

# Technical Data Sheet

Compressor model **NUS70NA**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R290**  
 Compressor status

## APPLICATION

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

## COMPRESSOR

Displacement 6,70 cm<sup>3</sup>  
 Diameter 21,99 mm  
 Stroke 17,50 mm  
 Net Weight 9,60 Kg  
 Oil type ISO VG 10 ESTER  
 Oil charge 180 cm<sup>3</sup>  
 HP 1/5 hp

## MOTOR

Voltage/Frequency 220V 50Hz  
 Voltage range 187-255 V  
 Type RSCR  
 Phase number 1 PH  
 Max. Cont. Current (MCC) 8,00 A  
 Main W. resist. at 25°C 12,30 Ω  
 Main W. resist. at 25°C 12,30 Ω  
 Start W. resist. at 25°C 15,70 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	282 kCal/h	244 W
COP	1,85 W/W	1,44 W/W
EER	1,59 kCal/Wh	1,24 kCal/Wh
Input Power	177 W	170 W
Current	0,82 A	0,79 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LMBP (B)	CECOMAF LMBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Run capacitor	5 / 6 µF 450 V			
Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14 Ω			
Protector	Option 1			
Reference	B85-130			
Current	9,00 A			
Time check	7,5-16 seg			
Disc temp. (Open/Close)	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

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	136	107	0,50	1,47	1,27
40	-35	176	121	0,56	1,70	1,46
40	-30	228	135	0,63	1,96	1,69
40	-25	291	150	0,69	2,26	1,95
40	-23,3	315	155	0,72	2,37	2,04
40	-20	365	164	0,76	2,59	2,22
40	-15	451	179	0,83	2,92	2,51
40	-10	547	194	0,90	3,27	2,81
40	-5	654	210	0,98	3,63	3,12
40	0	773	226	1,05	3,98	3,43

45	-40	129	108	0,50	1,39	1,19
45	-35	168	124	0,57	1,58	1,36
45	-30	219	140	0,65	1,82	1,56
45	-25	281	156	0,72	2,09	1,79
45	-23,3	304	162	0,75	2,18	1,88
45	-20	353	173	0,80	2,38	2,04
45	-15	437	190	0,88	2,68	2,30
45	-10	532	207	0,96	2,99	2,57
45	-5	638	224	1,04	3,31	2,84
45	0	755	242	1,13	3,63	3,12

50	-40	123	109	0,51	1,31	1,12
50	-35	161	127	0,59	1,47	1,27
50	-30	210	145	0,67	1,68	1,45
50	-25	270	163	0,76	1,92	1,65
50	-23,3	293	170	0,78	2,01	1,73
50	-20	341	182	0,84	2,18	1,88
50	-15	424	201	0,93	2,46	2,11
50	-10	517	220	1,02	2,74	2,35
50	-5	622	239	1,11	3,03	2,60
50	0	738	259	1,21	3,32	2,85

55	-40	116	110	0,51	1,23	1,05
55	-35	153	130	0,60	1,37	1,18
55	-30	201	150	0,69	1,56	1,34
55	-25	259	170	0,79	1,77	1,53
55	-23,3	282	177	0,82	1,85	1,59
55	-20	329	191	0,88	2,01	1,73
55	-15	410	211	0,98	2,26	1,94
55	-10	503	232	1,08	2,52	2,16
55	-5	606	254	1,19	2,78	2,39
55	0	720	275	1,29	3,05	2,62

60	-40	110	111	0,51	1,15	0,99
60	-35	145	133	0,61	1,27	1,09
60	-30	191	155	0,72	1,44	1,24
60	-25	249	177	0,82	1,64	1,41
60	-23,3	271	184	0,86	1,71	1,47
60	-20	317	199	0,93	1,85	1,59
60	-15	397	222	1,03	2,08	1,79
60	-10	488	245	1,14	2,32	1,99
60	-5	590	268	1,26	2,56	2,20
60	0	703	292	1,37	2,80	2,41

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	147	107	0,50	1,37	1,19
40	-35	197	121	0,56	1,63	1,41
40	-30	258	135	0,63	1,91	1,65
40	-25	329	150	0,69	2,20	1,90
40	-23,3	356	155	0,72	2,30	1,99
40	-20	411	164	0,76	2,50	2,16
40	-15	502	179	0,83	2,80	2,42
40	-10	604	194	0,90	3,11	2,68
40	-5	716	210	0,98	3,41	2,95
40	0	838	226	1,05	3,72	3,21

45	-40	134	108	0,50	1,24	1,07
45	-35	180	124	0,57	1,45	1,25
45	-30	235	140	0,65	1,68	1,45
45	-25	301	156	0,72	1,92	1,66
45	-23,3	326	162	0,75	2,01	1,74
45	-20	377	173	0,80	2,18	1,88
45	-15	463	190	0,88	2,44	2,11
45	-10	560	207	0,96	2,70	2,34
45	-5	666	224	1,04	2,97	2,57
45	0	783	242	1,13	3,24	2,80

50	-40	122	109	0,51	1,12	0,97
50	-35	162	127	0,59	1,28	1,10
50	-30	212	145	0,67	1,46	1,26
50	-25	272	163	0,76	1,67	1,44
50	-23,3	295	170	0,78	1,74	1,51
50	-20	343	182	0,84	1,89	1,63
50	-15	424	201	0,93	2,11	1,83
50	-10	515	220	1,02	2,35	2,03
50	-5	617	239	1,11	2,58	2,23
50	0	728	259	1,21	2,82	2,43

55	-40	109	110	0,51	0,99	0,86
55	-35	144	130	0,60	1,11	0,96
55	-30	189	150	0,69	1,26	1,09
55	-25	244	170	0,79	1,44	1,24
55	-23,3	265	177	0,82	1,50	1,29
55	-20	309	191	0,88	1,62	1,40
55	-15	385	211	0,98	1,82	1,57
55	-10	471	232	1,08	2,03	1,75
55	-5	567	254	1,19	2,24	1,93
55	0	673	275	1,29	2,45	2,12

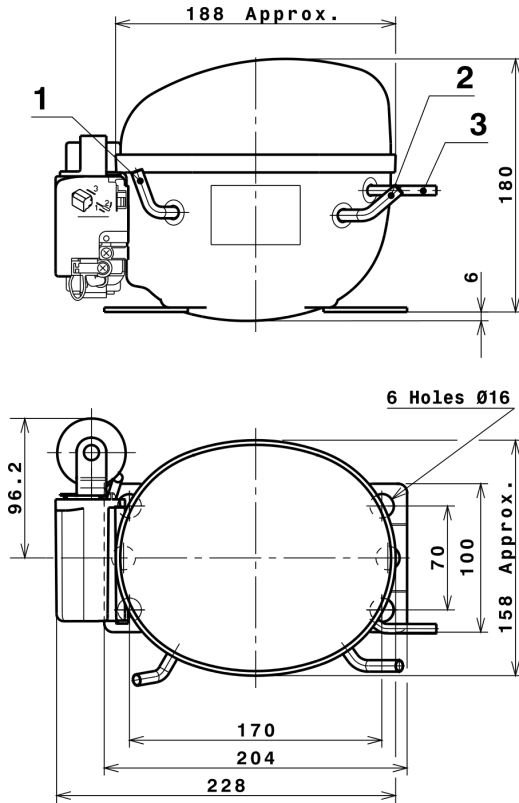
60	-40	97	111	0,51	0,87	0,75
60	-35	126	133	0,61	0,95	0,82
60	-30	166	155	0,72	1,07	0,93
60	-25	216	177	0,82	1,22	1,05
60	-23,3	235	184	0,86	1,27	1,10
60	-20	276	199	0,93	1,38	1,20
60	-15	346	222	1,03	1,56	1,35
60	-10	427	245	1,14	1,74	1,50
60	-5	517	268	1,26	1,93	1,67
60	0	618	292	1,37	2,12	1,83

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.276,9324922566	96,0049715285	0,4172940120	11,604254236326
2	33,8030471197	0,1069141848	0,0005400762	0,35250327980614
3	-11,3087491816	3,3884107598	0,0165242835	-0,044634370070298
4	0,1999645340	0,0058856177	0,0000462014	0,0029918924348945
5	-0,2196600178	0,0796019158	0,0003898078	-0,00071833629127306

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

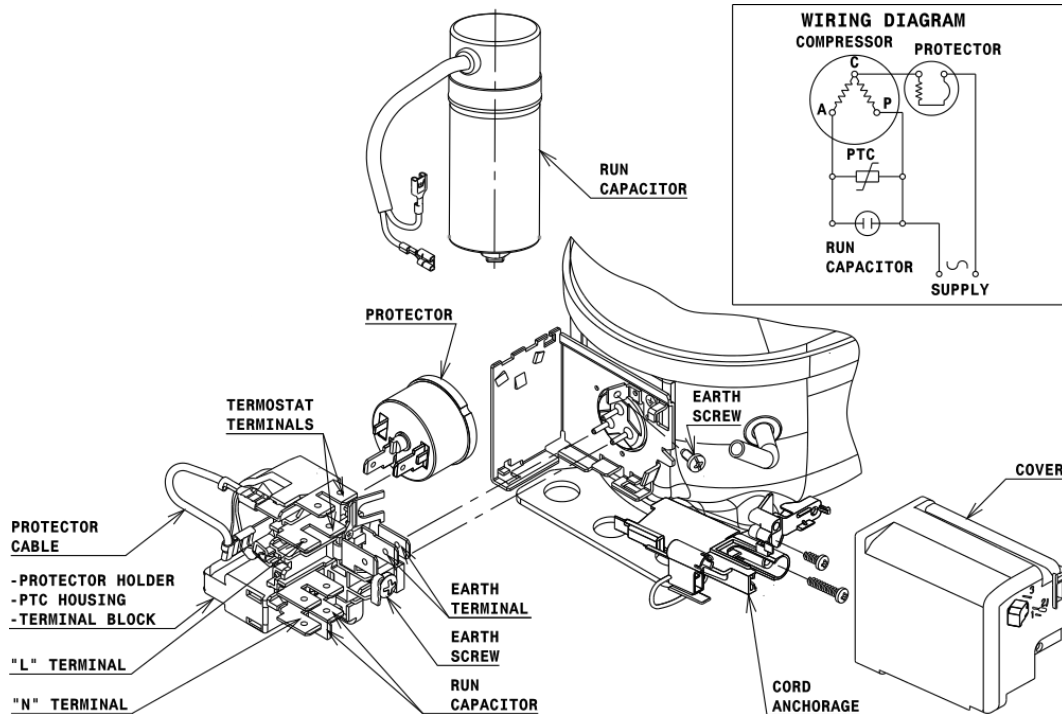


## DESIGNATION INTERNAL DIAM.

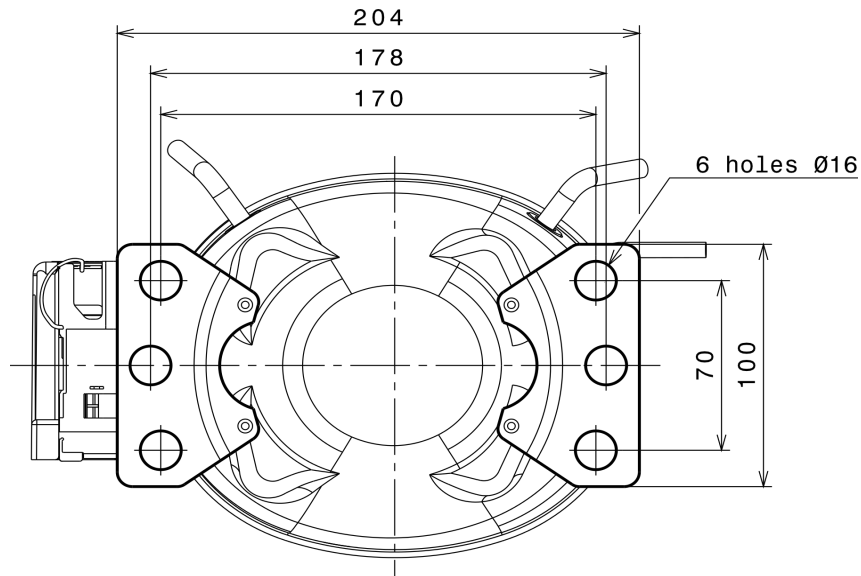
DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction (Direct)	6,2 mm
3 Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSCR CONNECTION (U range)



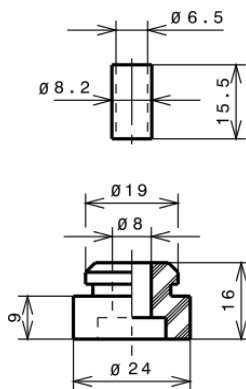
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

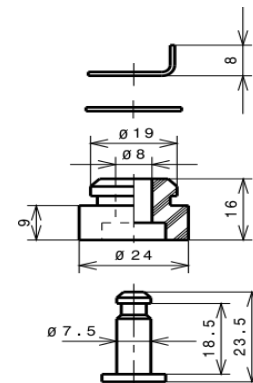
### STANDARD

Ø16 holes (170x70 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R290 LMBP

