

Technical Data Sheet

Compressor model **NUY45LAB**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	Low Back Pressure	Displacement	4,50 cm ³	Nominal Power	1/5 hp
Refrigerant	R290	Diameter	21,99 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-40,0 °C to -10,0 °C	Stroke	11,88 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	9,45 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	220 cm ³	Locked Rotor Amps (LRA)	7,50 A
				Max. Cont. Current (MCC)	1,20 A
				Main W. resist. at 25°C	16,20 Ω
				Start W. resist. at 25°C	41,30 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	186 kCal/h	161 W
COP	1,64 W/W	1,26 W/W
EER	1,41 kCal/Wh	1,09 kCal/Wh
Input Power	132 W	127 W
Current	0,61 A	0,59 A

TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 μF 330 V			
Run capacitor	5 μF 400 V			
Relay	Option 1			
Reference	2014 108. + NTC15Ω			
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 °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	82	87	0,41	1,10	0,94
40	-35	110	97	0,45	1,33	1,14
40	-30	145	106	0,49	1,59	1,37
40	-25	187	115	0,54	1,88	1,62
40	-23,3	202	119	0,55	1,98	1,70
40	-20	235	125	0,58	2,19	1,88
40	-15	290	134	0,62	2,52	2,16
40	-10	352	143	0,66	2,86	2,46

45	-40	78	87	0,41	1,04	0,90
45	-35	106	98	0,46	1,26	1,08
45	-30	140	109	0,51	1,50	1,29
45	-25	181	119	0,55	1,76	1,52
45	-23,3	197	123	0,57	1,86	1,60
45	-20	229	130	0,60	2,05	1,76
45	-15	284	141	0,65	2,35	2,02
45	-10	345	151	0,70	2,66	2,28

50	-40	74	87	0,41	0,99	0,85
50	-35	101	99	0,46	1,19	1,02
50	-30	135	111	0,52	1,41	1,21
50	-25	176	123	0,57	1,66	1,43
50	-23,3	191	128	0,59	1,75	1,50
50	-20	223	135	0,63	1,92	1,65
50	-15	278	147	0,68	2,19	1,89
50	-10	339	159	0,73	2,48	2,13

55	-40	70	87	0,41	0,94	0,80
55	-35	97	101	0,47	1,12	0,96
55	-30	130	114	0,53	1,33	1,14
55	-25	171	127	0,59	1,56	1,34
55	-23,3	186	132	0,61	1,64	1,41
55	-20	218	141	0,65	1,80	1,55
55	-15	272	154	0,71	2,05	1,76
55	-10	332	167	0,77	2,31	1,99

60	-40	66	87	0,41	0,88	0,76
60	-35	92	102	0,48	1,05	0,91
60	-30	126	117	0,54	1,25	1,08
60	-25	166	131	0,61	1,46	1,26
60	-23,3	181	136	0,63	1,54	1,32
60	-20	212	146	0,67	1,69	1,45
60	-15	265	161	0,74	1,92	1,65
60	-10	326	175	0,81	2,16	1,86

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	89	87	0,41	1,02	0,88
40	-35	122	97	0,45	1,26	1,09
40	-30	162	106	0,49	1,52	1,32
40	-25	207	115	0,54	1,80	1,55
40	-23,3	224	119	0,55	1,89	1,63
40	-20	259	125	0,58	2,08	1,80
40	-15	317	134	0,62	2,37	2,05
40	-10	382	143	0,66	2,67	2,31

45	-40	81	87	0,41	0,93	0,81
45	-35	112	98	0,46	1,14	0,99
45	-30	149	109	0,51	1,37	1,18
45	-25	192	119	0,55	1,61	1,39
45	-23,3	208	123	0,57	1,69	1,46
45	-20	241	130	0,60	1,85	1,60
45	-15	297	141	0,65	2,11	1,82
45	-10	358	151	0,70	2,37	2,05

50	-40	74	87	0,41	0,85	0,73
50	-35	102	99	0,46	1,02	0,88
50	-30	136	111	0,52	1,22	1,05
50	-25	176	123	0,57	1,43	1,23
50	-23,3	191	128	0,59	1,50	1,30
50	-20	223	135	0,63	1,65	1,42
50	-15	276	147	0,68	1,87	1,62
50	-10	335	159	0,73	2,11	1,82

55	-40	66	87	0,41	0,76	0,65
55	-35	91	101	0,47	0,91	0,78
55	-30	123	114	0,53	1,08	0,93
55	-25	161	127	0,59	1,26	1,09
55	-23,3	175	132	0,61	1,32	1,14
55	-20	205	141	0,65	1,45	1,26
55	-15	255	154	0,71	1,66	1,43
55	-10	311	167	0,77	1,86	1,61

60	-40	58	87	0,41	0,67	0,58
60	-35	81	102	0,48	0,79	0,69
60	-30	110	117	0,54	0,94	0,81
60	-25	145	131	0,61	1,10	0,95
60	-23,3	158	136	0,63	1,16	1,00
60	-20	186	146	0,67	1,28	1,10
60	-15	234	161	0,74	1,46	1,26
60	-10	288	175	0,81	1,64	1,42

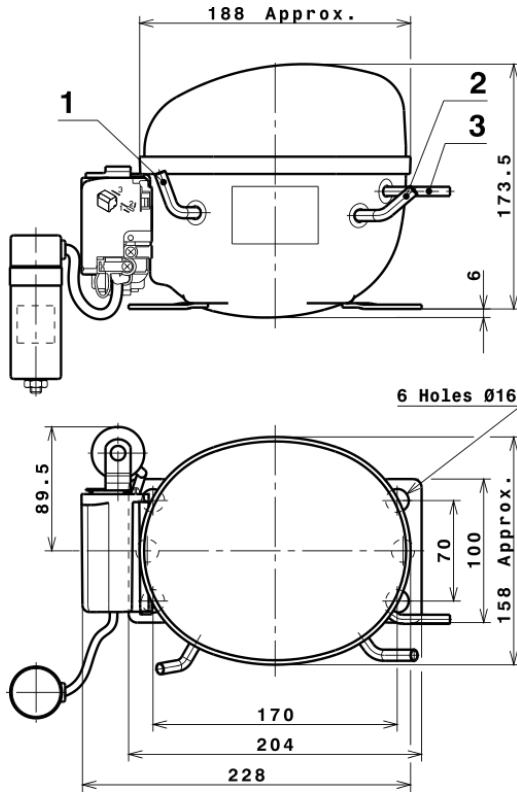
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	757,4949593810	77,6559857507	0,3598059454	6,9883179289891
2	20,0850159864	-0,3459733961	-0,0012791470	0,21125093786878
3	-5,9426760388	2,1860623437	0,0100866302	-0,018527337850866
4	0,1215439363	-0,0016309855	0,0000045490	0,0017842091945768
5	-0,1101195383	0,0546515586	0,0002521658	-0,00021856070063741

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

COMPRESSOR DIMENSIONS

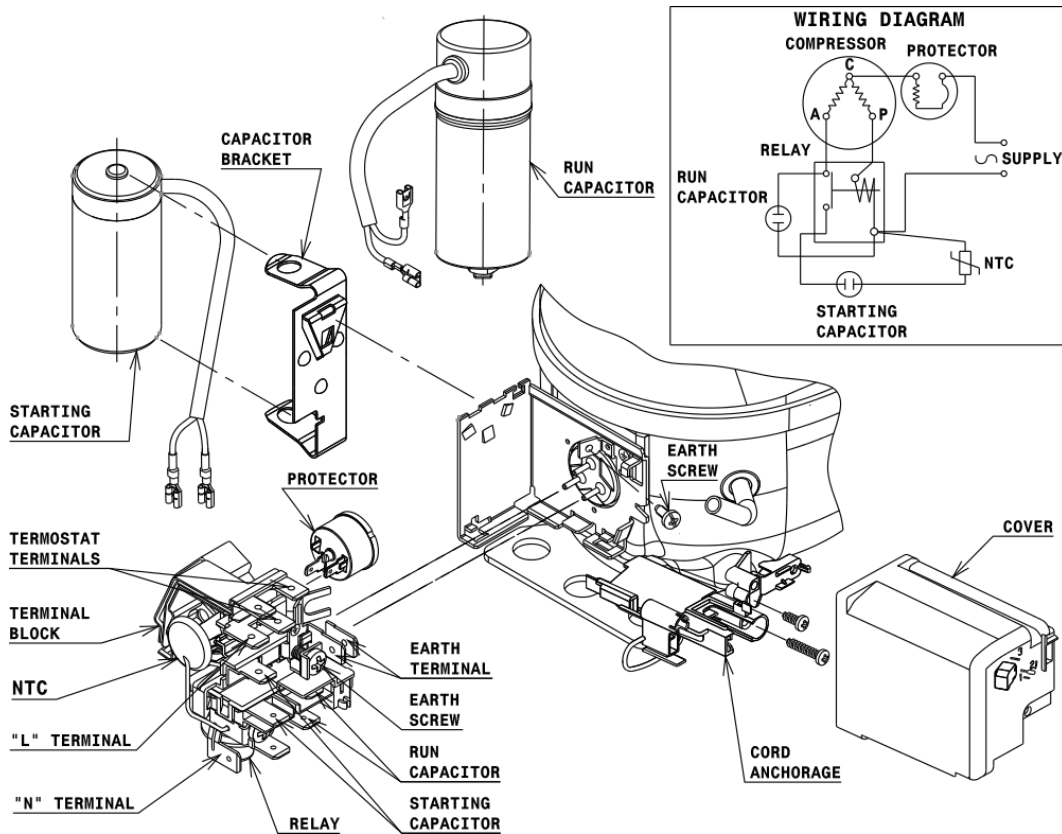


DESIGNATION INTERNAL DIAM.

1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

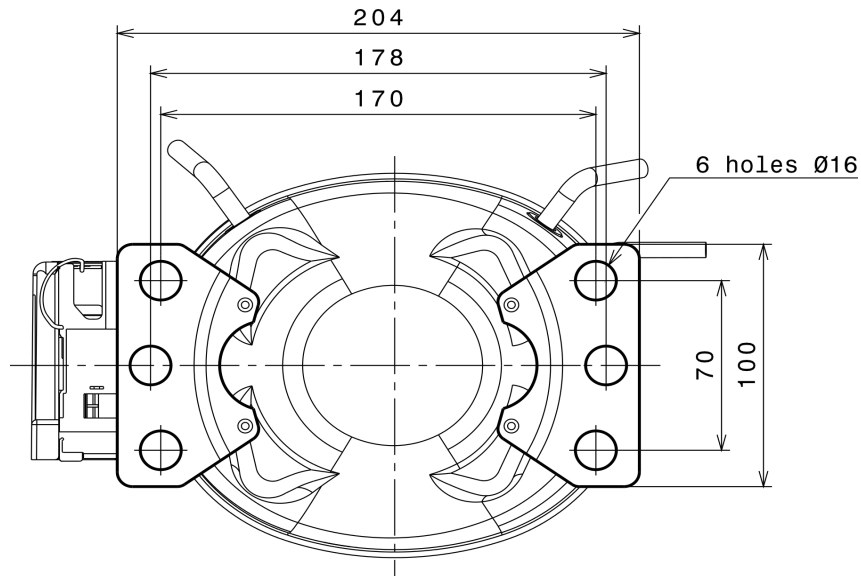
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (U range)



Technical Data Sheet

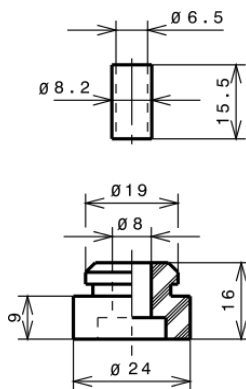
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

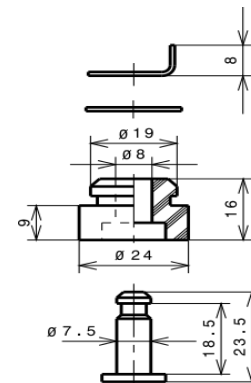
STANDARD

$\varnothing 16$ holes (170x70 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R290 LBP

