Technical Data Sheet

Compressor model **NUY45LRa**

Voltage **115-127V 60Hz ~1**

Refrigerant **R290**

APPLICATION

Application	Low-Medium 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	9,12 Kg
Oil type	ISO VG 32 ESTER
Oil charge	200 cm³

MOTOR

Nominal Power	1/5 hp
Voltage/Frequency	115-127V 60Hz
Voltage range	98-140 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	15,00 A
Max. Cont. Current (MCC)	3,40 A
Main W. resist. at 25ºC	3,85 Ω
Start W. resist. at 25ºC	13,85 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	209 kCal/h	185 W
COP	1,50 W/W	1,18 W/W
EER	1,29 kCal/Wh	1,02 kCal/Wh
Input Power	162 W	157 W
Current	1,87 A	1,83 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LMBP (B)	**LMBP (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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	125 µF 160 V			
Relay	Option 1			
Reference	2014 145.			
Pick-Up	7,10 A			
Drop-Out	6,00 A			
Protector	Option 1	Option 2		
Reference	T0269	AE39FHS		
Current	9,60 A	9,20 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 52,00 ºC	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	93	98	1,45	1,11	0,95
40	-35	135	114	1,54	1,38	1,18
40	-30	176	129	1,64	1,59	1,37
40	-25	217	142	1,73	1,77	1,52
40	-23,3	230	146	1,76	1,83	1,57
40	-20	257	154	1,81	1,94	1,67
40	-15	297	165	1,89	2,10	1,81
40	-10	337	173	1,96	2,26	1,94
40	-5	376	181	2,02	2,41	2,08
40	0	415	187	2,06	2,58	2,22
45	-40	89	100	1,46	1,04	0,89
45	-35	130	117	1,56	1,29	1,11
45	-30	170	133	1,67	1,49	1,28
45	-25	210	147	1,76	1,66	1,43
45	-23,3	223	152	1,79	1,71	1,47
45	-20	249	160	1,85	1,81	1,56
45	-15	288	171	1,94	1,96	1,69
45	-10	327	181	2,01	2,10	1,81
45	-5	365	189	2,08	2,25	1,93
45	0	403	196	2,14	2,39	2,06
50	-40	85	103	1,48	0,96	0,83
50	-35	125	120	1,58	1,20	1,04
50	-30	164	137	1,69	1,39	1,20
50	-25	203	152	1,80	1,55	1,34
50	-23,3	216	157	1,83	1,60	1,38
50	-20	242	166	1,90	1,70	1,46
50	-15	280	178	1,99	1,83	1,57
50	-10	317	188	2,07	1,96	1,69
50	-5	355	197	2,15	2,09	1,80
50	0	392	205	2,21	2,22	1,91
55	-40	81	105	1,49	0,90	0,77
55	-35	120	124	1,61	1,13	0,97
55	-30	158	141	1,72	1,30	1,12
55	-25	196	157	1,83	1,45	1,25
55	-23,3	209	162	1,87	1,50	1,29
55	-20	234	171	1,94	1,59	1,36
55	-15	271	184	2,04	1,71	1,47
55	-10	308	196	2,13	1,83	1,57
55	-5	344	206	2,22	1,95	1,67
55	0	380	214	2,29	2,07	1,78
60	-40	77	108	1,50	0,83	0,72
60	-35	115	127	1,63	1,05	0,90
60	-30	152	145	1,75	1,22	1,05
60	-25	189	162	1,87	1,36	1,17
60	-23,3	202	167	1,91	1,40	1,21
60	-20	226	177	1,98	1,48	1,28
60	-15	262	191	2,09	1,60	1,37
60	-10	298	203	2,20	1,71	1,47
60	-5	333	214	2,29	1,81	1,56
60	0	369	223	2,37	1,92	1,65

CECOMAF

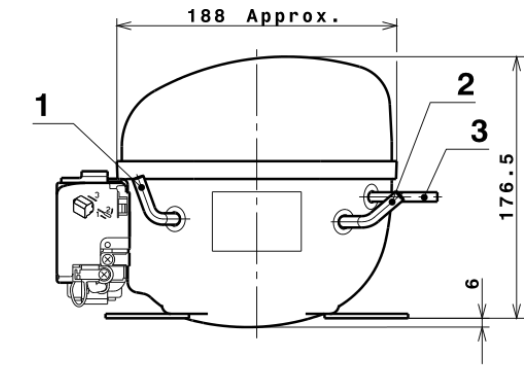
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	101	98	1,45	1,03	0,89
40	-35	146	114	1,54	1,28	1,11
40	-30	191	129	1,64	1,48	1,28
40	-25	235	142	1,73	1,65	1,43
40	-23,3	250	146	1,76	1,71	1,48
40	-20	279	154	1,81	1,81	1,56
40	-15	322	165	1,89	1,96	1,69
40	-10	365	173	1,96	2,10	1,82
40	-5	408	181	2,02	2,25	1,95
40	0	449	187	2,06	2,40	2,08
45	-40	93	100	1,46	0,93	0,80
45	-35	135	117	1,56	1,15	1,00
45	-30	177	133	1,67	1,33	1,15
45	-25	218	147	1,76	1,48	1,28
45	-23,3	232	152	1,79	1,53	1,32
45	-20	259	160	1,85	1,62	1,40
45	-15	300	171	1,94	1,75	1,51
45	-10	340	181	2,01	1,88	1,62
45	-5	379	189	2,08	2,00	1,73
45	0	418	196	2,14	2,13	1,84
50	-40	84	103	1,48	0,82	0,71
50	-35	124	120	1,58	1,03	0,89
50	-30	163	137	1,69	1,19	1,03
50	-25	201	152	1,80	1,32	1,14
50	-23,3	214	157	1,83	1,37	1,18
50	-20	239	166	1,90	1,45	1,25
50	-15	277	178	1,99	1,56	1,35
50	-10	314	188	2,07	1,67	1,44
50	-5	351	197	2,15	1,78	1,53
50	0	387	205	2,21	1,89	1,63
55	-40	76	105	1,49	0,73	0,63
55	-35	113	124	1,61	0,91	0,79
55	-30	149	141	1,72	1,06	0,91
55	-25	185	157	1,83	1,18	1,02
55	-23,3	196	162	1,87	1,21	1,05
55	-20	220	171	1,94	1,28	1,11
55	-15	254	184	2,04	1,38	1,19
55	-10	288	196	2,13	1,47	1,27
55	-5	322	206	2,22	1,57	1,35
55	0	355	214	2,29	1,66	1,43
60	-40	68	108	1,50	0,63	0,55
60	-35	102	127	1,63	0,80	0,69
60	-30	135	145	1,75	0,93	0,80
60	-25	168	162	1,87	1,04	0,89
60	-23,3	179	167	1,91	1,07	0,92
60	-20	200	177	1,98	1,13	0,98
60	-15	232	191	2,09	1,21	1,05
60	-10	263	203	2,20	1,30	1,12
60	-5	294	214	2,29	1,37	1,19
60	0	324	223	2,37	1,45	1,26

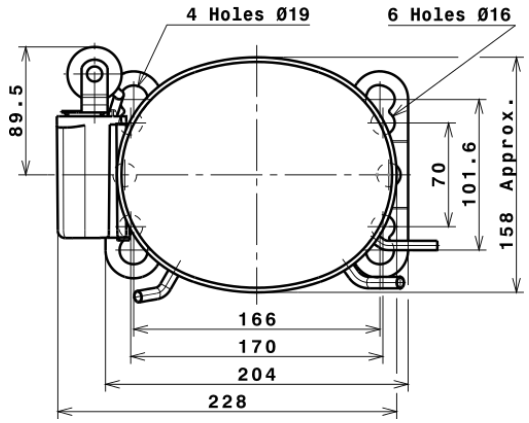
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	699,2694395464	118,0809810244	1,4603889738	6,4409705249593
2	13,0184109657	-0,2087264085	-0,0015132620	0,12411757875275
3	-6,4291037200	1,8482240508	0,0160036552	-0,02931162885445
4	-0,0085358129	-0,0295316022	-0,0001148404	3,1999280201375E-5
5	-0,1194361320	0,0334347184	0,0003244625	-0,00048811420367538

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

COMPRESSOR DIMENSIONS

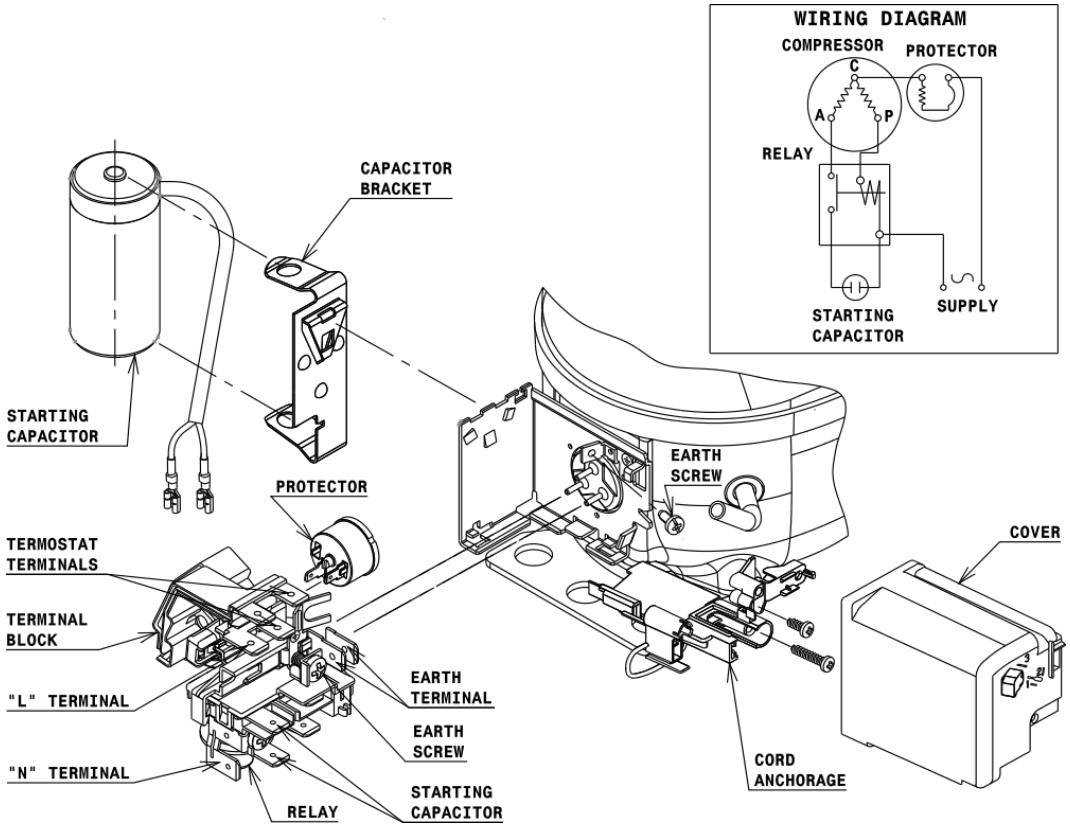




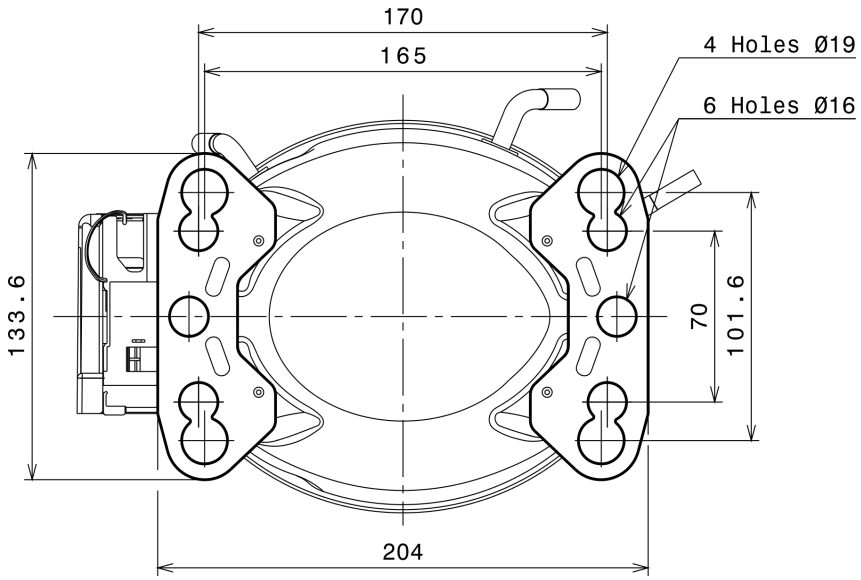
	DESIGNATION	INTERNAL DIAM.
1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



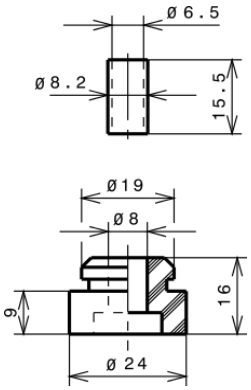
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

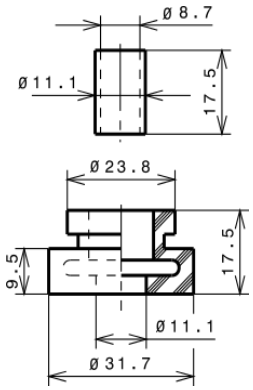
STANDARD

Ø16 holes (170x70 net)



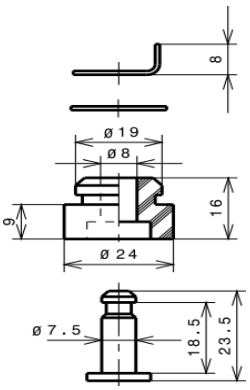
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



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