

UT TRACTION WIRE TO RAIL BONDING DEVICE

APPLICATION AREA

UT traction wire to rail bonding devices are designed for making protective connections between traction wires and running rails at mining operations and other plants where electric traction networks for 250 to 660 VDC voltages are deployed.

Two types of bonding devices are manufactured:

- portable (P) – designed for protection of workplaces when repair or maintenance works on sections of electric tractions are in progress to disconnect and de-energize these sections for safe execution of works,
- stationary (S) – designed for protection of passenger stations, material warehouses and loading facilities to have them de-energized when under no traffic condition.

APPLICATION CONDITIONS

UT appliances for bonding of traction wire sections to rails are suitable for working areas of underground operations without the hazard of methane explosion and the ones with the 'a' degree of methane explosion hazard as well as with the 'A' class of coal dust explosion hazard.

TECHNICAL CHARACTERISTICS

The UT traction wire to rail bonding device is made up of the following components:

- copper hook-up terminal designed for connection to the Djp traction wire and permanently fixed to an insulating rod with the length of 500 mm and made of non-conductive material. The terminal enables quick and reliable attachment of the bonding device to the traction wire and prevents from accidental or unintentional disconnection of the rod from the wire;
- bonding conductor made of copper strained rope (35 to 100 mm²) encapsulated in an plasticized PVC sheath and terminated with a cable connector;
- earthing clamp for connection to running rails (only portable devices) made of steel channel bar with galvanized coating suitable for tight mounting on S24, S30, S37 and S42 rails by means of a stirrup bolt with a locking key.



Stationary bonding devices are not provided with a clamping terminal for running rails and must be permanently screwed to crossbars of floor tracks at the beginning and at the end of stations or warehouse areas.

CONFORMITY WITH STANDARDS

UT traction wire to rail bonding devices are manufactured in line with rules of good engineering practice in the field of occupational safety as well as current state-of-art in technical expertise with consideration to applicable technical standards and the 2014/35/UE Low-Voltage Directive.

TECHNICAL PARAMETERS

Bonding device type	Rated DC voltage [V]	Rated one-second current [kA]	Length of bonding conductor [m]	Cross-section of bonding conductor [mm ²]	Weight [kg]
UT – 0,25/9/35/S(P)	250	9	3 ± 0.2 m	35	ca. 3
UT – 0,25/18,5/100/S(P)	250	18.5	3 ± 0.2 m	100	ca. 4
UT – 0,66/13/70/S(P)	660	13	3 ± 0.2 m	70	ca. 3.5
UT – 0,66/18,5/100/S(P)	660	18.5	3 ± 0.2 m	100	ca. 7

v.2