MEDIUM VOLTAGE PRODUCT

Voltage transformers with fuse

Instruction for installation, use and maintenance

Scope of Contents

3 **Fuse replacement**
3 General safety instructions
3 Fuse replacement
4 Fuse replacement for external fuse holder

5 **Fuse holders**
5 Single pole fuse holders
6 Double pole fuse holders

Instructions for Installation, Use and Maintenance for Voltage Transformers

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01 Delivered VT with fixation

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02 Fixation removing

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03 TJP 6.2-G Screw-off epoxy nut and remove the contact, if fuse stay inside the holder use thin pliers and remove the fuse

Fuse replacement

These instructions are valid for Voltage transformers types: TJP; TDP; TJPN

Important !

Always consider transformer as a part of the circuit to which it is connected and where is assembled. This instruction can be use only together with other Installation and maintenance instruction (doc. 1VLM000610) valid for Voltage transformers and equipment where is installed. Please be sure that safety and maintenance instruction for all equipment were taken into consideration.

General safety instructions

1. Always consider transformer as a part of the circuit to which it is connected, and do not touch the leads and terminals or other parts of the transformer unless they are known to be earthed.
2. Always earth the metallic bases of instrument transformer.
3. Always earth one secondary terminal of the transformer, except if the windings are connected to open delta. When the secondary of transformer is interconnected, there should be only one earthed point to prevent accidental paralleling with system earthing wire. In case of disconnection from the earth, the earthing screw has to be removed from the secondary terminal. Connection between secondary terminal and base plate (earth) is shown on the picture “Cross section of single line terminal box“ (page.10 doc. 1VLM000610)
4. Never short-circuit the secondary terminal of a voltage transformer. A secondary short-circuit will cause the unit to overheat and fail in a very short period of time.
5. Protection of single pole insulated voltage transformers against ferroresonance phenomena is stated in appendix 3. – Damping of the ferroresonance for single pole voltage transformers (doc.1VLM000610).

Warning: All VT’s type TJP 4.0 ; TJP 5.0 ; TJP 6.0; TJPN 4.0, have fuse contact equipped by fixation. Fuse contact fixation is used just for transportation. Before installation must be removed. See pictures:

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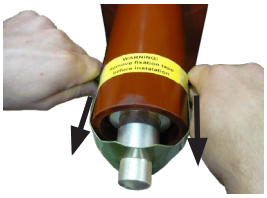
01



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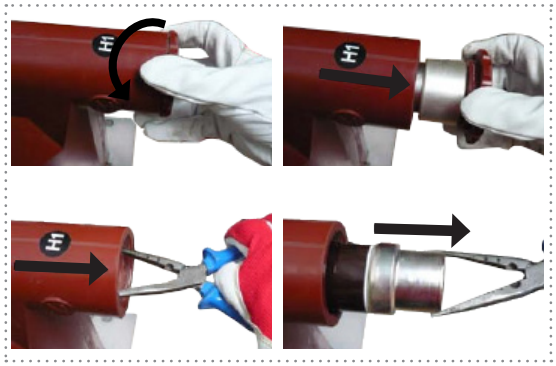
Fuse replacement

1. After make the VT safe to work on, remove the fuses as shown in the pictures.
   Before replacing the fuse make sure the VT is not energized!



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03

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04 TJP 4.3; 5.3; 6.3 grip contact and unscrew it. Use thin pliers and remove the fuse

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05 TJP 4.0; TJP 6.0; TJPN 4.0 ; 6.0 Grip primary contact and pull it away. If fuse stay inside the holder use thin pliers and remove the fuse

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06 TJP 4.1; 4.2; 6.1; 6.2; TDP 4.1; 4.2; 6.1; 6.2 Screw-off epoxy nut and remove the contact.

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07 TJP 7.1 ; 7.2 Using socket M36 screw-off the contact

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08 TJP 4.0-F Front removing: Screw-off the contact, use thin pliers and remove the fuse

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09 Upper removing: Slightly press down upper cover and move it to the back. Use thin screw-driver at point of fuse contact and remove the fuse.

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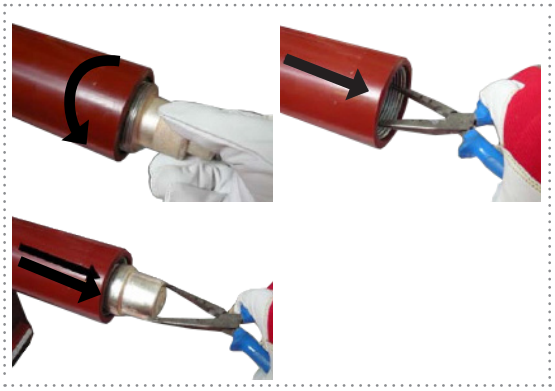
10 TJC 4; 5; 6 and TDC 4



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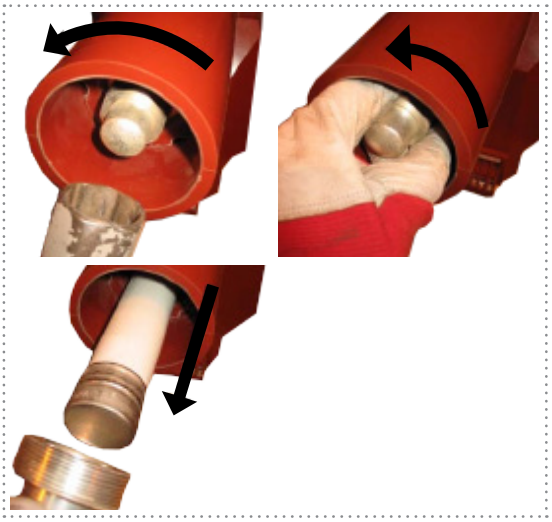

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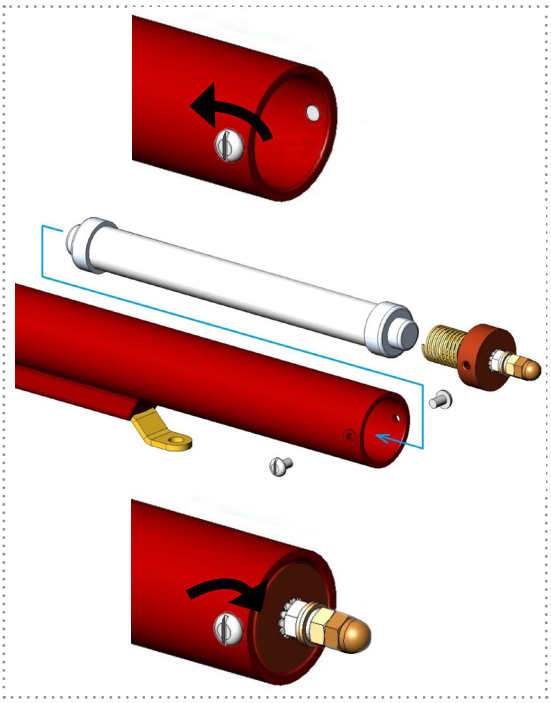
2. Remove the fuse and put new fuse inside the holder
3. Use the same procedure as point 1 but in reverse.
4. Make sure that the fuse is holding tight.

Fuse replacement for external fuse holder

1. Loosen the two screws.
2. Check the spring before inserting the fuse. Then insert the fuse.
3. Mount the primary terminal with the two screws.



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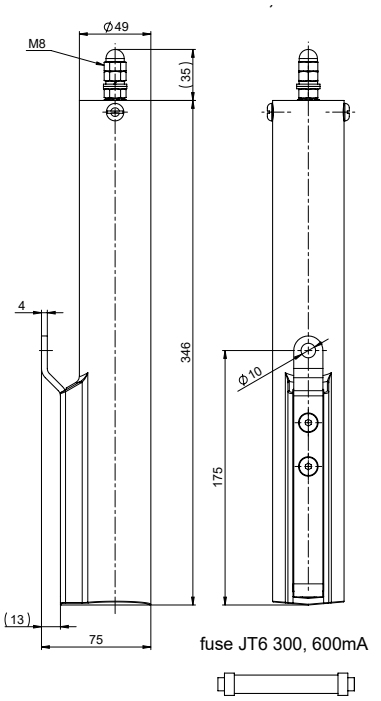
Fuse holders

These instructions are valid for Voltage transformers types:
TJC 4, TJC 5, TJC 6, TJCN 4
TDC 4
TJE 3, TJE 3.1
TJCH 4, TJCH 5
TJCL 6

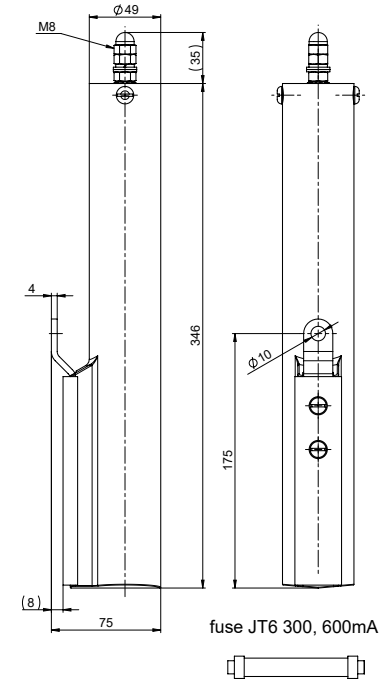
Single pole fuse holders

No special tools are needed for the installation of external fuse holder and It can be installed in any direction. All the necessary mounting accessories are a part of delivery and shall be used for fixing the fuse holder on primary terminal (M10) on the top of the VT. Maximum allowed torque for screw connection is 20 Nm.

11 Single pole voltage transformer TJC 4 with external fuse holder



12 External fuse holder for voltage transformers up to 17.5 kV
Fuse JT6 300 mA: 1VL4200499R0101
Fuse JT6 600 mA: 1VL4200499R0102



13 External fuse holder for voltage transformers up to 24 kV
Fuse JT6 300 mA: 1VL4200499R0201
Fuse JT6 600 mA: 1VL4200499R0202

Double pole fuse holders

No special tools are needed for the installation of external fuse holder expect mounting kit 1VL0209587P0101 which can be delivered together with TDC. Mounting kit ensures installation of external fuse holders in a parallel position rotated by 40° from the TDC axis which is required for proper operation of TDC. All the necessary mounting accessories are a part of delivery and shall be used for fixing the fuse holders on primary terminals (M10) on the top of the TDC. Maximum allowed torque for screw connection is 20 Nm.

Attention: TDC 4 double pole voltage instrument transformers shall be combined with external fuse holders 1VL4200499R0201 and 1VL4200499R0202 only.

Mechanical installation according to the next steps, see Fig. 13:

1 step The state before of installation process, see picture 1

2 step Remove the primary terminal screws, see picture 2

3 step Prepare the mounting kit 1VL0209587P0101, see picture 3

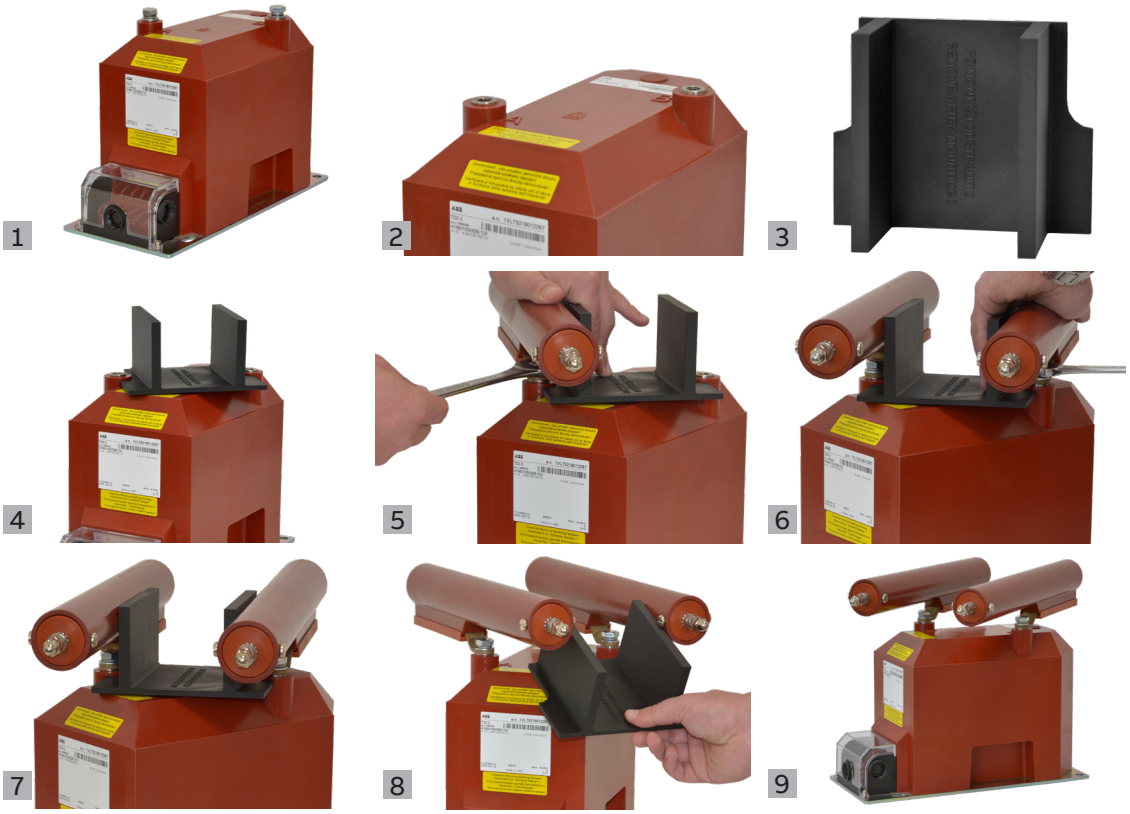
4 step Insert prepared mounting kit between both primary terminals (any other variant is not possible). TDC is now prepared for external fuse holders assembly, see picture 4

5 step Screw both external fuse holder so they touch the mounting kit, see picture 5 and 6

6 step Check the tightening of the both primary terminal screws M10, recommended tightening torque 20 Nm shall be used, see picture 7

7 step The mounting kit is ready to be removed, see picture 8

8 step TDC 4 with external fuse holders is ready to use, see picture 9



14 Assembly procedure of TDC 4 and external fuse holders

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