

Technical Data Sheet

Compressor model **NUY55RAa**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R290**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	5,50 cm ³	Nominal Power	1/5 hp
Refrigerant	R290	Diameter	21,99 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	14,50 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	9,50 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 22 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	220 cm ³	Locked Rotor Amps (LRA)	12,60 A
				Max. Cont. Current (MCC)	3,00 A
				Main W. resist. at 25°C	8,20 Ω
				Start W. resist. at 25°C	35,00 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	669 kCal/h	653 W
COP	2,69 W/W	2,29 W/W
EER	2,31 kCal/Wh	1,98 kCal/Wh
Input Power	289 W	284 W
Current	1,77 A	1,75 A

TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T _e)	7,2 °C	5,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	46,0 °C	55,0 °C
Ambient temp. (T _{amb.})	35,0 °C	32,0 °C
Suction temp. (T _{suction})	35,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Relay	Option 1			
Reference	2014 118.			
Pick-Up	3,75 A			
Drop-Out	3,20 A			
Protector	Option 1	Option 2		
Reference	T0269	B96-105		
Current	9,60 A			
Time check	7,5-14 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	-25	227	160	1,35	1,66	1,42
40	-20	283	173	1,39	1,91	1,64
40	-15	351	184	1,42	2,22	1,91
40	-10	431	195	1,45	2,57	2,21
40	-5	521	205	1,48	2,96	2,55
40	0	623	213	1,51	3,40	2,93
40	5	737	220	1,53	3,89	3,35
40	7,2	791	223	1,54	4,12	3,54
40	10	862	226	1,55	4,43	3,81

45	-25	212	164	1,37	1,50	1,29
45	-20	265	180	1,41	1,71	1,47
45	-15	328	194	1,45	1,97	1,69
45	-10	404	208	1,49	2,26	1,94
45	-5	490	220	1,53	2,59	2,23
45	0	589	231	1,56	2,96	2,55
45	5	698	241	1,60	3,37	2,90
45	7,2	750	245	1,61	3,56	3,06
45	10	819	250	1,63	3,81	3,28

50	-25	197	169	1,38	1,36	1,17
50	-20	246	187	1,43	1,53	1,31
50	-15	306	204	1,48	1,74	1,50
50	-10	377	220	1,53	1,99	1,71
50	-5	460	235	1,58	2,27	1,95
50	0	554	249	1,62	2,59	2,22
50	5	659	262	1,67	2,93	2,52
50	7,2	710	267	1,69	3,09	2,66
50	10	776	273	1,71	3,30	2,84

55	-25	182	173	1,39	1,22	1,05
55	-20	227	194	1,45	1,36	1,17
55	-15	283	214	1,51	1,53	1,32
55	-10	350	233	1,57	1,75	1,50
55	-5	429	251	1,63	1,99	1,71
55	0	519	267	1,69	2,26	1,94
55	5	621	283	1,75	2,55	2,20
55	7,2	669	289	1,77	2,69	2,31
55	10	734	297	1,80	2,87	2,47

60	-25	167	178	1,40	1,09	0,94
60	-20	208	201	1,47	1,20	1,03
60	-15	260	224	1,54	1,35	1,16
60	-10	323	246	1,61	1,53	1,32
60	-5	398	266	1,68	1,74	1,50
60	0	484	285	1,76	1,97	1,70
60	5	582	303	1,83	2,23	1,92
60	7,2	629	311	1,86	2,35	2,02
60	10	691	320	1,90	2,51	2,16

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	244	160	1,36	1,52	1,32
40	-20	306	173	1,39	1,76	1,52
40	-15	379	185	1,42	2,05	1,77
40	-10	465	196	1,46	2,37	2,05
40	-5	562	206	1,48	2,73	2,36
40	0	671	214	1,51	3,13	2,71
40	5	792	222	1,53	3,58	3,09
40	7,2	850	224	1,54	3,78	3,27
40	10	926	228	1,55	4,06	3,51

45	-25	227	165	1,37	1,38	1,19
45	-20	283	181	1,41	1,57	1,36
45	-15	352	195	1,45	1,80	1,56
45	-10	433	209	1,49	2,07	1,79
45	-5	525	221	1,53	2,37	2,05
45	0	630	232	1,57	2,71	2,34
45	5	746	243	1,60	3,07	2,66
45	7,2	801	247	1,62	3,25	2,81
45	10	874	251	1,63	3,48	3,00

50	-25	209	169	1,38	1,24	1,07
50	-20	261	188	1,43	1,39	1,20
50	-15	325	205	1,48	1,58	1,37
50	-10	401	222	1,53	1,81	1,56
50	-5	488	237	1,58	2,06	1,78
50	0	588	251	1,63	2,34	2,03
50	5	699	264	1,68	2,65	2,29
50	7,2	752	269	1,69	2,80	2,42
50	10	823	275	1,72	2,99	2,58

55	-25	192	174	1,39	1,10	0,95
55	-20	239	195	1,45	1,22	1,06
55	-15	298	215	1,51	1,38	1,19
55	-10	369	234	1,57	1,57	1,36
55	-5	451	252	1,64	1,79	1,55
55	0	546	269	1,69	2,03	1,75
55	5	653	284	1,75	2,29	1,98
55	7,2	703	291	1,78	2,42	2,09
55	10	771	299	1,81	2,58	2,23

60	-25	174	178	1,40	0,98	0,84
60	-20	217	202	1,47	1,07	0,92
60	-15	271	225	1,55	1,20	1,04
60	-10	337	247	1,62	1,36	1,18
60	-5	415	268	1,69	1,55	1,34
60	0	504	287	1,76	1,76	1,52
60	5	606	305	1,83	1,98	1,71
60	7,2	655	313	1,87	2,09	1,81
60	10	720	323	1,90	2,23	1,93

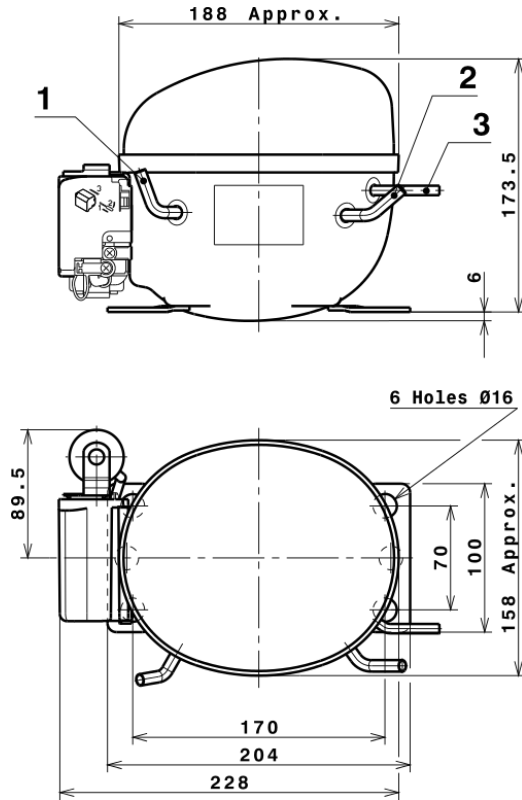
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.008,4885954530	70,1614163252	0,9641687794	8,7039310107128
2	30,9314749054	-2,8235983846	-0,0121390497	0,30187589023442
3	-8,6760055197	3,7460922364	0,0137444108	-0,022871930417821
4	0,2339142511	-0,0219822926	-0,0000032682	0,0036883026272926
5	-0,2051426573	0,1128198194	0,0004495412	-0,00022624200487797

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

COMPRESSOR DIMENSIONS

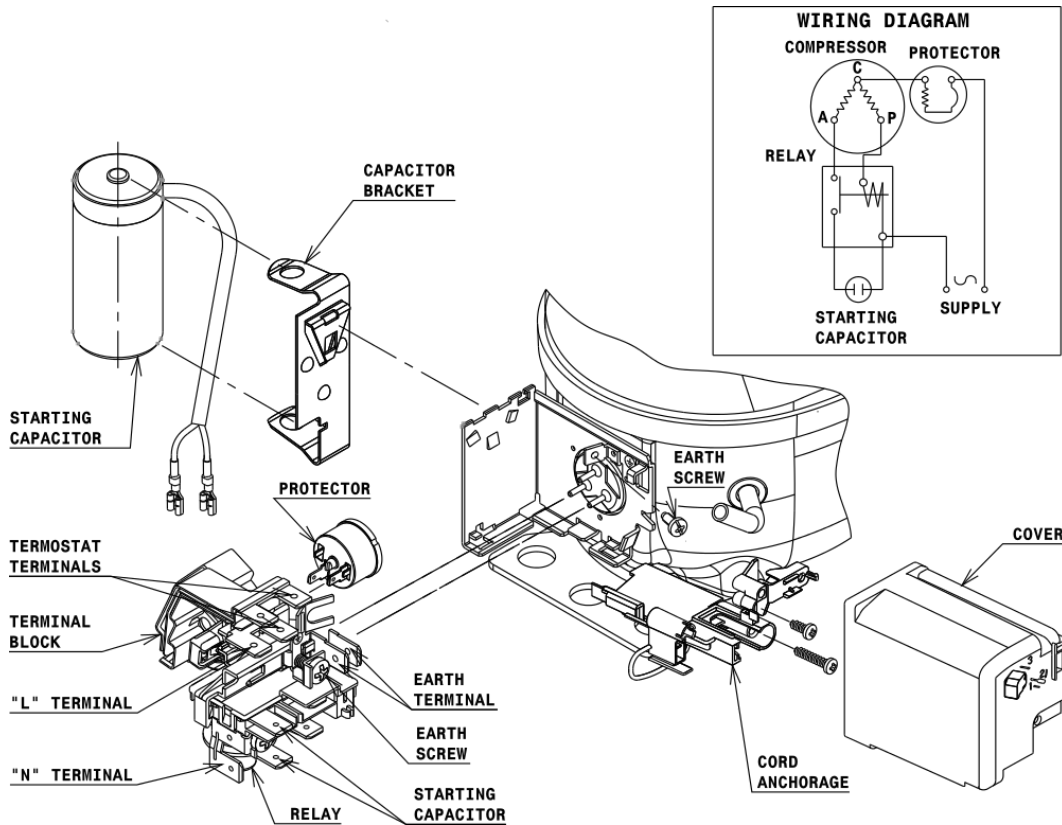


DESIGNATION INTERNAL DIAM.

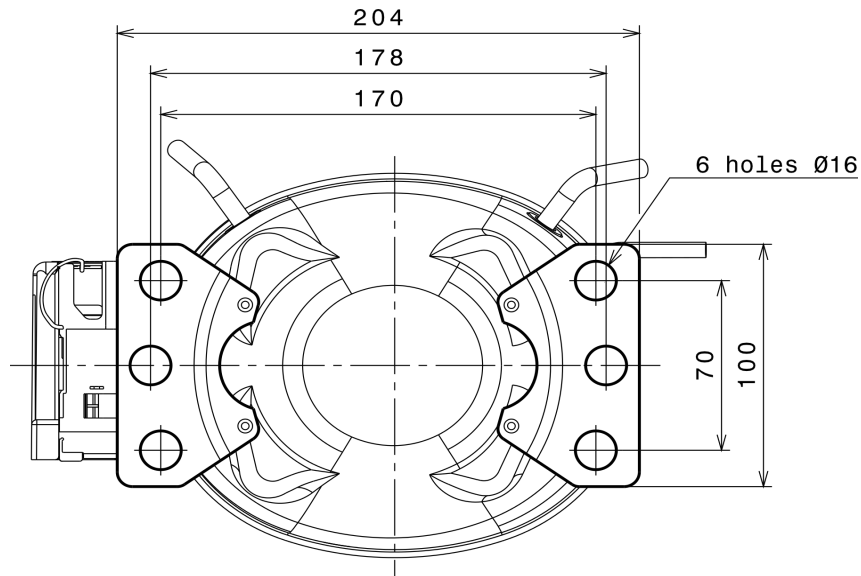
DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction	6,2 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



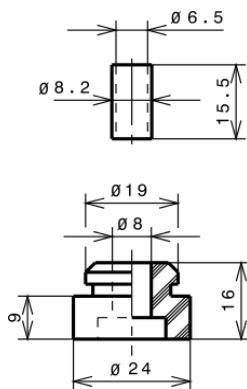
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

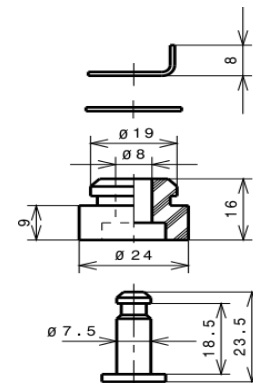
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 HMBP

