



GA74GB/0808

EARTHING AND SHORT CIRCUITING DEVICE FOR MEDIUM VOLTAGE OVERHEAD LINES

Advantages:

Lightweight, bending resistant material used for telescopic earthing and operating rods.

Transport and storage of the earthing device in a 2.8 m long roll-up bag.

At site absence of voltage test and earthing and short circuiting possible safely and easily from the ground, by one person.

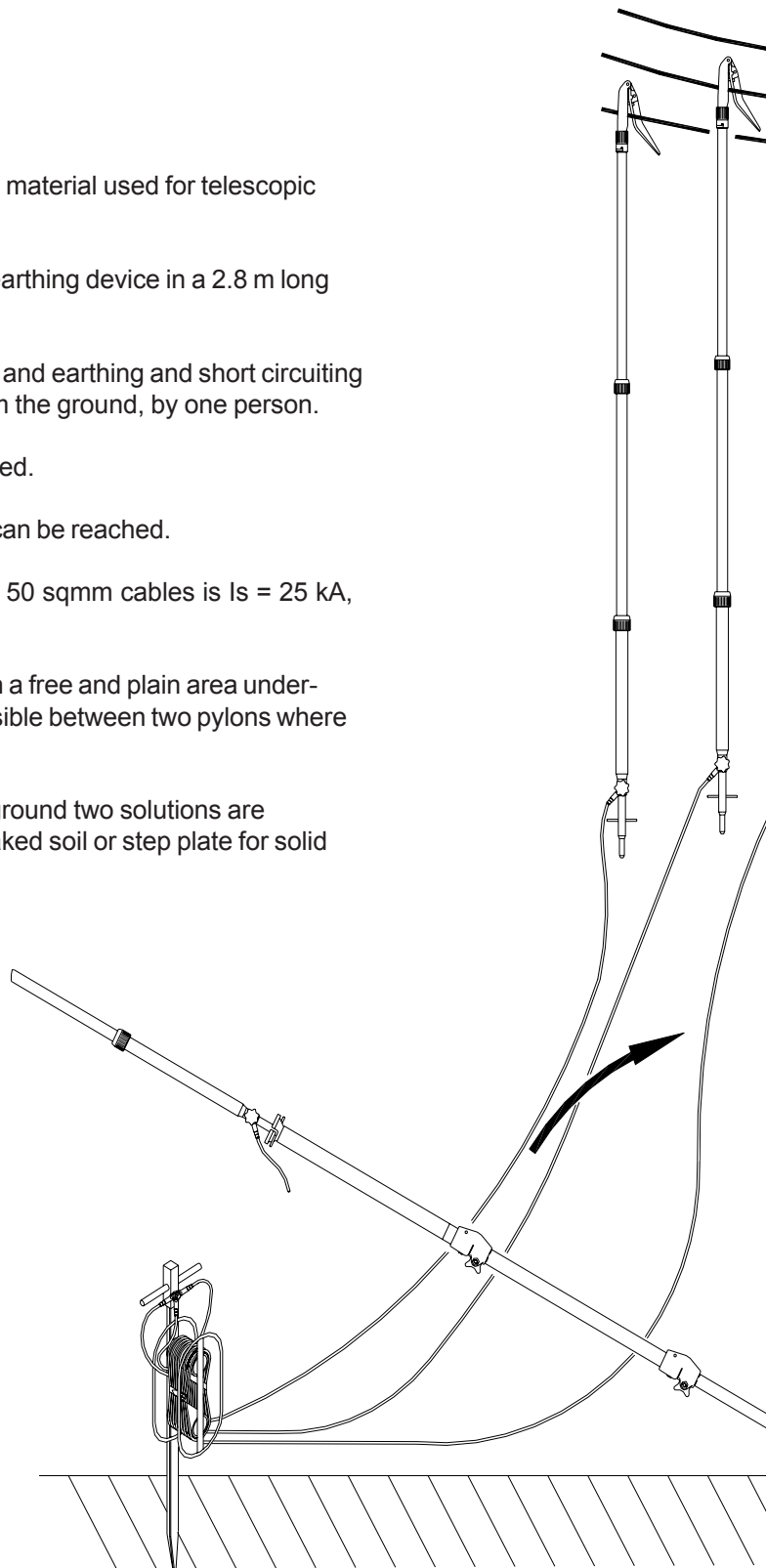
No climbing onto masts required.

Overhead line height of 13 m can be reached.

Max. short circuit current with 50 sqmm cables is $I_s = 25 \text{ kA}$, $I_k'' = 10 \text{ kA}$, $T_k = 1000 \text{ ms}$.

Device should be positioned in a free and plain area underneath an overhead line, if possible between two pylons where sagging lines are lower.

To fix the earthing rod on the ground two solutions are available: ground plate for soaked soil or step plate for solid ground.



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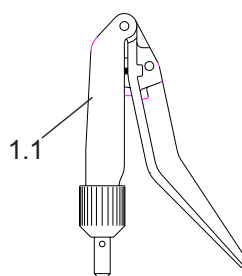
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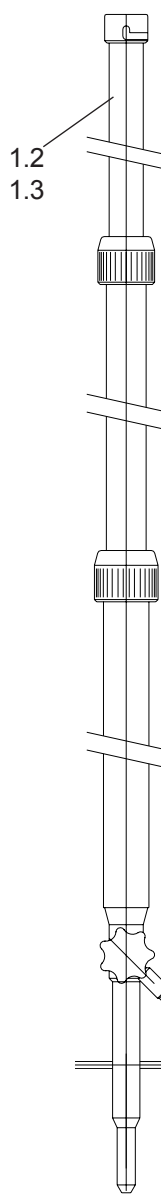
RANGE OF DELIVERY

Item	pcs.	part	type no.
1	1	earthing and short circuiting device for m.v. overhead lines, consisting of:	512 238
1.1	3	phase clamp for o.h. lines 35-150 mm ²	507 132
1.2	3	3-part telescopic rod of aluminium alloy, length variable between 2.7 – 6 m	512 238 57
1.3	1	3-section telescopic earthing rod made of glassfibre-reinforced polyester tube, length variable between 2.5 – 6.4 m	512 238 12
1.4	1	earth spike of hot-dip galvanized steel, complete with 3 one-phase short circuiting cables of PVC-insulated copper lead 35 mm ² , each 9000 mm long	512 238 40
or	1	as item 1.4, but cross-section 25 mm ²	512 238 37
or	1	as item 1.4, but cross-section 50 mm ²	512 238 43
1.5	1	roll-up bag of textile-reinforced plastic material with separations for all parts except item 1.4	512 238 44
accessories as required:			
1.6	1	ground plate made of hot-dip galvanized steel	512 238 05
1.7	1	step plate of aluminium alloy with spike of hot-dip galvanized steel	512 238 63

DESCRIPTION OF PICTURE



Phase clamp item 1.1 of aluminium alloy with automatic opening and closing mechanism, provided with bayonet bolt and knurled nut for connection to telescopic rod item 1.2



3-section telescopic earthing rod item 1.2 of aluminium alloy, length variable between 2.7 – 6 m by means of a clamp coupling. Upper rod end with metal bayonet to take up the phase clamp, lower rod end shaped as bayonet spindle for connection to earthing rod item 1.3. The bayonet bolt is equipped with a connection to the short circuiting cable.

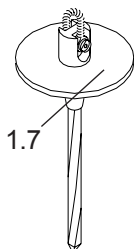
DESCRIPTION OF PICTURE



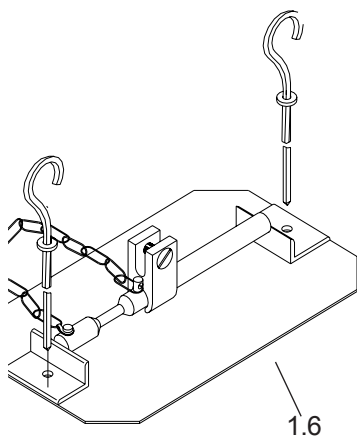
3-section telescopic earthing rod item 1.3 made of glassfibre-reinforced polyester tube, length variable between 2.5 – 6.4 m by means of slotted joints

Upper rod end with large bayonet to take up the aluminium rod item 1.2.

Lower rod end provided with an eye to obtain a pivotable connection with the ground plate or step plate.

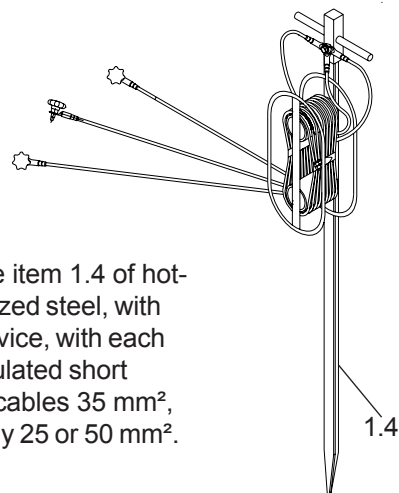


Large step plate of aluminium alloy with hot-dip galvanized steel spike to facilitate erection and handling of the complete earthing rod and live line tester in case it is operated in heights above 7.5 m.

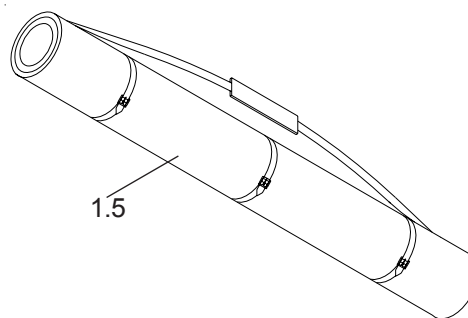


Ground plate with joint and two spikes of hot-dip galvanized steel, specially for soaked soil, step plate for solid ground.

DESCRIPTION OF PICTURE



Earth spike item 1.4 of hot-dip galvanized steel, with take-up device, with each 3 PVC-insulated short circuiting cables 35 mm², alternatively 25 or 50 mm².



Transport and carrying bag for all parts except earth spike.



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INSTRUCTION FOR USE

Earth and short circuit

Drive earth spike (item 1.4) into the ground and fasten ends of short circuit cables to lower end of telescopic aluminium rod (item 1.2) by means of tommy screw.

Extend telescopic aluminium rod to required length on the ground and tighten knurled nut. Examine tight fit of phase clamp (item 1.1) in metal bayonet head and tighten knurled nut again, if required.

Set telescopic aluminium rod into bayonet of earthing rod (item 1.3).

Lift complete rod with unextended earthing rod.

Extend and lift single tubes of telescopic earthing rod until beak of phase clamp is positioned above the respective overhead line.

When earth rod is lowered phase clamp closes down on conductor automatically.

Next earth rod is removed by disconnection of bayonet (rotation to the left).

Then other two telescopic earth rods are operated the same way.

Observe standards

EN 50110

EN 61230

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