

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **NUT55CAc**
Voltage **220-240V 50Hz ~1**
Refrigerant **R290**

APPLICATION

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

COMPRESSOR

Displacement 5,50 cm³
Diameter 21,99 mm
Stroke 14,50 mm
Net Weight 9,10 Kg
Oil type ISO VG 07 ESTER
Oil charge 200 cm³

MOTOR

Nominal Power 1/5 hp
Voltage/Frequency 220-240V 50Hz
Voltage range 187-255 V
Type RSIR
Phase number 1 PH
Locked Rotor Amps (LRA) 6,00 A
Max. Cont. Current (MCC) 1,40 A
Main W. resist. at 25°C 16,70 Ω
Start W. resist. at 25°C 17,40 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	227 kCal/h	196 W
COP	1,64 W/W	1,27 W/W
EER	1,41 kCal/Wh	1,10 kCal/Wh
Input Power	161 W	154 W
Current	0,99 A	0,97 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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2		
Reference	T0490	AE15BW		
Current	9,40 A	8,20 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	130,00 / 62,00 °C	130,00 / 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

Made by Huayi for Danfoss

Technical Data Sheet NUT55CAc

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ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	113	102	0,78	1,29	1,11
40	-35	145	114	0,83	1,48	1,28
40	-30	187	127	0,87	1,71	1,47
40	-25	238	141	0,92	1,96	1,69
40	-23,3	257	146	0,94	2,05	1,77
40	-20	298	156	0,97	2,23	1,92
40	-15	367	171	1,03	2,50	2,15
40	-10	446	188	1,09	2,77	2,38

45	-40	106	101	0,78	1,22	1,05
45	-35	138	115	0,83	1,39	1,20
45	-30	178	130	0,88	1,60	1,37
45	-25	228	145	0,93	1,83	1,57
45	-23,3	247	151	0,95	1,91	1,64
45	-20	287	162	0,99	2,07	1,78
45	-15	356	179	1,06	2,31	1,99
45	-10	433	197	1,13	2,56	2,20

50	-40	100	101	0,78	1,15	0,99
50	-35	130	116	0,83	1,30	1,12
50	-30	170	133	0,89	1,49	1,28
50	-25	218	150	0,95	1,69	1,46
50	-23,3	237	156	0,97	1,77	1,52
50	-20	276	168	1,02	1,91	1,65
50	-15	344	187	1,09	2,14	1,84
50	-10	420	207	1,16	2,37	2,03

55	-40	93	100	0,78	1,08	0,93
55	-35	122	117	0,84	1,21	1,04
55	-30	161	135	0,90	1,38	1,19
55	-25	209	154	0,97	1,57	1,35
55	-23,3	227	161	0,99	1,64	1,41
55	-20	266	174	1,04	1,77	1,53
55	-15	332	195	1,12	1,98	1,70
55	-10	407	216	1,20	2,19	1,88

60	-40	87	100	0,78	1,01	0,87
60	-35	115	118	0,84	1,13	0,97
60	-30	152	138	0,91	1,28	1,10
60	-25	199	159	0,98	1,46	1,25
60	-23,3	217	166	1,01	1,52	1,31
60	-20	255	180	1,06	1,64	1,41
60	-15	320	202	1,15	1,84	1,58
60	-10	394	226	1,24	2,03	1,75

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	122	102	0,78	1,20	1,04
40	-35	161	114	0,83	1,41	1,22
40	-30	208	127	0,87	1,64	1,42
40	-25	264	141	0,92	1,88	1,62
40	-23,3	285	146	0,94	1,96	1,69
40	-20	329	156	0,97	2,11	1,83
40	-15	402	171	1,03	2,35	2,03
40	-10	484	188	1,09	2,58	2,23

45	-40	110	101	0,78	1,09	0,94
45	-35	146	115	0,83	1,27	1,09
45	-30	189	130	0,88	1,46	1,26
45	-25	242	145	0,93	1,66	1,44
45	-23,3	261	151	0,95	1,73	1,50
45	-20	303	162	0,99	1,87	1,62
45	-15	372	179	1,06	2,08	1,80
45	-10	450	197	1,13	2,28	1,97

50	-40	99	101	0,78	0,98	0,85
50	-35	130	116	0,83	1,12	0,97
50	-30	170	133	0,89	1,29	1,11
50	-25	219	150	0,95	1,46	1,26
50	-23,3	237	156	0,97	1,52	1,32
50	-20	276	168	1,02	1,64	1,42
50	-15	342	187	1,09	1,83	1,58
50	-10	416	207	1,16	2,01	1,74

55	-40	88	100	0,78	0,88	0,76
55	-35	115	117	0,84	0,98	0,85
55	-30	152	135	0,90	1,12	0,97
55	-25	196	154	0,97	1,27	1,10
55	-23,3	213	161	0,99	1,33	1,15
55	-20	250	174	1,04	1,43	1,24
55	-15	311	195	1,12	1,60	1,38
55	-10	382	216	1,20	1,77	1,53

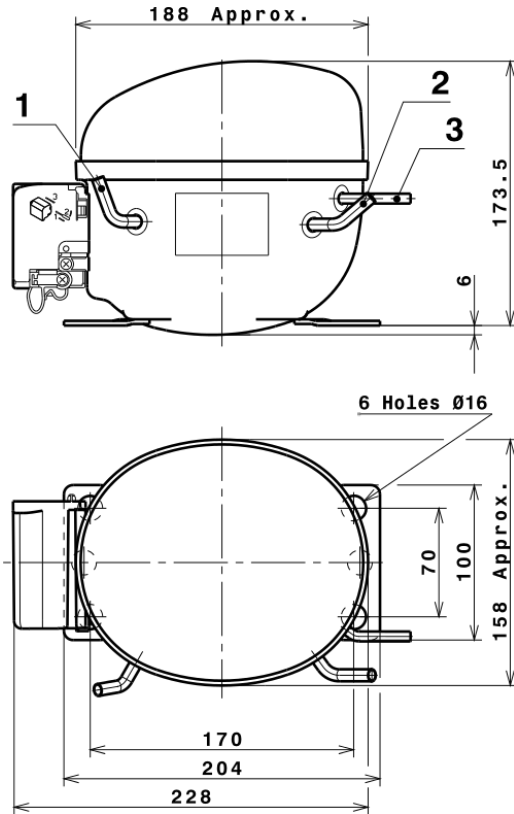
60	-40	76	100	0,78	0,77	0,66
60	-35	100	118	0,84	0,85	0,73
60	-30	133	138	0,91	0,96	0,83
60	-25	174	159	0,98	1,09	0,94
60	-23,3	189	166	1,01	1,14	0,99
60	-20	223	180	1,06	1,24	1,07
60	-15	281	202	1,15	1,39	1,20
60	-10	348	226	1,24	1,54	1,33

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.001,0923131970	123,2763216928	0,8392705071	9,4827562516485
2	26,4129288607	1,0736370165	0,0054142181	0,28357930801283
3	-8,5169319134	2,6300047208	0,0104112701	-0,038209166302409
4	0,1662960705	0,0171596316	0,0001141739	0,0024190262415613
5	-0,1558113371	0,0683042946	0,0002686147	-0,00055781862954746

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

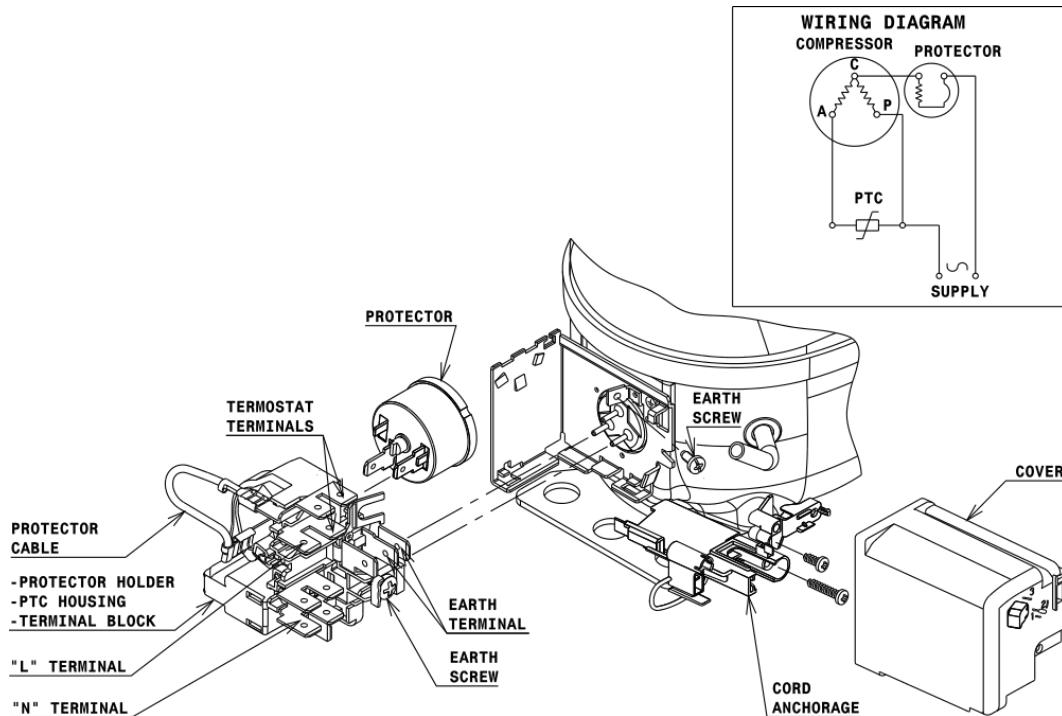


DESIGNATION INTERNAL DIAM.

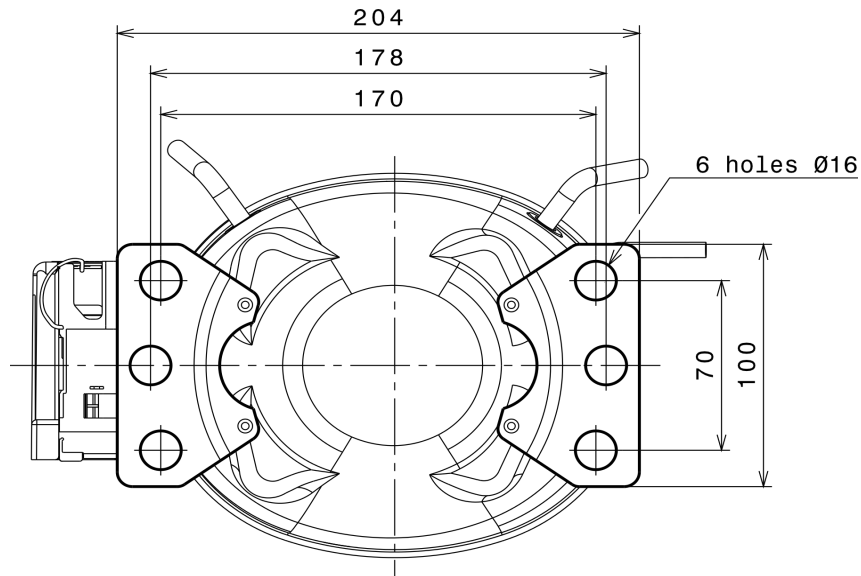
DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction	6,2 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (U range)



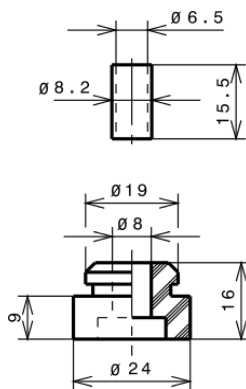
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

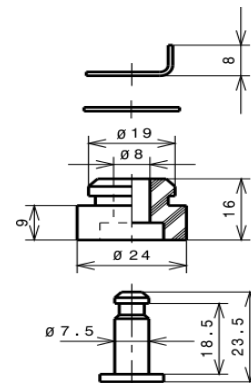
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R290 LBP

