



# IMPEDANCE BOND DT 075 E

- Ecological product
- High mechanical and climatic resistance of material applied
- Replaces older types of impedance bonds
- Weight reduction
- Cutting installation time
- Simplified maintenance

### General Description

DT 075 E Impedance bond is a part of the double rail track circuit system. It is designed for tracks electrified by 3 kV catenary voltage, 25 kV, 50 Hz single-phase catenary voltage and for tracks with independent traction system.

It enables transmission of reverse catenary, heating or auxiliary current over the insulated joints from one track section to the adjacent track section. It secures function of track circuits supplied or coded by signal current with frequency between 25 Hz and 400 Hz.

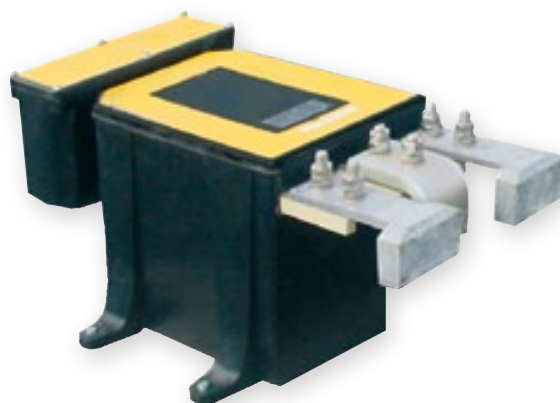
### Basic Technical Description

The impedance bond system is installed in the moulded plastic housing filled by polyurethane sealing compound with increased heat conductivity.

The DT 075 E impedance bond system consists of the main coil and the supplementary coil.

The terminal box bottom is set up for installation of up to three cables.

The bottom of the impedance bond housing has footings with holes used to mount the impedance transformer

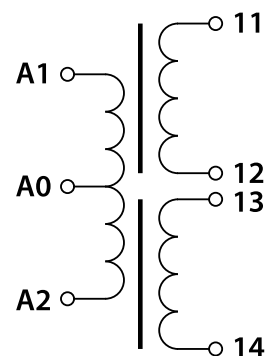


to the base prefabricated slab.

DT 075 E impedance bond can directly replace DT075-0 impedance bond (Rumanian oil model) or DT 075 C impedance bond (AŽD oil model) or DT 075 S impedance bond (AŽD non-oil model for single-phase catenary voltage).



DT 075 E impedance bonds



Impedance bond block diagram



### Basic Technical Parameters

Transformer ratio	21 or 42	
Continuous permitted DC tractive current of the main coil	$2 \times 500 \text{ A}$	
Continuous permitted AC tractive current of the main coil	$2 \times 450 \text{ A}$	
Continuous permitted signal current of supplementary coil	2,5 A	
Total no-load impedance of the main coil without bias	at 5 V and 275 Hz	0,71 to 0,78 $\Omega$
	at 1 V and 275 Hz	0,68 to 0,73 $\Omega$
Insulation resistance between galvanically separated live parts of coils and between the live parts of coil and impedance bond	min. 20 M $\Omega$	
Electric strength between galvanically separated live parts of coils and between the live parts of coil and impedance bond	4000 V	
Cover rating	IP 54	
Working temperature range	-40 to +70 °C	
Transformer weight	53 kg	



*Impedance bonds connected to track circuits*