# **HSA 194 Distance Voltage Detector**

## Nominal voltage range 110 ... 420 kV / 50 Hz

# SAFETY EQUIPMENT VOLTAGE DETECTORS

- Also for use in wet weather
- For verifying safe isolation from power supply without contacting high-voltage overhead lines
- With self-testing device
- Visual and acoustic indicator
- Storage bag included in delivery



Distance voltage detector used for a 110 kV overhead line.

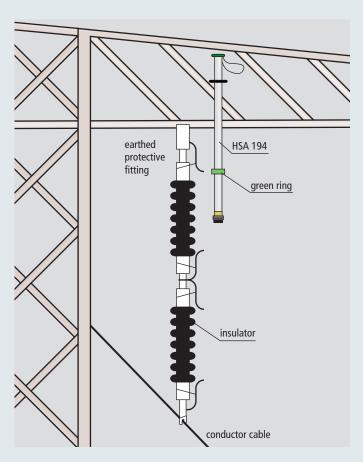
### Self-testing device

The electronic HSA distance voltage detector has an integrated self-testing device. The test is performed automatically after switching on the detector.

#### **Batteries**

The HSA distance voltage detector is supplied with a 9 V E block battery. This battery is installed in the battery compartment by releasing the screws and removing the indicator.

Low batteries are indicated by a permanent red light and by an additionally constant acoustic signal.



Technical Data	
Ready for operation	Green flashing light and acoustic signal at intervals of 2 seconds
Voltage present	Red flashing light and acoustic signal with increased frequency
No voltage present	Green flashing light and acoustic signal at intervals of 2 seconds
Insulating rod	Glass-fibre reinforced polyester tube, Ø43 mm, grey, with integrated measuring head as well as operating unit and indicator with green ring as contact indication
Operating temperature range	-25° C +55° C, Climatic category N

### Note on application

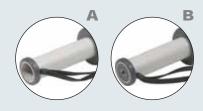
For verifying safe isolation from power supply, the distance voltage detector is used from the crossarm of the overhead line tower. The green ring of HSA 194 is contacted to the last earthed protective fitting (or earthed insulating cap) to ensure that the measuring head of the voltage detector points in the direction of the conductor cable at the other end of the insulator (rod axis of HSA 194 parallel to the longitudinal axis of the insulator). "Voltage present" on the conductor cable is signalled visually (red flashing light) and acoustically.



## **SAFETY EQUIPMENT**

## **HSA 194 Distance Voltage Detector**

## **VOLTAGE DETECTORS**



	Nominal voltage	Total length	Part
Type	U <sub>N</sub>	l <sub>G</sub>	No.

### **A** HSA 194

HSA194 110 420 110 ... 420 kV 935 mm **767 540** 

## B HSA 194 with threaded socket (TR 16 x 4)

For screwing into the adapter, Part No. 765 013, for handle extension

HSA194 110 420 M12 110 ... 420 kV 935 mm **767 541** 

If required, the distance voltage detectors can also be supplied with Lithium batteries at an additional cost. Distance voltage detectors for other nominal voltages and frequencies available on request.



## **Accessories for HSA 194 Distance Voltage Detector**

### Adapter

For screwing into the threaded TR 16 x 4 socket for handle extension with IS SQ insulating rods or ES SQ earthing rods

	Part	
Туре	No.	
AD HV TR16 SQ	765 013	new



### **Artificial Leather Bag, empty**

With shoulder strap

			Part
Туре	Colour	Dimension	No.
KLT 98 9 SCH	•	Ø95 x 980 mm	767 531



## **Supporting device**

For wall mounting

			Part
Туре	Colour	Dimension	No.
HV P ST D40 45		530 mm	700 008



## HSA 205 Distance Voltage Detector Nominal voltage range 1 ... 420 kV / 50 Hz

# SAFETY EQUIPMENT VOLTAGE DETECTORS

- Also for use in wet weather
- For contact-free testing of switchgears and high-voltage overhead lines for safe isolation from supply
- With self-testing device
- Visual and acoustic indicator
- Storage bag included in delivery



Distance voltage detector used for a switchgear.

Tackwisel Data

### **Self-testing device**

The electronic HSA distance voltage detector has an integrated self-testing device. The test is performed automatically after switching on the detector.

#### **Batteries**

The HSA distance voltage detector is supplied with a 9 V E block battery. This battery is installed in the battery compartment by releasing the screws and removing the indicator.

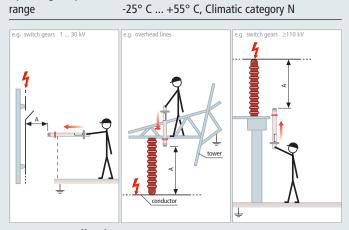
Low batteries are indicated by a permanent red light and by an additionally constant acoustic signal.

	lechnical Data	
	Readiness for operation	Green flashing light and acoustic signal at intervals of 2 seconds
	Voltage present	Red flashing light and acoustic signal with increased frequency
	No voltage present	Green flashing light and acoustic signal at intervals of 2 seconds
	Insulating rod	Glass-fibre reinforced polyester tube, Ø43 mm, grey, with integrated measuring head as well as operating and indication unit and green ring as contact indication
	Operating temperature	

Selected voltage range	Nominal voltage acc. to DIN VDE 0105, Part 1	Min. safety distance A
red	more than 1 to 6 kV	90 mm indoor installations
1 30 kV	more than 6 to 10 kV	120 mm indoor installations
	more than 1 to 10 kV	150 mm outdoor installations
	more than 10 to 20 kV	220 mm indoor installations and outdoor installations
	more than 20 to 30 kV	320 mm indoor installations and outdoor installations
white 30 220 kV	more than 30 to 45 kV	480 mm indoor installations and outdoor installations
	more than 45 to 60 kV	630 mm indoor installations and outdoor installations
	more than 60 to 110 kV	1100 mm indoor installations and outdoor installations
yellow 110 420 kV	more than 110 to 220 kV	2100 mm indoor installations and outdoor installations
	more than 220 to 420 kV	2900 mm indoor installations

and outdoor installations

Minimum distances A according to the nominal voltage.



### **Notes on application**

The operating head of the HSA 205 distance voltage detector is fitted with a yellow switching ring which is used to set the required nominal voltage range 1  $\dots$  30 kV / 30  $\dots$  220 kV / 110  $\dots$  420 kV.

Voltage range 1 ... 30 kV requires the use of the transparent insulating cap. By attaching the insulating cap, the minimum distance "A" can be reduced for nominal voltages up to 30 kV.

Please note that this distance can only be reduced if the insulating tube and insulating cap of the distance detector are in a clean and dry condition. If the insulating tube and insulating cap is not clean and dry, the distance "A" must be maintained.



## **SAFETY EQUIPMENT**

## **HSA 205 Distance Voltage Detector**

## **VOLTAGE DETECTORS**



	Nominal voltage	Total length	Part
Type	U <sub>N</sub>	I <sub>G</sub>	No.

### A HSA 205

HSA205 U 1 420 1 ... 30 / 30 ... 220 / 110 ... 420 kV 935 mm **767 555 new** 

### B HSA 205 with threaded socket TR 16 x 4

For screwing into the adapter, Part No. 765 013, for handle extension

If required, the distance voltage detectors can also be supplied with Lithium batteries at an additional cost. Distance voltage detectors for other nominal voltages and frequencies available on request.



## **Accessories for HSA 205 Distance Voltage Detector**

### **Insulating cap**

For attaching to HSA 205 within nominal voltage range 1 ... 30 kV

			Part
Туре	Colour	Dimension	No.
IK HSA205	transparent	Ø60 x 310 mm	767 559 <b>new</b>



## **Adapter**

For screwing into the threaded TR 16 x 4 socket for handle extension with IS SQ insulating rods or ES SQ earthing rods

	Part	
Туре	No.	
AD HV TR16 SQ	765 013	new



## **Artificial Leather Bag, empty**

With shoulder strap

			Part
Туре	Colour	Dimension	No.
KLT 98 9 SCH	•	Ø95 x 980 mm	767 531



## **Supporting device**

For wall mounting

			Part
Туре	Colour	Dimension	No.
HV P ST D40 45		530 mm	700 008

