

## Accessories

### 11-Pole Plug-in Bases

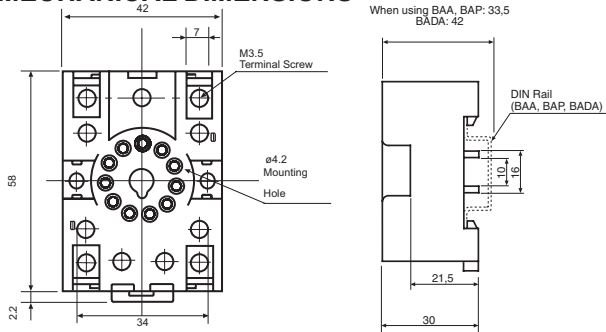
#### DIN RAIL/SURFACE BASE FOR PLUG-IN TIMERS

Black 11-pole plug-in base with semi-enclosed screw terminals for timers version S1/S2. The base is clip on mounted to a 35 mm DIN rail or surface mounted by 2 M3 screws or 1 M4 screw.

#### VERSIONS/ORDERING CODES

Type: SR3P-05C  
 11-pole base. SR3P-05C

#### MECHANICAL DIMENSIONS



#### TECHNICAL DATA

- Ratings:** 220/380V AC max. 10A.
- Terminals:** Max. 3 x 1.5 mm<sup>2</sup> or 2 x 2.5 mm<sup>2</sup> or 1 x 4 mm<sup>2</sup>. Screw type terminals with self-lifting clamps shrouded in accordance to VDE0106 (finger and back of hand protection).
- Mounting:** DIN rail TS35 (EN 50022) or 2 M3 x 25 mm screws or 1 M4 x 20 mm.
- Protection:** IP20.
- Ambient temperature:** -25 to +80°C.
- Housing:** Black Noryl SE-1.

#### RELAY RETENTION CLIP

The relay retention clip is used with base where strong vibrations may occur.



#### VERSIONS/ORDERING CODES

Type: SR2B-02F1  
 Relay retention clip.  
 For X Timer: SR2B-02F1  
 For TX Timer: SR3B-02F1

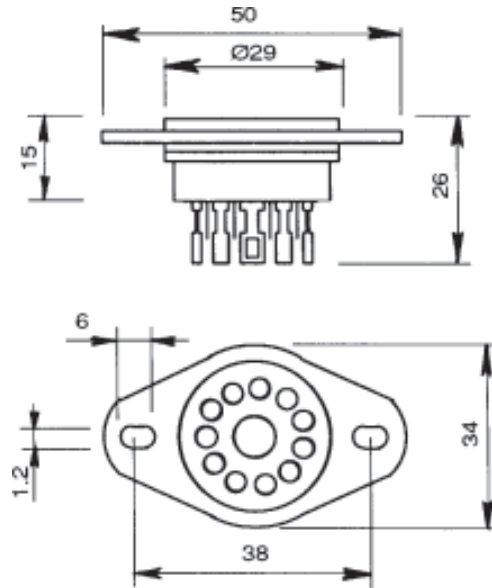
#### CHASSIS BASE FOR PLUG-IN TIMERS

Black 11-pole plug-in base with soldering terminals for all timers version S1/S2. The base is mounted by 2 M3 screws.

#### VERSIONS/ORDERING CODES

Type: SR3P-511  
 11-pole base. SR3P-511

#### MECHANICAL DIMENSIONS



#### TECHNICAL DATA

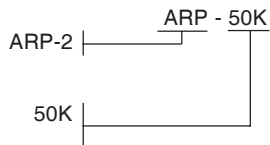
- Ratings:** 250V AC max. 10A.
- Mounting:** 2 M3 x 25 mm screws.
- Ambient temperature:** -25 to +80°C.
- Housing:** Nylon 66.

**KIT FOR REMOTE TIME ADJUSTMENT**

Potentiometer, knob, and adhesive scale for panel mounting.

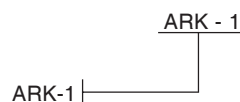
**VERSIONS/ORDERING CODES**

**Type:**  
Remote potentiometer.



**Resistance:**  
50kOhm.

**Type:**  
Knob for remote potentiometer.

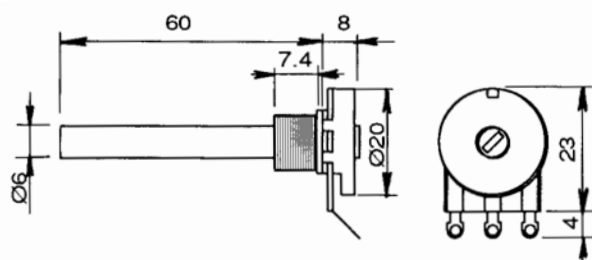


**Type:**  
Adhesive scale for remote potentiometer.

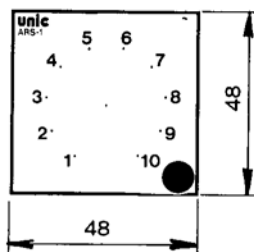


**MECHANICAL DIMENSIONS**

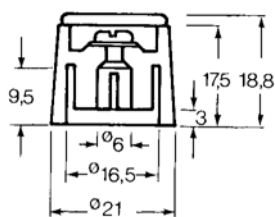
ARP-2



ARS-1



ARK-1



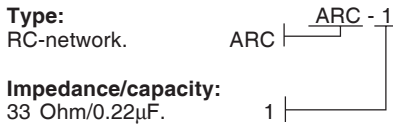
**TECHNICAL DATA**

- Accuracy:**  
ARP-2: 20%.
- Resistance:** 47/50kOhm.
- Cable lengths:** Max. 3 m (unshielded).  
Max. 25 m (shielded).
- Rotation angle:** 290°.
- Protection:**  
ARP-2: IP40.
- Scale graduation:** 1-10.
- Panel cut out:** Ø 10 mm.
- Panel thickness:** Max. 8 mm.
- Ambient temperature:** -25 to +55°C.

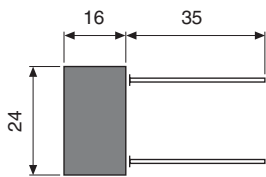
## RC-NETWORK

RC-network for protection of relay contacts switching inductive loads.  
The RC-network is mounted parallel over the relay contact or the load and the link is supplied embedded with connection wires.

### VERSIONS/ORDERING CODES



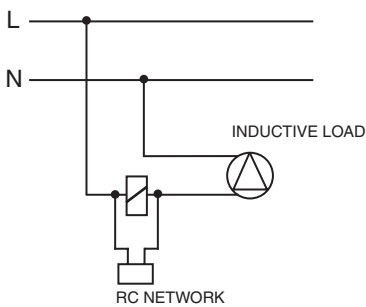
### MECHANICAL DIMENSIONS



### TECHNICAL DATA

- RC-value:** 33 Ohm/0.22µF.  
**Voltage:** Max. 250V AC  
**Ambient temperature:** -25 to +55°C.  
**Mounting:** On relay base with screw or soldering terminals or in another kind of terminal strip.

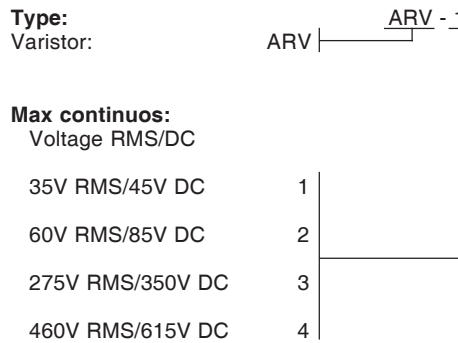
### APPLICATION/WIRING



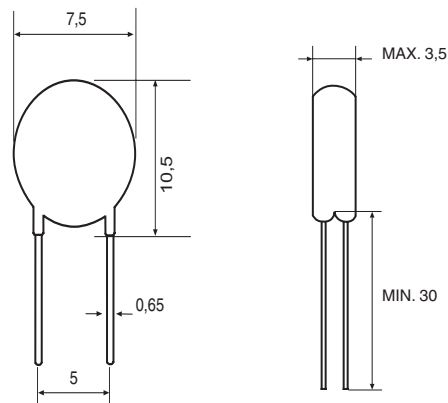
## VARISTOR

Varistor for protection of electronic equipment against transients and spikes, produced by switching inductive loads or lightning.

### VERSION/ORDERING CODES



### MECHANICAL DIMENSIONS



### TECHNICAL DATA

Type	Max con. voltage		Max clamping Voltage [Vc]	Energy Transients (8/20µS)	W max (2 ms)
	RMS	DC			
1	35	45	125	100 A	1.1 J
2	60	85	175	400 A	2 J
3	275	350	850	400 A	8,6 J
4	460	615	1490	400 A	18 J



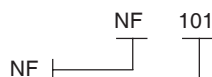
## DESCRIPTION

Level sensor for conductive liquids.  
1, 2 or 3 electrodes.

## VERSIONS/ORDERING CODES

### Type:

Level sensor



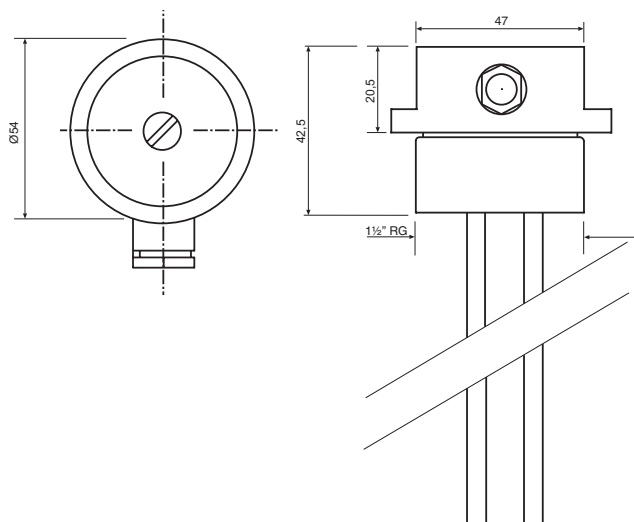
### Sensortype:

1 electrode, steel	101
1 electrode, isolated	111
2 electrodes, steel	102
2 electrodes, isolated	112
3 electrodes, steel	103
3 electrodes, isolated	113

Nut, 1½" RG

type NF-200

## MECHANICAL DIMENSIONS

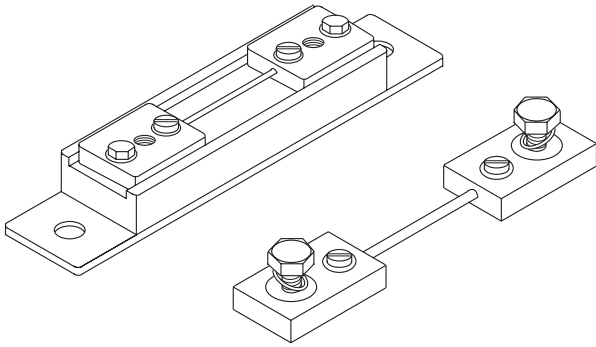


## TECHNICAL DATA

Thread:	1½" RG.
Thread face:	Nylon 6.
Max. temperature:	90°C.
Max. pressure:	10 Ato at 60°C.
Protection:	IP67.
Cable lenght:	1 m. PVC cable.
Electrode lenght:	1 m. Diameter 5 mm.
Electrode:	Stainless 24, stainless acid-resistant steel.

## Accessories

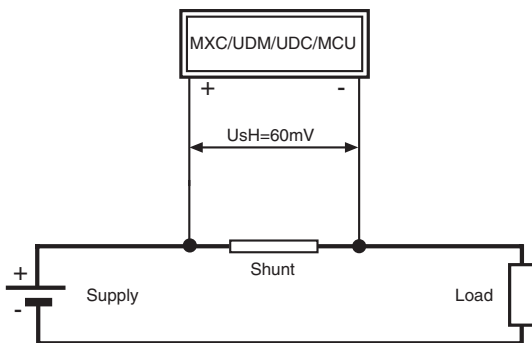
### Shunts



#### DESCRIPTION

Manganin shunt for measurement of DC current. Standard voltage drop 60mV, according to DIN 43703. The shunt AAS-010 /20 is supplied with an isolated mounting device for base plate mounting.

#### WIRING DIAGRAM



#### VERSIONS/ORDERING KEY

Type:		AAS - 010
Shunt.	AAS	
Measuring range:		
0-10ADC	010	
0-20ADC	020	
0-50ADC	050	
0-100ADC	100	
0-150ADC	150	

#### TECHNICAL DATA

##### Measuring range:

AAS - 010:	0 - 10ADC
AAS - 020:	0 - 20ADC
AAS - 050:	0 - 50ADC
AAS - 100:	0 - 100ADC
ASS - 150:	0 - 150ADC

**Measuring accuracy:**  $\pm 0.5\%$ , class 0,5  
**Reference temp.:** 23°C

**Voltage drop:** 60mV DC at max. current.

##### Permissible overloads:

Continuously:	1,2 x rated current.
5 sec.:	5 x rated current

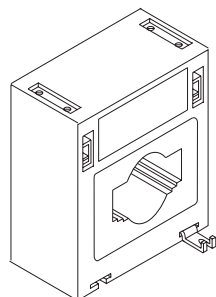
**Shunt material:** Manganin.

##### Dimensions:

With base plate:	135 x 30 mm.
Without base plate:	100 x 20 mm.

##### Environmental conditions:

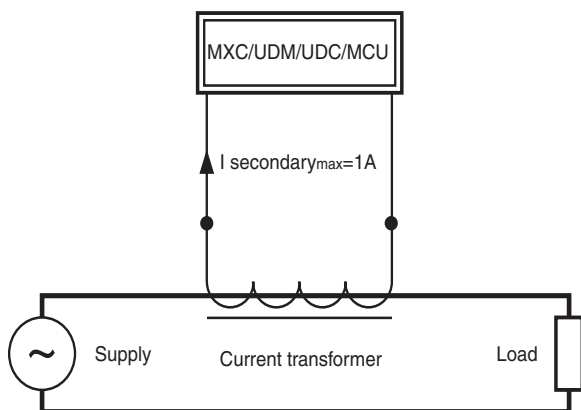
Operatig temp.:	-10 - +55°C
Storage temp.:	-25 -+65°C
RH:	$\leq 75\%$ annual average non-condensing



## DESCRIPTION

Compact current transformer for measurement of AC current in cable or primary bar.  
Possibility of short-circuiting the secondary when necessary due to the double terminal.  
Suitable for base or DIN rail mounting. Fixing plate for primary bars is included.

## WIRING DIAGRAM

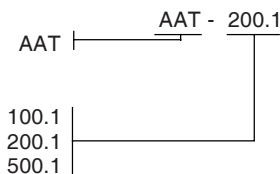


When primary load is applied, the secondary circuit must not be disconnected unless the secondary of the current transformers is short-circuited. Otherwise the current transformer may be permanently damaged.

## VERSIONS/ORDERING KEY

**Type:**  
Current transformer.

**Measuring range:**  
0-100A AC  
0-200A AC  
0-500A AC



## TECHNICAL DATA

### Measuring range:

0-100A AC:	Primary	(I <sub>N</sub> ):	100A AC
	Secondary	(I <sub>N</sub> ):	1A AC
0-200A AC:	Primary	(I <sub>N</sub> ):	200A AC.
	Secondary	(I <sub>N</sub> ):	1A AC
0-500A AC:	Primary	(I <sub>N</sub> ):	500 A AC
	Secondary	(I <sub>N</sub> ):	1A AC

The current transformers rates according to IEC 185.  
Other ranges on request.

**Accuracy:** ±2% within the range 0.1 to 1 x I<sub>N</sub>.

**Ambient temperature:** -25°C to +50°C.

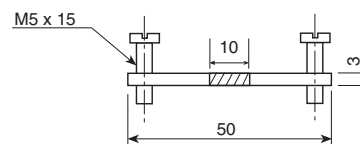
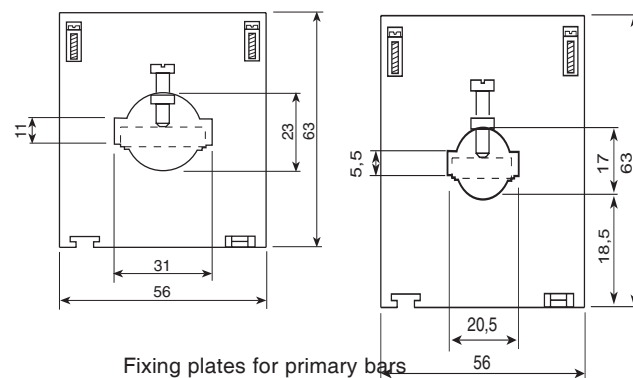
**Housing:** Plastic.

**Mounting:** Base or DIN rail mounting.

## MECHANICAL DIMENSIONS

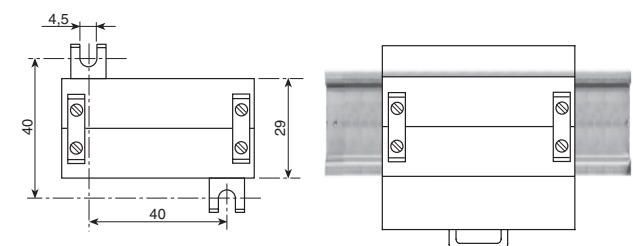
AAT-200/500

AAT-100



Base mounting

DIN rail mounting



SR3P-05C  
SRxB-02F1  
SR3P-511  
ARx+x  
ARC  
ARV  
NF  
AAS  
AAT  
AUT  
UF-6  
UK6  
AUx

## Accessories

### Temperature Sensors

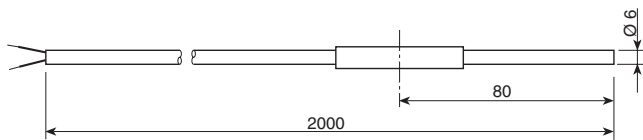


#### DESCRIPTION

The temperature sensors are available in 2 different forms of sensor types Pt-100, Ni-100 and KTY.

#### FORM 2:

Stainless steel protection tube and fixed cable.



#### VERSIONS/ORDERING CODES

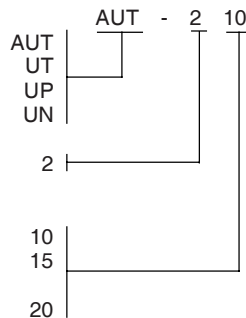
##### Type:

KTY (-30-100°C).  
 NTC (-20-80°C).  
 Pt-100 (-50-500°C).  
 Ni-100 (-50-180°C).

Form.

##### Cable type/cable temp. range:

PVC/-40-80°C.  
 Silicone/-50-180°C. (UP/UN only).  
 Glass silk with braided copper shield/  
 -60-350°C (UP only).



#### TECHNICAL DATA

**Sensor types:** KTY, Ni-100, Pt-100.

##### Measuring accuracy:

Pt-100/Ni-100: ±0.6%.  
 KTY: ±4°C.

**Cable type:** 2-wire PVC, silicone or glass silk with braided copper shield.

##### Time constant:

Pt-100/Ni-100: Approx. 20 sec.  
 KTY: Approx. 30 sec.

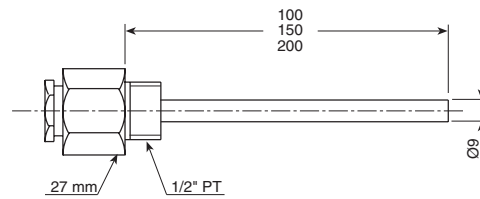
**Cable length:** 2 m.

##### Protection:

Tube: IP68.  
 Cable inlet: IP40.

#### PROTECTION TUBE

Protection tube for temperature sensors, form 2.



#### TECHNICAL DATA

**Material:** Stainless steel.

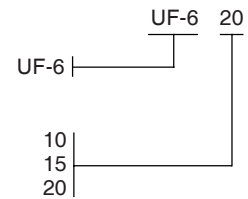
#### VERSIONS/ORDERING CODES

##### Type:

Protection tube:

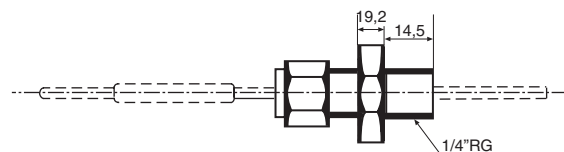
Length of tube:

100 mm.  
 150 mm.  
 200 mm.



#### MOUNTING FITTINGS

Mounting fittings for temperature sensors form 2.



#### TECHNICAL DATA

**Material:** Brass

#### VERSION/ORDERING CODES

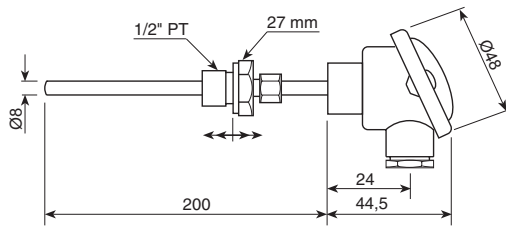
##### Type:

Mounting fitting: UK-6

### FORM 3

Cable connection housing. Stainless steel protection tube. Movable mounting nipple 1/2" PT for attachment.

Cable housing type MA



### TECHNICAL DATA

**Sensor types:** Ni-100, Pt-100, NiCr-Ni.

**Measuring accuracy:**

Pt - 100/Ni - 100:  $\pm 0.35^{\circ}\text{C}$  or  $\pm 0.6\%$ .  
NiCr-Ni:  $\pm 2.2^{\circ}\text{C}$  or  $\pm 0.7\%$ .  
KTY:  $\pm 4^{\circ}\text{C}$ .

**Thermo electric output (NiCr-Ni):**

0°C: 0mV.  
100°C: 4.095mV.  
1000°C: 41.269mV.

**Time constant:**

Pt-100/Ni-100/KTY: Approx. 30 sec.  
NiCr-Ni: Approx. 100 sec.

**Housing:** Light alloy metal.

**Cable connection:**

Type MA: PG 11.

**Mounting nipple:** Steel 1/2" PT movable.

**Protection:**

Protection tube: IP68.  
Housing: IP54.

### VERSIONS/ORDERING CODES

**Type:**

Ni-100 (-50-180°C).  
Pt-100 (-50-500°C).  
NiCr - Ni (-50-750°C).  
KTY (-30-100°C).

Form.

Length of protection tube:  
200 mm/type MA.

