

# SHORT-CIRCUITING (EARTHING) SET HV 38.5 kV

universal - stationary

## Models

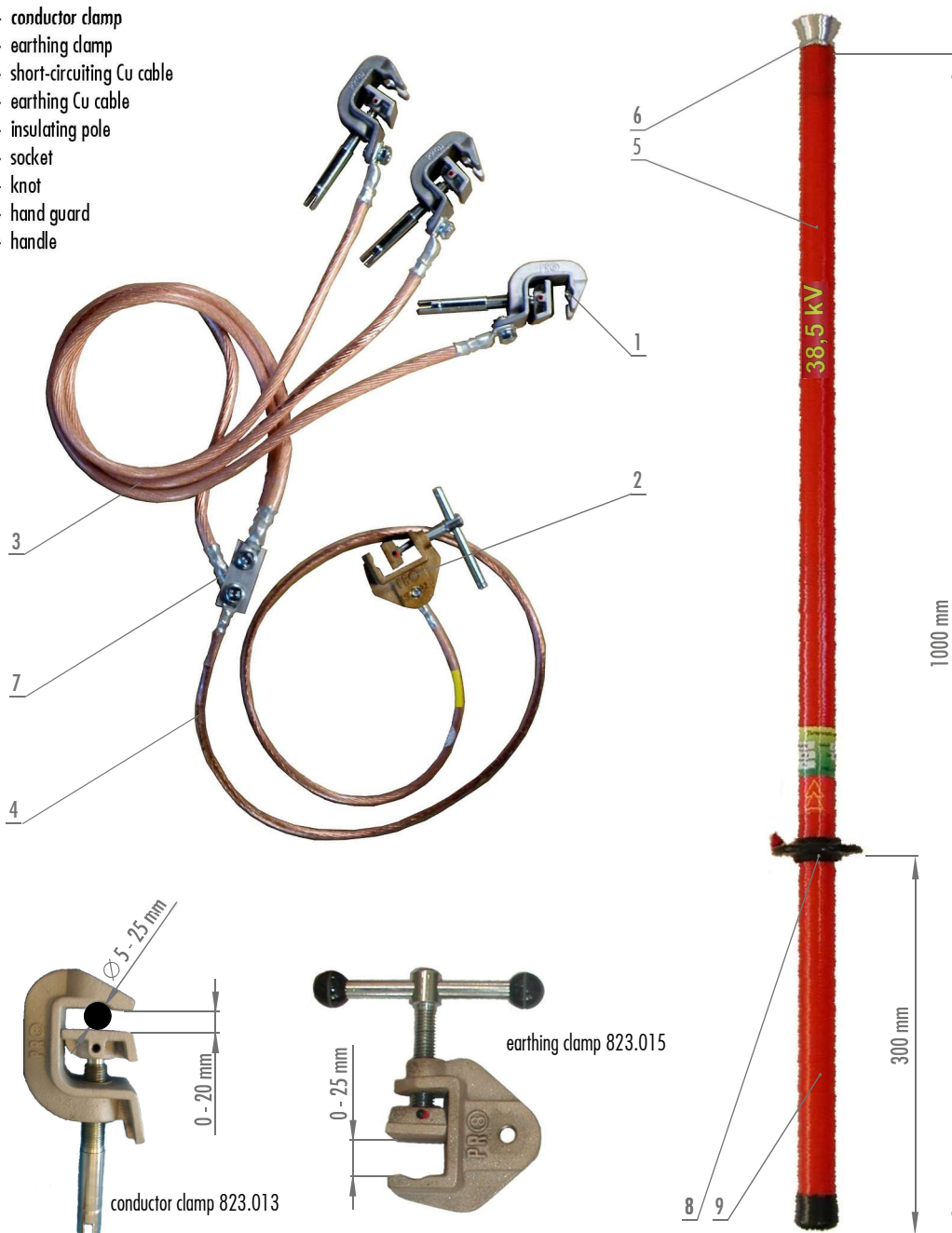
823.040 - 06 (08,10,15)

# TYPE 823.040

## General Information

Short-circuiting (earthing) set is designed for short-circuit making and earthing of the circuit in networks with an indirectly earthed or insulated node of the nominal voltage of up to 35 kV. The short-circuiting set is delivered together with **one insulating pole** (separable) and three conductor clamps connected by Cu cables in transparent isolation into the knot and ended with cable and earthing clamp. Conductor clamps are universal, i.e. for connection to conductor of circular cross section, spherical connecting point, connecting point of "T" shape or to the flat conductor. Earthing clamp is connected to the earthed flat conductor or to the conductor of circular cross section. Insulating pole is made of glass fabric laminate which is suitable for its high electrical and mechanical resistance and stability. The pole is ended with socket for conductor clamp handling. It fulfills the requirements on the protection equipment for outdoor use. The set is determined for indoor use, as well as for outdoor use under normal climatic conditions. The handle is provided with the protecting ring (hand guard). Short-circuiting set complies with standards ČSN EN 61230 ed.2, IEC 61230, DIN 46235. It is produced in four models for various short-time withstanding current. It is possible to modify the model at the custom's request.

- 1 - conductor clamp
- 2 - earthing clamp
- 3 - short-circuiting Cu cable
- 4 - earthing Cu cable
- 5 - insulating pole
- 6 - socket
- 7 - knot
- 8 - hand guard
- 9 - handle



## Technical Data

Climatic group	normal -25°C to 55°C	Pole material	glass-fabric laminate for outdoor use
Short-circuited conductor: circular cross section	∅ 5 - 25 mm	Pole diameter	31 mm
flat conductor	up to 20 mm	Cross section of cable	25 (25/25/35) mm <sup>2</sup> earthing
spherical connecting point	∅ 25 mm		25 (35/50/70) mm <sup>2</sup> short-circuiting
connecting point of "T" shape	∅ 15 mm	Length of cable	1500 mm earthing
Rated short-time withstanding current	6 (8/10/15) kA/1 s		1000 mm short-circuiting
Length of pole	1000 mm	Tightening of clamps	12 Nm
Length of handle	300 mm	Weight of equipment	4.5 (5/5.5/6) kg

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TYPE 823.04040

## 1.0 Directions for use

Before using the set, it is necessary to use a voltage detector to be sure that the traction is without tension.

The short-circuiting equipment is fixed in this way:

- 1) fix the earthing clamp to the earthing conductor or to the metallic grounded construction
- 2) slip one conductor clamp to the socket so that the pivot in the socket put together with the cut hole in the screw mechanism of the clamp
- 3) rotate the insulating pole (while holding the clamp) until the clamp jaws open according to the parameter (thickness, diameter) of the short-circuited conductor
- 4) put the clamp onto the conductor
- 5) rotate reverse by the insulating pole to constriction of the clamp
- 6) pull the pole backward from the conductor clamp to release the pole
- 7) fix other two clamps in the same way
- 8) when removing the clamp, proceed reversely

Make sure the clamp is tightened properly. The tightening torque must not exceed 12 Nm.

**The short-circuiting set should only be used on electrical facilities with nominal voltage for which it is designed.**

**The instructions for use should be incorporated into the local operating and safety regulations.**

**The set may only be used by qualified personnel.**

## 2.0 Maintenance and storage

The set must be kept in good technical condition. Make sure that the set is stored in the way to keep it dry and to prevent any mechanical damage. Perform a visual check before each use. At least once a year, it is necessary to perform a thorough check of the whole set, including cleaning and tightening all the connecting points.

For common cleaning of the poles use damp cloth, for more resistance dirt use technical alcohol. Do not use any organic solvents or any substances which may have a decolorizing effect.

**!!! The set must be eliminated or proved again its right functionality, when a short-circuiting current has already gone through short-circuiting current !!!**

## 3.0 Testing

The set is type-tested according to valid standards by the authorised laboratory. Each set is separately tested piece by piece before expedition and labeled too. The label includes the test date (quarter/year) and the number of the authorised laboratory.

## 4.0 Packing

The cables with clamps are supplied in a water-resistant carry bag. The insulating poles are wrapped in a transparent plastic foil. There is enclosed the function description and the directions for use, the Certificate about quality and completeness of product and product test.

## 5.0 Guarantee

The guarantee period is 24 months long and starts on the day the product is delivered to the customer. It applies to any defects probably caused by the manufacture. The guarantee does not cover any defects resulting from improper use, unprofessional handling, or unsuitable storing.