



Solid State Relay

R10-Z



Solid State Relay R10-Z

- For infrequent or very fast switching operations
- Long life thanks to wear-free semiconductor output
- Can be installed in any orientation
- Instantaneous or zero-crossing switching
- Silent operation
- Switching current up to DC 6 A or AC 3 A
- Inrush current 40 A DC / 150 A AC



Technical data		R10-Z1N R10-Z1P	R10-Z1I R10-Z1Z
	Contact type	NO (MOSFET)	NO (TRIAC)
	Number of contacts	1	
	Switching current	DC 6 A	AC 3 A
	Switching voltage	DC 5 ... 48 V	AC 24 ... 250 V
	Frequency	0 kHz	50/60 Hz
	Minimal load	1 mA	35 mA
	Inrush current (10 ms)	40 A	150 A
	Leakage current max.	0.1 mA	5 mA
	Electrical durability	∞	
	Operate / release time	0.06 ms / 0.06 ms	Z1I: 0.06 ms / 0.06 ms Z1Z: 10 ms / 10 ms
	Control voltage	DC 5 ... 48 V	
	Control current max.	4 mA	10 mA
	Power consumption	300 mW	300 mW
Operating temperature		-40°C ... +70°C	
Wiring diagram			

A solid state relay (SSR) is an electronic switching device with no moving parts. The switching process is completely electronic and therefore wear-free.

Solid state relays are largely insensitive to environmental influences such as polluted air, high humidity or aggressive gases, which can lead to deposits or corrosion on the contacts of unsealed mechanical relays.

Solid state relays are preferred in two typical applications: for very fast switching times and high switching frequencies, and for infrequent but particularly reliable switching operations. They offer decisive advantages in both cases. Fast switching operations take place without contact wear, while occasional switching does not impair the function due to contact deposits.

A long and reliable service life is therefore one of the main arguments for using this technology. Further advantages include vibration-free and silent operation.

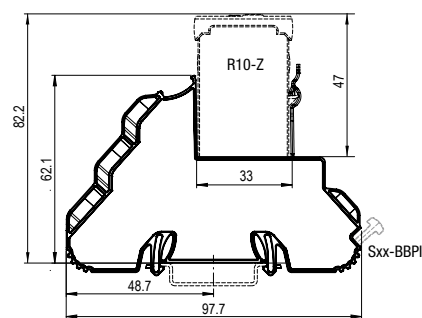
Our SSRs are available with different output types for DC and AC applications.

Technical approvals

Standards IEC/EN 60947
Railway EN 45545-2; EN 50155

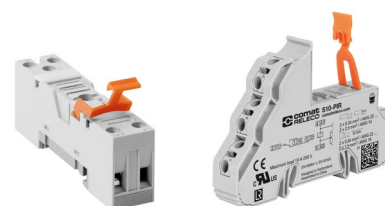
Approvals

Dimensions



Accessories

Sockets



S10-GR
Screw terminals

S10-PIR
Push-in

Product key

R10 - Z 1 I X / DC5-48V

Product family

R10 = Railway version of the C10 series

Typ

Z = Solid state

Channels

1 = 1 pole

Control voltage

DC = Direct current

Indication

X = LED

Logic

P = PNP, instantaneous (DC)
N = NPN, instantaneous (DC)
I = Random-on, instantaneous (AC)
Z = Zero crossing (AC)