

Technical Data Sheet

Compressor model **NUT55LRa**
Voltage **115-127V 60Hz ~1**
Refrigerant **R290**
Compressor status

APPLICATION

Application	Low Back Pressure
Refrigerant	R290
Evaporating Temp.	-40,0 °C to -10,0 °C
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 °C

COMPRESSOR

Displacement	5,50 cm ³
Diameter	21,99 mm
Stroke	14,50 mm
Net Weight	9,47 Kg
Oil type	ISO VG 15 ESTER
Oil charge	200 cm ³
HP	1/5 hp

MOTOR

Voltage/Frequency	115-127V 60Hz
Voltage range	98-140 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	19,00 A
Max. Cont. Current (MCC)	3,50 A
Main W. resist. at 25°C	2,52 Ω
Start W. resist. at 25°C	4,47 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	280 kCal/h	243 W
COP	1,60 W/W	1,24 W/W
EER	1,37 kCal/Wh	1,07 kCal/Wh
Input Power	204 W	196 W
Current	2,31 A	2,25 A

APPROVALS



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	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	250 µF 160 V			
Relay	Option 1	Option 2		
Reference	2014 149.	QLZ-7.8A		
Pick-Up	7,80 A	7,80 A		
Drop-Out	6,65 A	6,65 A		
Protector	Option 1	Option 2		
Reference	T1086	B135-115		
Current	13,50 A			
Time check	6,0-16 seg			
Disc temp. (Open/Close)	105,00 / 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	137	129	1,78	1,24	1,06
40	-35	176	143	1,88	1,43	1,23
40	-30	226	159	1,98	1,65	1,42
40	-25	286	176	2,11	1,89	1,62
40	-23,3	309	182	2,15	1,97	1,69
40	-20	356	195	2,24	2,12	1,83
40	-15	436	215	2,39	2,36	2,03
40	-10	526	237	2,56	2,59	2,22

45	-40	130	129	1,78	1,17	1,01
45	-35	169	146	1,89	1,35	1,16
45	-30	218	163	2,02	1,55	1,33
45	-25	277	183	2,15	1,76	1,51
45	-23,3	299	190	2,20	1,83	1,58
45	-20	346	203	2,31	1,98	1,70
45	-15	425	226	2,48	2,19	1,88
45	-10	514	249	2,66	2,40	2,06

50	-40	124	130	1,79	1,11	0,95
50	-35	161	148	1,91	1,27	1,09
50	-30	209	168	2,05	1,45	1,25
50	-25	268	189	2,20	1,64	1,41
50	-23,3	290	197	2,26	1,71	1,47
50	-20	336	212	2,37	1,84	1,58
50	-15	414	236	2,56	2,04	1,75
50	-10	502	262	2,77	2,23	1,92

55	-40	117	130	1,79	1,05	0,90
55	-35	154	151	1,93	1,19	1,02
55	-30	201	172	2,08	1,36	1,17
55	-25	258	196	2,25	1,53	1,32
55	-23,3	280	204	2,31	1,60	1,37
55	-20	325	220	2,44	1,72	1,48
55	-15	403	247	2,64	1,90	1,63
55	-10	490	274	2,87	2,08	1,79

60	-40	111	131	1,79	0,98	0,85
60	-35	147	153	1,94	1,11	0,96
60	-30	193	177	2,11	1,27	1,09
60	-25	249	202	2,30	1,43	1,23
60	-23,3	270	211	2,36	1,49	1,28
60	-20	315	229	2,50	1,60	1,38
60	-15	392	257	2,73	1,77	1,52
60	-10	478	287	2,98	1,94	1,67

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	148	129	1,78	1,15	0,99
40	-35	195	143	1,88	1,36	1,18
40	-30	252	159	1,98	1,58	1,37
40	-25	318	176	2,11	1,80	1,56
40	-23,3	342	182	2,15	1,88	1,62
40	-20	393	195	2,24	2,01	1,74
40	-15	477	215	2,39	2,22	1,92
40	-10	571	237	2,56	2,42	2,09

45	-40	135	129	1,78	1,05	0,91
45	-35	178	146	1,89	1,23	1,06
45	-30	231	163	2,02	1,41	1,22
45	-25	293	183	2,15	1,60	1,38
45	-23,3	316	190	2,20	1,67	1,44
45	-20	364	203	2,31	1,79	1,54
45	-15	444	226	2,48	1,97	1,70
45	-10	534	249	2,66	2,14	1,85

50	-40	123	130	1,79	0,95	0,82
50	-35	162	148	1,91	1,09	0,94
50	-30	210	168	2,05	1,25	1,08
50	-25	268	189	2,20	1,42	1,22
50	-23,3	290	197	2,26	1,47	1,27
50	-20	335	212	2,37	1,58	1,36
50	-15	411	236	2,56	1,74	1,50
50	-10	497	262	2,77	1,90	1,64

55	-40	110	130	1,79	0,85	0,73
55	-35	145	151	1,93	0,96	0,83
55	-30	189	172	2,08	1,10	0,95
55	-25	243	196	2,25	1,24	1,07
55	-23,3	263	204	2,31	1,29	1,11
55	-20	306	220	2,44	1,39	1,20
55	-15	378	247	2,64	1,53	1,32
55	-10	460	274	2,87	1,68	1,45

60	-40	98	131	1,79	0,75	0,65
60	-35	128	153	1,94	0,84	0,73
60	-30	169	177	2,11	0,95	0,82
60	-25	218	202	2,30	1,08	0,93
60	-23,3	237	211	2,36	1,12	0,97
60	-20	277	229	2,50	1,21	1,04
60	-15	345	257	2,73	1,34	1,16
60	-10	422	287	2,98	1,47	1,27

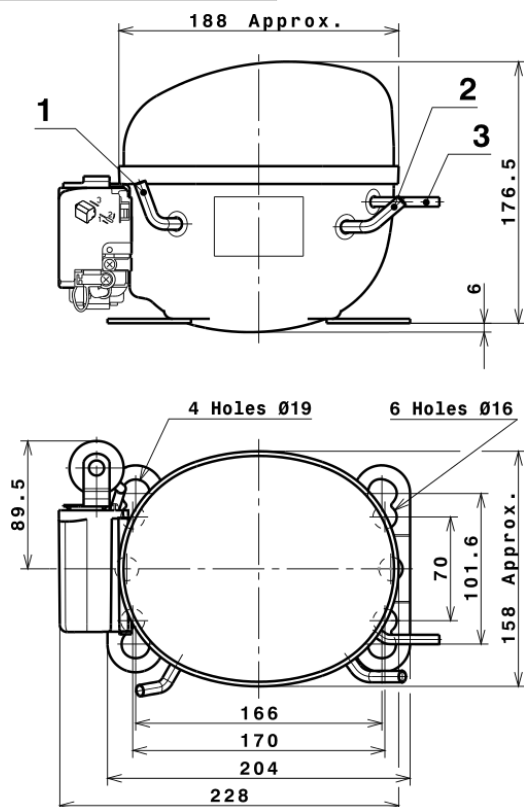
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.145,8806559718	155,8004409885	1,8916800524	10,68506356244
2	29,7642677069	1,8851940330	0,0185090729	0,31603385158454
3	-9,3359843073	3,3816667244	0,0284393411	-0,034891958372041
4	0,1818292124	0,0292533211	0,0003876704	0,0026622901674428
5	-0,1700823416	0,0819874915	0,0006942327	-0,00047477111044831

Equation

$$x_1 + x_2 Te + x_3 Tc + x_4 Te^2 + x_5 Te Tc$$

COMPRESSOR DIMENSIONS

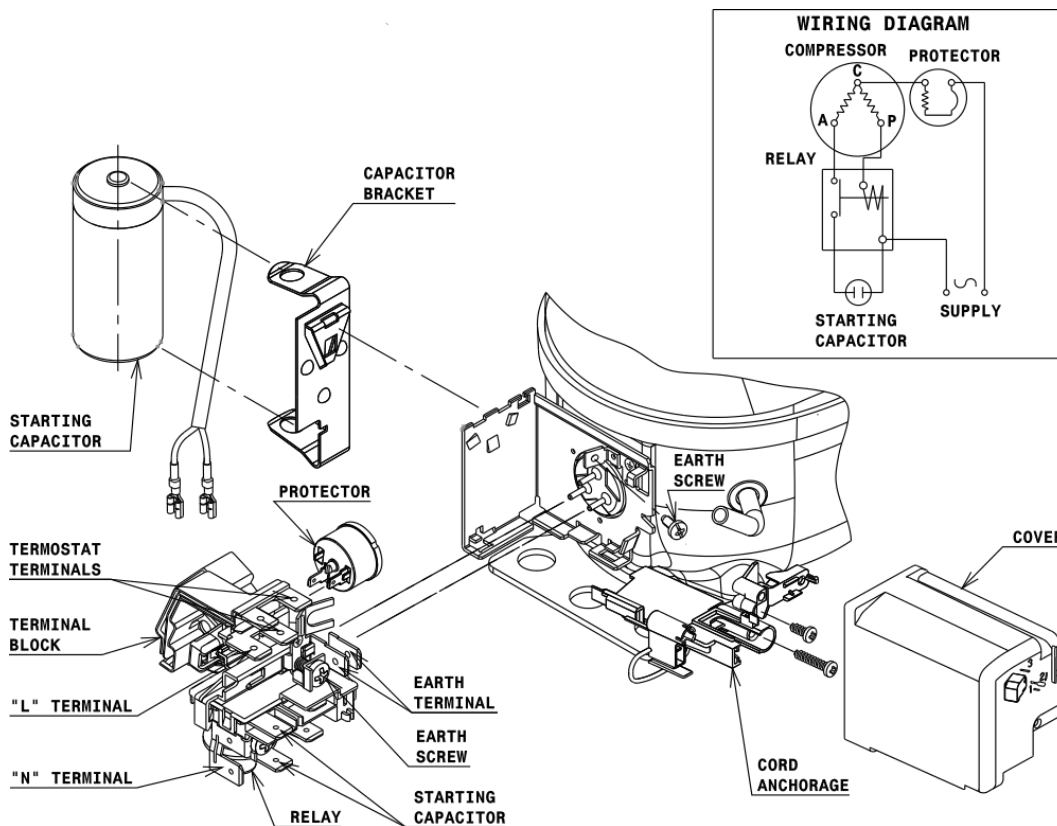


DESIGNATION INTERNAL DIAM.

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

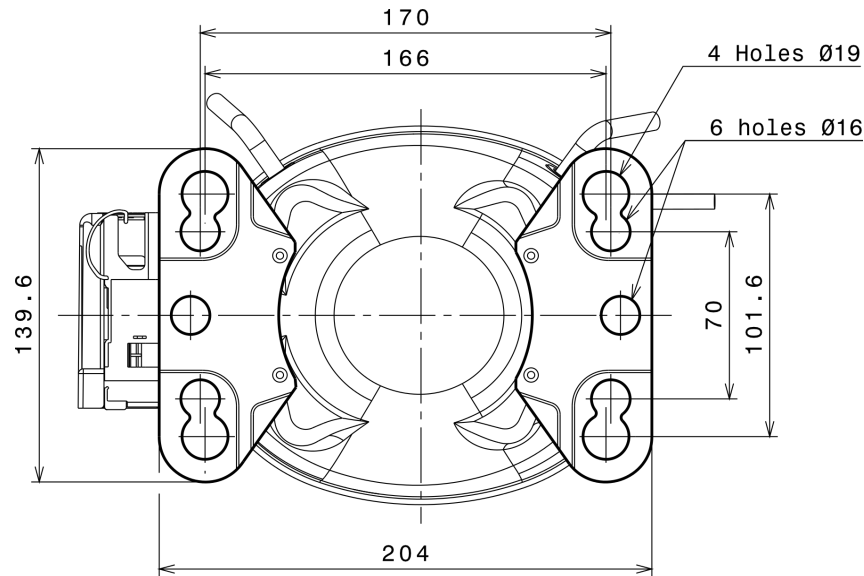
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

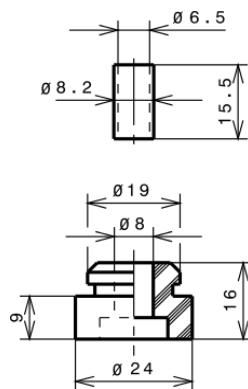
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

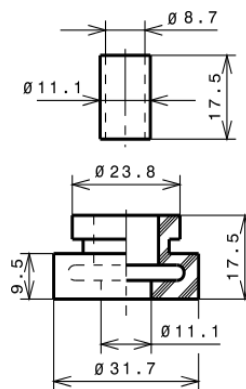
STANDARD

Ø16 holes (170x70 net)



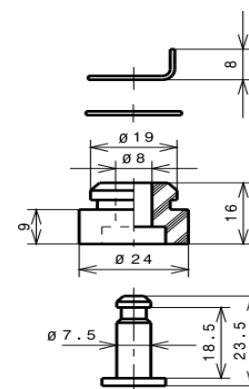
AMERICAN FEET

Ø19 holes (166x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LBP

