

# Technical Data Sheet

Compressor model **NUT70CAb**  
 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 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 9,41 Kg  
 Oil type ISO VG 10 ESTER  
 Oil charge 200 cm<sup>3</sup>

## MOTOR

Nominal Power 1/4 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-255 V  
 Type RSCR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 8,60 A  
 Max. Cont. Current (MCC) 1,85 A  
 Main W. resist. at 25°C 10,05 Ω  
 Start W. resist. at 25°C 18,26 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	288 kCal/h	250 W
COP	1,80 W/W	1,39 W/W
EER	1,55 kCal/Wh	1,20 kCal/Wh
Input Power	186 W	179 W
Current	0,93 A	0,90 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (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	6 µF 400 V			
Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1			
Reference	AE18FU			
Current	6,30 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	120,00 / 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	131	118	0,63	1,30	1,11
40	-35	177	134	0,70	1,54	1,32
40	-30	231	149	0,77	1,80	1,55
40	-25	294	164	0,84	2,08	1,79
40	-23,3	317	169	0,86	2,18	1,87
40	-20	365	179	0,90	2,37	2,04
40	-15	446	193	0,96	2,68	2,31
40	-10	535	207	1,02	3,01	2,59

45	-40	126	118	0,64	1,24	1,07
45	-35	170	136	0,71	1,46	1,25
45	-30	223	153	0,78	1,70	1,46
45	-25	285	169	0,86	1,95	1,68
45	-23,3	307	175	0,88	2,04	1,76
45	-20	355	186	0,93	2,22	1,91
45	-15	434	201	1,00	2,51	2,16
45	-10	521	216	1,06	2,81	2,41

50	-40	121	119	0,64	1,19	1,02
50	-35	164	138	0,72	1,38	1,19
50	-30	215	156	0,80	1,60	1,38
50	-25	275	174	0,88	1,84	1,58
50	-23,3	298	180	0,91	1,92	1,65
50	-20	344	192	0,96	2,08	1,79
50	-15	421	209	1,03	2,35	2,02
50	-10	508	226	1,11	2,62	2,25

55	-40	116	119	0,64	1,13	0,97
55	-35	157	140	0,73	1,31	1,13
55	-30	207	160	0,82	1,51	1,30
55	-25	266	179	0,90	1,72	1,48
55	-23,3	288	186	0,93	1,80	1,55
55	-20	333	199	0,99	1,95	1,68
55	-15	409	217	1,07	2,19	1,89
55	-10	494	235	1,15	2,44	2,10

60	-40	111	120	0,64	1,08	0,93
60	-35	151	142	0,74	1,24	1,07
60	-30	200	163	0,83	1,42	1,22
60	-25	257	184	0,92	1,62	1,39
60	-23,3	278	192	0,95	1,69	1,45
60	-20	323	205	1,01	1,83	1,57
60	-15	397	225	1,10	2,05	1,77
60	-10	481	245	1,19	2,29	1,97

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	142	118	0,63	1,21	1,05
40	-35	195	134	0,70	1,46	1,26
40	-30	256	149	0,77	1,71	1,48
40	-25	325	164	0,84	1,98	1,71
40	-23,3	350	169	0,86	2,07	1,79
40	-20	402	179	0,90	2,25	1,94
40	-15	487	193	0,96	2,52	2,18
40	-10	580	207	1,02	2,81	2,43

45	-40	131	118	0,64	1,11	0,96
45	-35	180	136	0,71	1,32	1,14
45	-30	236	153	0,78	1,54	1,33
45	-25	300	169	0,86	1,77	1,53
45	-23,3	324	175	0,88	1,85	1,60
45	-20	373	186	0,93	2,01	1,73
45	-15	453	201	1,00	2,25	1,95
45	-10	541	216	1,06	2,51	2,16

50	-40	120	119	0,64	1,01	0,88
50	-35	164	138	0,72	1,19	1,03
50	-30	216	156	0,80	1,38	1,19
50	-25	275	174	0,88	1,58	1,36
50	-23,3	297	180	0,91	1,65	1,42
50	-20	343	192	0,96	1,79	1,54
50	-15	419	209	1,03	2,00	1,73
50	-10	502	226	1,11	2,23	1,92

55	-40	109	119	0,64	0,92	0,79
55	-35	148	140	0,73	1,06	0,92
55	-30	195	160	0,82	1,22	1,06
55	-25	250	179	0,90	1,39	1,20
55	-23,3	271	186	0,93	1,46	1,26
55	-20	313	199	0,99	1,58	1,36
55	-15	384	217	1,07	1,77	1,53
55	-10	463	235	1,15	1,97	1,70

60	-40	98	120	0,64	0,82	0,71
60	-35	133	142	0,74	0,94	0,81
60	-30	175	163	0,83	1,07	0,93
60	-25	225	184	0,92	1,22	1,06
60	-23,3	244	192	0,95	1,28	1,10
60	-20	284	205	1,01	1,38	1,20
60	-15	350	225	1,10	1,56	1,34
60	-10	424	245	1,19	1,74	1,50

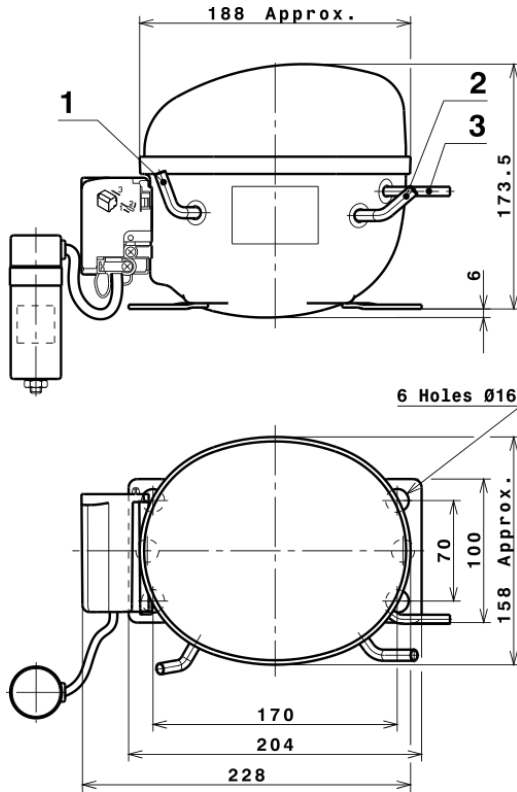
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.172,0921341170	135,4722354453	0,7007409267	10,961139140509
2	29,8537193354	0,0702885778	0,0008705498	0,31454012371179
3	-9,9045849553	2,5618933455	0,0116595121	-0,041121879616326
4	0,1562643395	-0,0104381724	-0,0000242615	0,0023188033037477
5	-0,1921866203	0,0614931571	0,0002806559	-0,00072212923986792

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

## COMPRESSOR DIMENSIONS

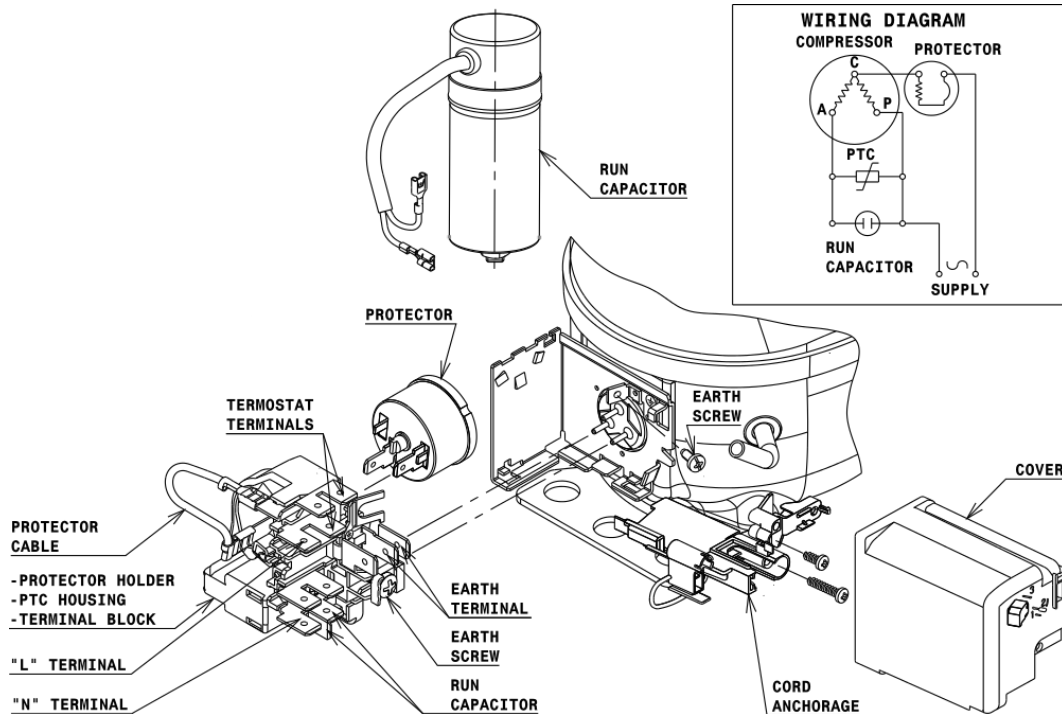


## DESIGNATION INTERNAL DIAM.

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

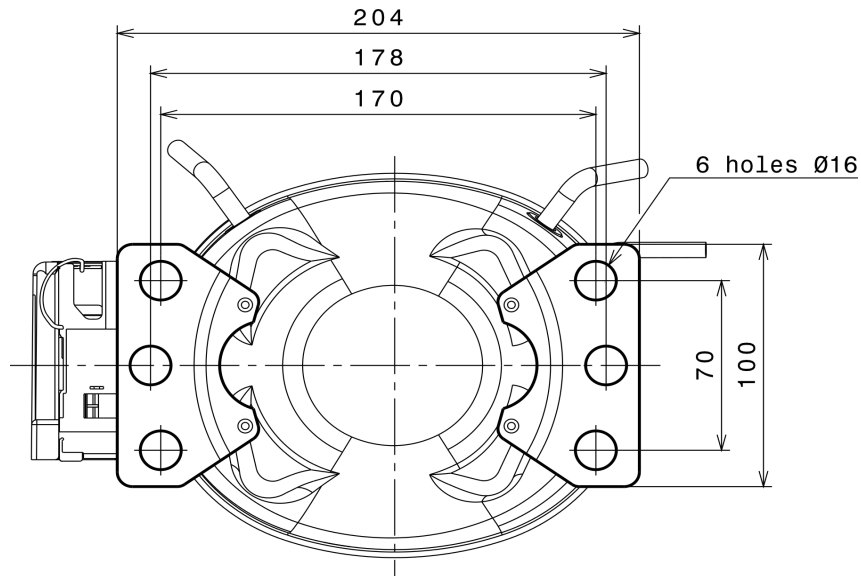
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSCR CONNECTION (U range)



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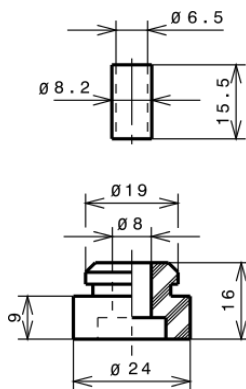
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

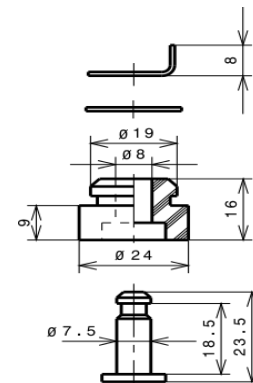
### STANDARD

$\varnothing 16$  holes (170x70 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R290 LBP

