

# Technical Data Sheet

Compressor model **NUT70CAa**  
 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 9,20 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 RSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 8,80 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	1,68 W/W	1,30 W/W
EER	1,45 kCal/Wh	1,13 kCal/Wh
Input Power	199 W	192 W
Current	1,29 A	1,26 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

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	120	1,02	1,27	1,09
40	-35	177	138	1,08	1,49	1,28
40	-30	231	155	1,14	1,73	1,49
40	-25	294	172	1,19	1,98	1,71
40	-23,3	317	178	1,21	2,07	1,78
40	-20	365	189	1,25	2,25	1,93
40	-15	446	205	1,31	2,53	2,17
40	-10	535	221	1,37	2,81	2,42

45	-40	126	122	1,03	1,20	1,03
45	-35	170	141	1,09	1,40	1,20
45	-30	223	160	1,15	1,62	1,39
45	-25	285	179	1,22	1,85	1,59
45	-23,3	307	185	1,24	1,93	1,66
45	-20	355	197	1,28	2,10	1,80
45	-15	434	215	1,35	2,35	2,02
45	-10	521	232	1,41	2,61	2,25

50	-40	121	124	1,03	1,13	0,98
50	-35	164	145	1,10	1,32	1,13
50	-30	215	165	1,17	1,51	1,30
50	-25	275	185	1,24	1,73	1,49
50	-23,3	298	192	1,26	1,80	1,55
50	-20	344	205	1,31	1,95	1,68
50	-15	421	224	1,38	2,19	1,88
50	-10	508	243	1,46	2,43	2,09

55	-40	116	126	1,04	1,07	0,92
55	-35	157	148	1,11	1,23	1,06
55	-30	207	170	1,19	1,42	1,22
55	-25	266	192	1,26	1,61	1,39
55	-23,3	288	199	1,29	1,68	1,45
55	-20	333	213	1,34	1,82	1,57
55	-15	409	234	1,42	2,04	1,75
55	-10	494	254	1,50	2,26	1,94

60	-40	111	128	1,05	1,01	0,87
60	-35	151	152	1,12	1,16	0,99
60	-30	200	175	1,21	1,32	1,14
60	-25	257	198	1,29	1,51	1,30
60	-23,3	278	206	1,32	1,57	1,35
60	-20	323	221	1,37	1,70	1,46
60	-15	397	243	1,46	1,90	1,63
60	-10	481	265	1,54	2,11	1,81

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-40	142	120	1,02	1,18	1,02
40	-35	195	138	1,08	1,42	1,22
40	-30	256	155	1,14	1,65	1,43
40	-25	325	172	1,19	1,89	1,63
40	-23,3	350	178	1,21	1,97	1,70
40	-20	402	189	1,25	2,13	1,84
40	-15	487	205	1,31	2,37	2,05
40	-10	580	221	1,37	2,63	2,27

45	-40	131	122	1,03	1,08	0,93
45	-35	180	141	1,09	1,27	1,10
45	-30	236	160	1,15	1,47	1,27
45	-25	300	179	1,22	1,68	1,45
45	-23,3	324	185	1,24	1,75	1,51
45	-20	373	197	1,28	1,89	1,63
45	-15	453	215	1,35	2,11	1,82
45	-10	541	232	1,41	2,33	2,02

50	-40	120	124	1,03	0,97	0,84
50	-35	164	145	1,10	1,13	0,98
50	-30	216	165	1,17	1,30	1,13
50	-25	275	185	1,24	1,49	1,28
50	-23,3	297	192	1,26	1,55	1,34
50	-20	343	205	1,31	1,67	1,45
50	-15	419	224	1,38	1,87	1,61
50	-10	502	243	1,46	2,07	1,79

55	-40	109	126	1,04	0,87	0,75
55	-35	148	148	1,11	1,00	0,86
55	-30	195	170	1,19	1,15	0,99
55	-25	250	192	1,26	1,30	1,13
55	-23,3	271	199	1,29	1,36	1,18
55	-20	313	213	1,34	1,47	1,27
55	-15	384	234	1,42	1,64	1,42
55	-10	463	254	1,50	1,82	1,58

60	-40	98	128	1,05	0,77	0,66
60	-35	133	152	1,12	0,87	0,75
60	-30	175	175	1,21	1,00	0,86
60	-25	225	198	1,29	1,14	0,98
60	-23,3	244	206	1,32	1,19	1,02
60	-20	284	221	1,37	1,28	1,11
60	-15	350	243	1,46	1,44	1,24
60	-10	424	265	1,54	1,60	1,38

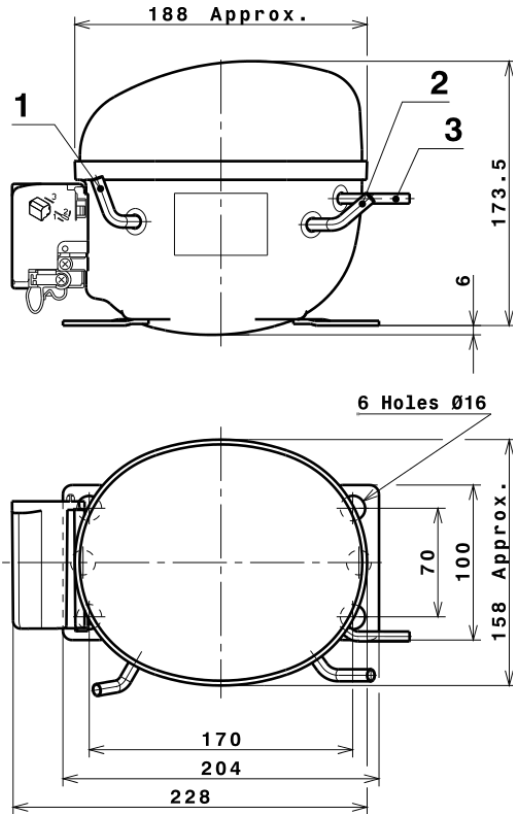
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.172,0921341170	143,4025129184	1,0668663205	10,961139140509
2	29,8537193354	0,6391187625	0,0035543215	0,31454012371179
3	-9,9045849553	2,8696129719	0,0114562746	-0,041121879616326
4	0,1562643395	-0,0072400105	0,0000325263	0,0023188033037477
5	-0,1921866203	0,0615236180	0,0002536679	-0,00072212923986792

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
----------	---

# Technical Data Sheet

## COMPRESSOR DIMENSIONS

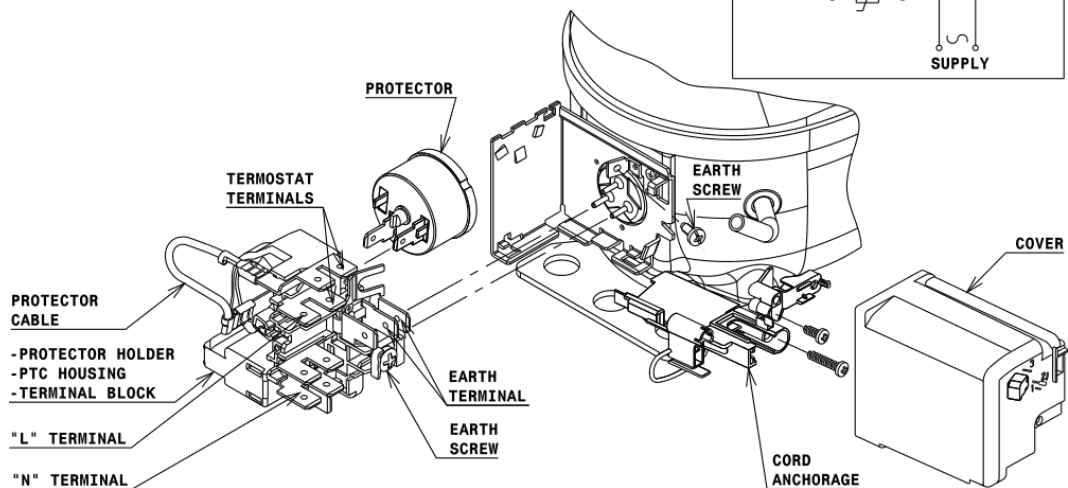
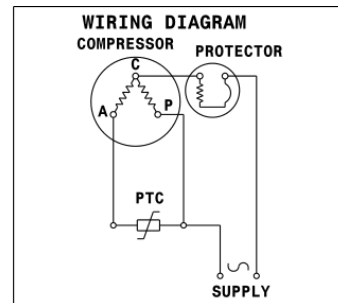


## DESIGNATION INTERNAL DIAM.

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

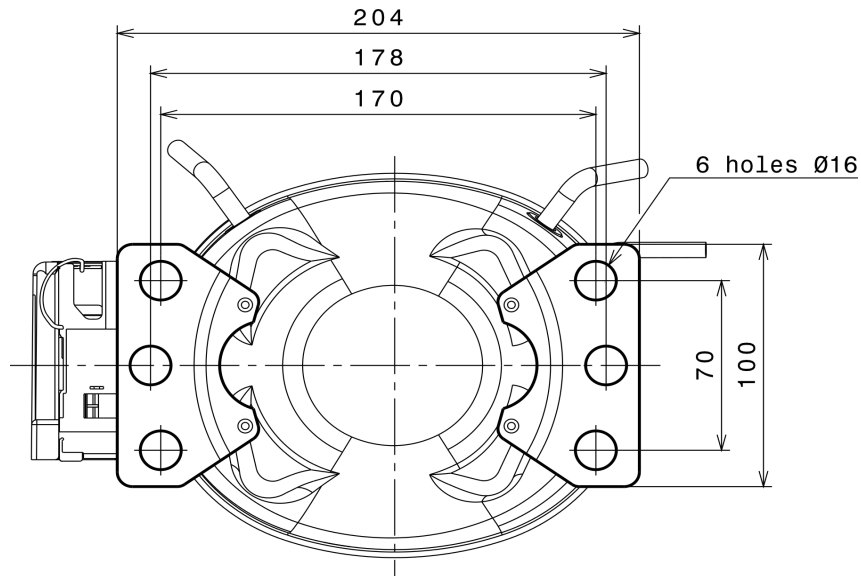
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSIR CONNECTION (PTC) (U range)



# Technical Data Sheet

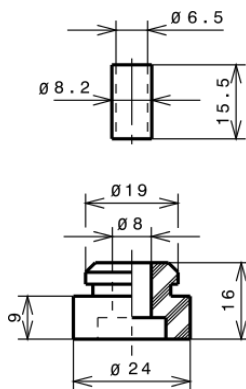
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

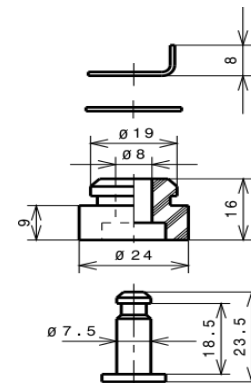
### STANDARD

$\varnothing 16$  holes (170x70 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R290 LBP

