60	-20	184	152	0,93	1,21	1,05
60	-15	230	168	0,99	1,37	1,18
60	-10	282	185	1,05	1,53	1,32

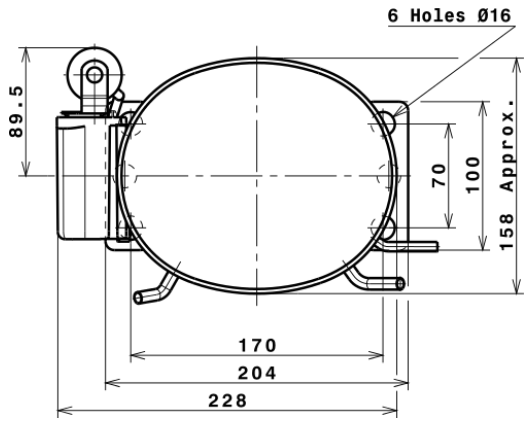
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	748,7067968039	83,8394641918	0,6660566247	6,9210029988361
2	19,4701759283	-0,0597536506	0,0012340898	0,20413643653565
3	-5,9630370651	2,3226912402	0,0091540889	-0,019787756475909
4	0,1142361783	0,0010212900	0,0000617016	0,0016827649469088
5	-0,1083435489	0,0580672810	0,0002288522	-0,00021954098465044

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

COMPRESSOR DIMENSIONS

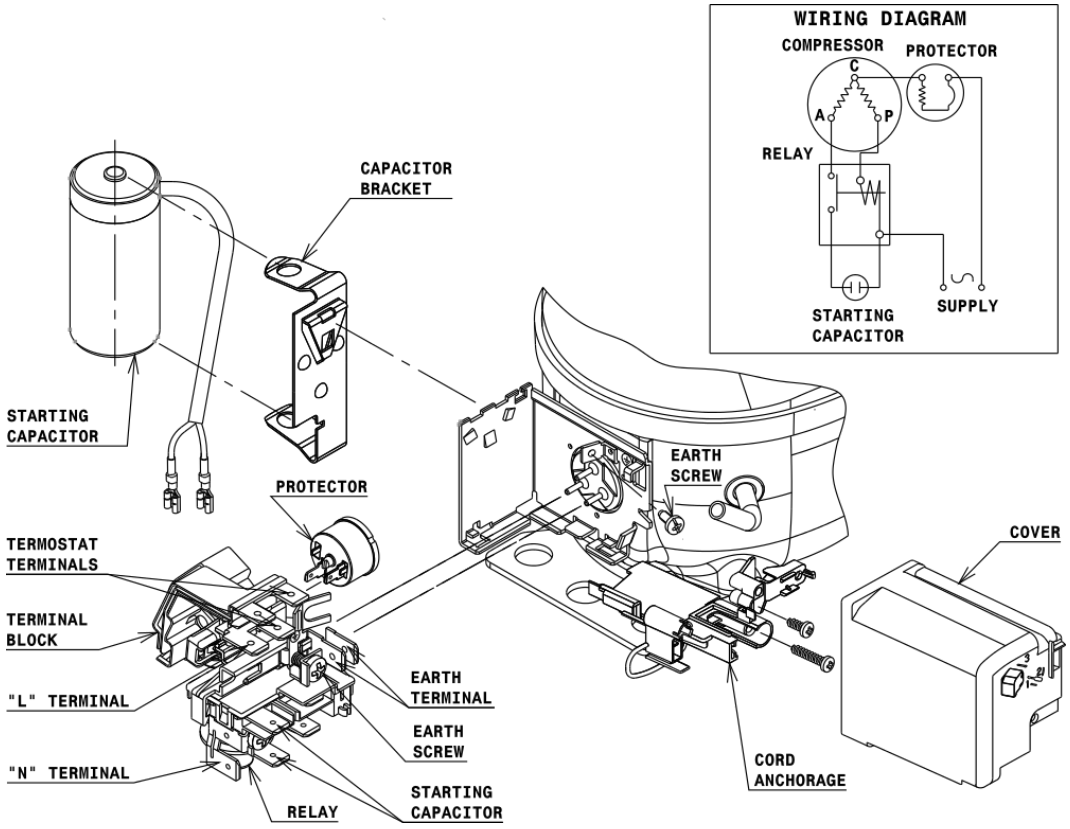




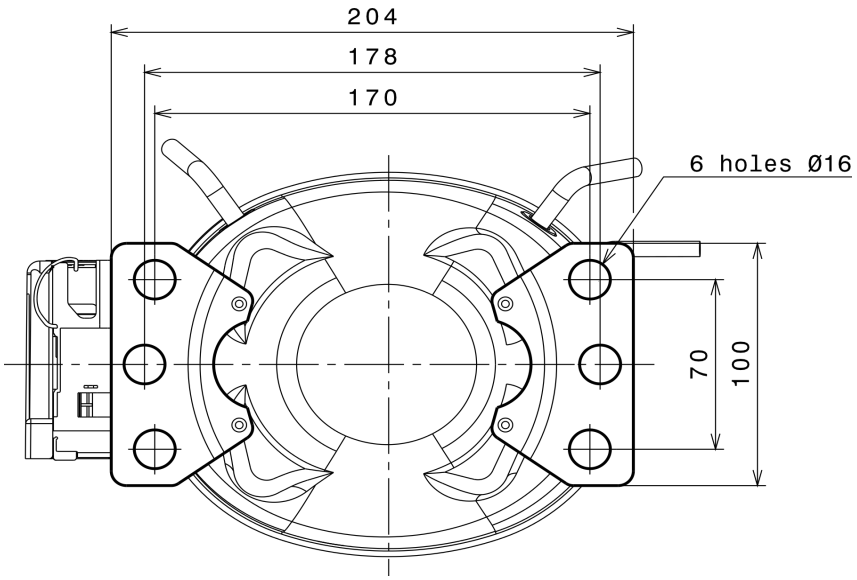
	DESIGNATION	INTERNAL DIAM.
1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



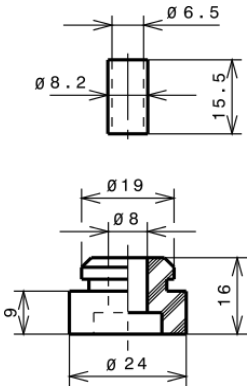
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

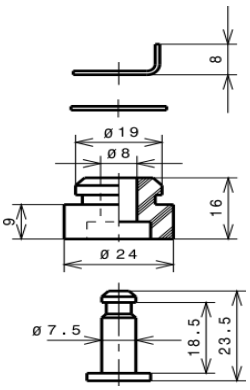
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LBP