



LEVEL CROSSING SYSTEM PZZ-RE

- Automatic control triggered by train operation (by continuous or intermittent elements)
- Failsafe and reliable system meeting SIL4 requirements according to CENELEC Standards
- Combination of proven relay circuits and modern electronic elements
- Power supply of wayside elements by 230 V AC allows removing the control and checking circuits from the level crossing site and safeguarding several level crossings with centralized logic
- Transmission of the system state by the barrage or protection signal to the tractive vehicle

General Description

The level crossing system PZZ-RE is the relay based system with electronic elements designed to protect locations where roads cross a railway (single- multi track) line. The level crossing must be covered by barrage/protection signals informing on the level crossing state.



Basic Technical Description

The PZZ-RE logic functions are generated by relay circuits assembled with N-class relays (according to UIC classification).

The equipment time functions and power supply of warning board signal bulbs are realized by electronic units.

The level crossing can be activated by any line or intermittent elements or by commands from station interlocking equipment.

The system cooperates with any line signalling equipment.

Checking and remote control is carried out by station interlocking equipment.

The indoor logic of the equipment is embedded in level crossing hut.

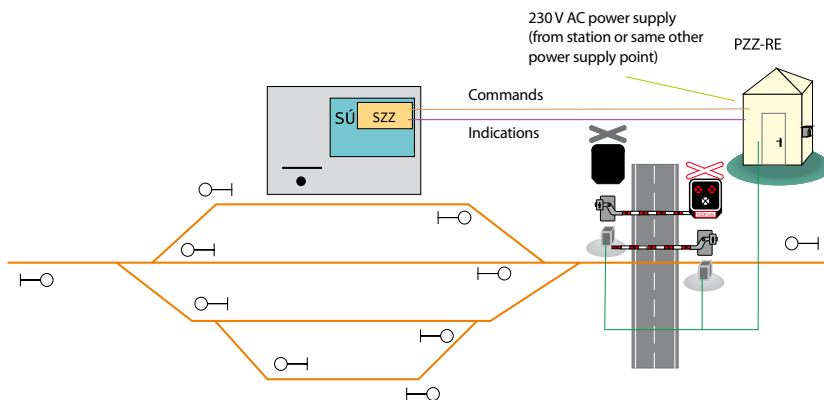
System can be connected to LDS diagnostic system.





Basic Technical Parameters

Power supply	$3 \times 400/230 \text{ V}, 50 \text{ Hz} \pm 10\%$ $1 \times 230 \text{ V}, 50 \text{ Hz} \pm 10\%$
Power supply of electronic device and relays	$24 \text{ V DC} +33\%, -20\%$
Output voltage for wayside elements	$230 \text{ V AC}, 50 \text{ Hz} \pm 10\%$
Working temperature	$-40 \text{ to } +65 \text{ }^\circ\text{C}$
Operating power input of electronics and relays	$< 50 \text{ W}$
Radiated power losses	$< 100 \text{ W}$
Max. number of coupled warning boards	10
Max. number of barrier drives	no limits
Max. number of tracks	no limits
Service life	20 years



Block diagram – example of the PZZ-RE