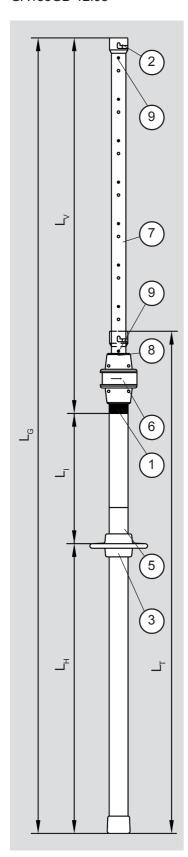
INSTRUCTION FOR USE

Telescopic operating rods above 1 kV "Not to be used with precipitation!"

135GB-12.08



Observe instructions for application of operating rods as per EN 50110-1.

Application, marks, maintenance

- 1.1 Operating rods are only to be used for the nominal voltage or voltage range as marked on the rod.
- 1.2 Operating rods "Not to be used with precipitation!" may only be used indoor or outdoor under dry conditions. Precipitation is any kind of weather that causes moisture or drops on the
- operating rod surface, this also refers to fog. 1.3 Operating rods consist of:
 - operating head (2) to take up an operating element, e.g. a switching head.
 - insulating length (L.) between hand protection disk (3) and red ring (1). It offers to the user the required safety distance and sufficient insulation towards the switchgear section.
 - the variable extension part (L,) between operating head (2) and red ring (1). It may rest on earthed or live switchgear sections.
 - the handle (L_u). Operating rods are to be held only at the (L_u) part during operation. It is not permissible to hold the operating rod above the hand protection disk (3).
 - label (5) with information about nominal voltage or voltage range and model.
- 1.4 The transport length (L_{τ}) of the unextended operating rod corresponds to appr.: $L_{\tau} = L_{c}/2 + 110$
- 1.5 For extension of the telescopic operating rod disconnect ring (6) as per marking. Then extend the inner tube (7) stepwise to the required length and lock. To lock the upper part line the joint mark (8) with one of the mark points (9) of the inner tube (7) until the ring (6) connects and locks again.
- 1.6 The operating position of the operating rod is optional.
- 1.7 Before use a trained person is to examine the operating rod for visible damages and dirt. In case of damage or illegible labels the operating rod must not be used.
- 1.8 For safety reasons it is recommended to examine the operating rod's proper condition repeatedly (insulating properties, short circuit safety). If the test values as per VDE 0681 are not fulfilled, the operating rod must not be used.

Hints for use

- 2.1 Observe general requirements of EN 50110-1:
- Only trained personnel may work with operating rods.
- Operating rods are to be used only from a safe place and the operating person is to remain in a safe distance from live switchgear sections.
- Operating rods are to be stored in a dry place.
- Information on operating rods, labels, marks and instruction for use are d) to be observed.
- National regulations for health and safety at work are to be observed.

Maintenance

- 3.1 Operating rods are to be protected against soil and damage (by colour, metal parts, or other).
- 3.2 Wet operating rods are to be dried with a soft, non-fibrous and clean cloth.

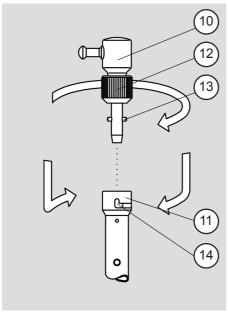
INSTRUCTION FOR USE



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GA135GB-12.08

- 3.3 Wet operating rods "Not to be used with precipitation!" are to be dried before use.
- 3.4 The insulation properties of operating rods can be maintained by annual lubrication with ARCUS silicon grease (Type number 625 004).



6. Spare parts and accessoriesSwitching rod head to DIN 57681 part 2

Further information upon request.

ARCUS silicon grease 100 g

4. Assembly information

- 4.1 Operating rods equipped with a bayonet coupling (11) at the operating head to take up suitable tooling under live working conditions must only be used to move easily movable parts.
- 4.2 Fitting of a switching rod head (10,12,13) into the bayonet coupling (11):

Rotate knurled nut (12) into direction of switching head (10) until it locks. Fit switching rod head (10/12/13) into the slots of the bayonet coupling (11) and rotate by 90° until it locks. Tighten knurled nut (12). Bayonet pin of the spindle (13) is to be locked in the notch (14) of the bayonet coupling (11).

5. Usage in completely accomplished and approved stations

Operating rods may be used in type-tested switchgear only under certain conditions as they were designed according to the minimum distances of VDE 0101 or their effective range of the level sparking distance. Users of operating rods resp. stations should ask the manufacturer in which cases the operating rod can be used.

Type number 509 053 Type number 625 004