

# Remote potentiometers for CT-S range timers

## Data sheet

The potentiometers are used as remote potentiometers for the fine adjustment of the delay times for the electronic timers out of ABB's CT-S range. There are multi-function timers such as the CT-MVS.21, CT-MXS.22, CT-MFS.21 and CT-MBS.22 which offer this functionality. When an potentiometer is connected to the remote potentiometer connection (terminals Z1-Z2, Z3-Z2 respectively), the internal, front-face potentiometer is disabled and the time adjustment is made via the external potentiometer.

For further documetation of the electro-  
nic time relays, please refer to the data sheets and the technical catalogue.



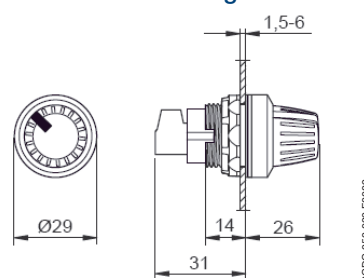
### Features

- Remote potentiometers as accessories for time relays CT-S range
- Black knob with integrated position indication and marking in white
- Resistance 50 kOhm
- Element type cermet
- Rated power 2 W
- Mechanical angle 280°
- Screw type connection terminals
- Isolation voltage 900 V

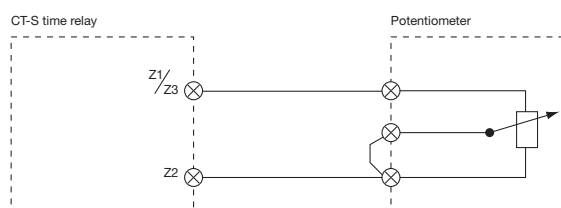
### Approvals

- UL 508 File No. E76003

### Dimensional drawing



### Connection diagram/electrical diagram



Remark: The connection terminals of the Potentiometer are not marked.

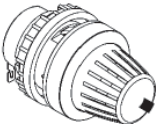
2CDC 252 040 F0209

# Remote potentiometers for CT-S range timers


## Order data

### Remote potentiometer

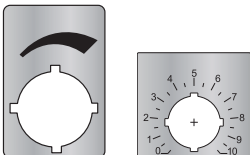
50 k $\Omega$   $\pm$ 20 % - 0.2  $\Omega$ , Degree of protection IP66

	Type	Material	Diameter in mm	Order Code	Pack. unit piece	Weight 1 piece kg
	MT-150B	Black plastic	22.5	1SFA 611 410 R1506	1	0.040
MT-250B	Chrome plastic	22.5	1SFA 611 410 R2506	1	0.040	
MT-350B	Chrome metal	22.5	1SFA 611 410 R3506	1	0.048	

### Adaptor for reduction of 30 mm hole to 22.5 mm

	Type	Material	Order Code	Pack. unit piece	Weight 1 piece kg
	KA1-8029	Black plastic	1SFA 616 920 R8029	1	
KA1-8030	Chrome metal	1SFA 616 920 R8030	1		

### Legend plates

	Type	Marking	Order Code	Pack. unit piece	Weight 1 piece kg
	SK 615 562-87	Symbol	GJD6 155 620 R0087	1	0.002
SK 615 562-88	Scale 0 – 10	GJD6 155 620 R0088	1	0.002	
MA16-1060	Scale 0 – 30	1SFA 611 940 R1060	1	0.002	

# Remote potentiometers for CT-S range timers

## Technical data

Data at  $T_a = 25\text{ °C}$  and rated values, unless otherwise indicated.

Type	MT-150B, MT-250B, MT-350B	
<b>Electrical data</b>		
Nominal resistance value		50 kOhm
Accuracy/tolerance		+/- 10 %
Linearity		+/- 5 %
Absolute minimum resistance		$\leq 2\text{ Ohm}$
Effective electrical angle		$250^\circ \pm 5^\circ$
Contact resistance variation		+/- 3 % of total resistance
Rated power		2 W
Theoretical resolution		essentially infinite
<b>Isolation data</b>		
Dielectric withstand voltage		$\geq 900\text{ V AC}$
Isolation resistance	500 V DC	$\geq 1.000\text{ MegaOhms}$
<b>Mechanical data</b>		
Stop strength		56.5 Ncm (5 lb.-in.)
Mechanical angle		$280^\circ \pm 5^\circ$
Torque	starting/running	0.35 – 4.23 Ncm (0.05 – 6.0 oz.-in.)
<b>Environmental data</b>		
Ambient temperature ranges	operation	- 1...+ 70 °C
	storage	- 40...+ 85 °C
<b>Electrical connection</b>		
Wire size	fine-strand with wire end ferrule	1 x 0.5 – 1.5 mm <sup>2</sup> (1 x 24 – 12 AWG)
	rigid	1 x 0.5 – 2.5 mm <sup>2</sup> (1 x 24 – 12 AWG)
Stripping length		8 mm (0.32 Inch)
Tightening torque		0.4 Nm/3.6 lb.in
<b>General data</b>		
Duty time		100 %
Dimensions (length x diameter)		57 mm x 29 mm (2.3 x 1.1 Inch)
Weight	plastic versions/metal version	0.040 kg (0.09 lb)/0.048 kg (0.11 lb)
Mounting		22.5 mm hole
Mounting position		any
Degree of protection (EN 60529)	enclosure/terminals	IP66/IP20
Touch proof acc. DIN VDE 0106 part 100		yes

# Contact

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