

Description

The type 8961 voltage fuse is suitable for limiting contact voltages in direct current powered rail operations. In conformity with DIN VDE 0100 Part 410, Section 6.1.1.4, the threshold of the voltage fuse type 8961 is ≤ 120 V DC (see technical data).

The voltage fuse separates the floating ground structural elements or conductor components effectively from each other as long as the potential difference between the two lies below the threshold voltage of the fuse.

When the potential difference exceeds the threshold voltage, the fuse fails in the conductive state, similar in effect to an irreversible metallic conductive connection, or becomes electrically non-conductive again when the threshold is not reached. The determinant of the state of the voltage fuse after a response is the electrical charge allowed through for the short period, which must lie below the impulse load capacity for the non-conductive state to be restored.

For an exact test, test of the threshold and residual voltage of the internal spark gap, the voltage fuse can be disconnected on one side or removed and then checked with the portable battery-powered type 8204 voltage fuse tester.

Any type of test with the fuse either installed or removed

should always be performed twice, with the polarity reversed each time.

For complete protection devices with voltage fuses, see the Product Data Sheet type 8901 or ask us for further information. The brass-copper-housing of the voltage fuse is useable for most of the voltage fuse insets (diameter 24mmx16mm) as delivered from ESN. Complete solutions in a wide variety of different configurations are available (please enquire).



Technical Data

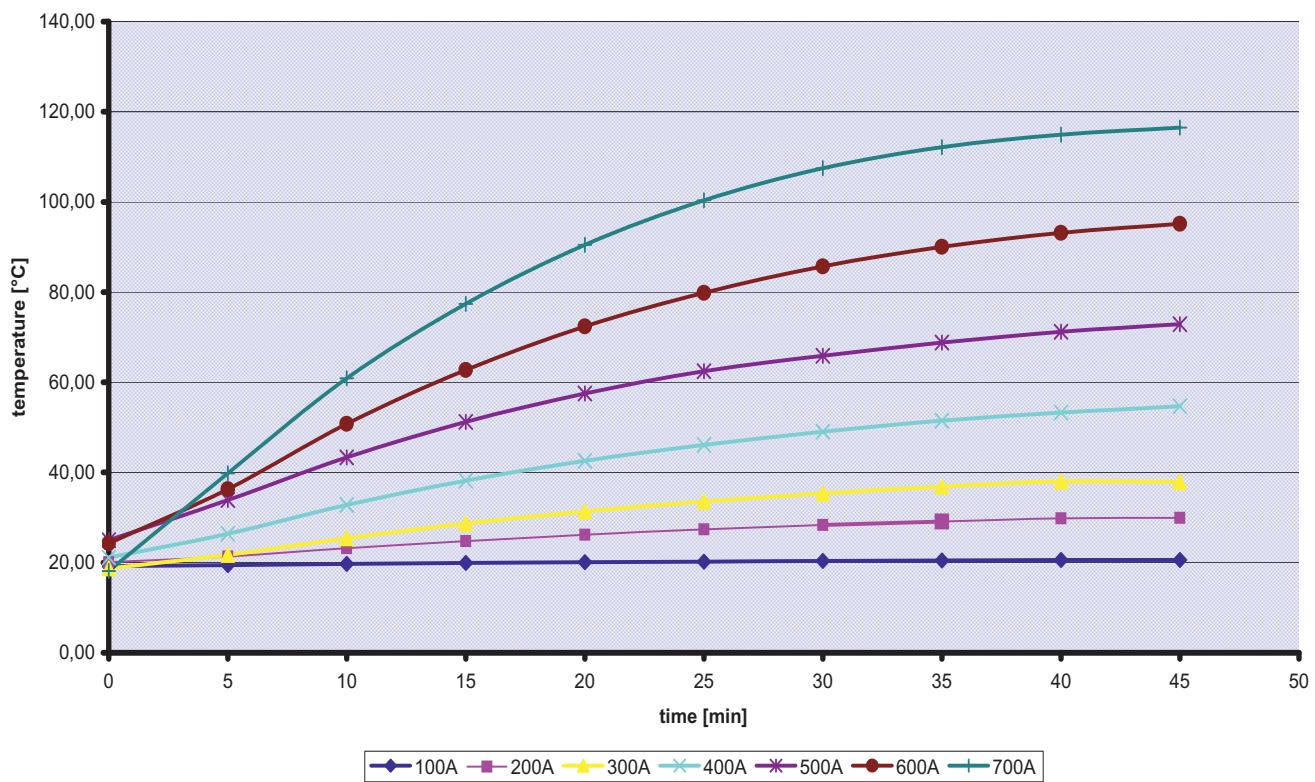
Dimensions	see figure, Ø 60 mm, length 102 mm
Threshold	DC < 120 V +/- 20% DC < 90 V +/- 20% DC < 75 V +/- 20%
Material	Brass- housing galvanically tin-plated copper bolts
Permanent current	300A
Impulse current (reversible)	2kA (10/350 μ s)
Impulse current (non reversible)	25kA (10/350 μ s)
Short circuit current (non reversible)	≤ 5 kA for 250ms
Connections	M 12 (SW 19) max. 20 Nm M 16 (SW 24) max. 40 Nm
max. heating temp.	120°C
Accessories	120V: type 8204, part no. 250207
Portable tester	type 910101, part no. 250210
Mounting bracket 75 x 50 mm	part no. 250220

Ordering Information

Type	Part No.
8961-120	250150
8961-090	250153
8961-075	250154



Heating of a voltage fuse type 8961 part no. 250100
(measured in a quick change device part no. 250222)



Quick change device part no. 250222

