



VILLBEK LTD. CATALOGUE 2019 V1.0



Certificates



Programs



ONE SECTION OPERATING ROD

Field of application

These rods are made of fibreglass reinforced synthetic resin tubes filled with poliurethane foam. It is suitable for applying different devices (short-circuiter, voltage detector, rescuing hook, cleaning tools, etc) on the SV, MV and HV networks. The different head shapes allow to connect the fittings or devices to the rod more easily. The one section rod types, the rod head shapes as well as the fittings which can be connector are summarized in the following table.

Basic rods without shaped heads



Operating rod types and the rod head's shapes | length of 1500 mm EN 60832

Type	Product code	Rated voltage (kV)	Effective length (mm)	Weight (g)	Head shape
VK-E-1500	536600	35	1500	800	
VK-E-C-1500	536610	35	1500	830	
VK-E-B-1500	536620	35	1500	890	

Operating rod types and the rod head's shapes | length of 2200 mm EN 60832

Type	Product code	Rated Voltage (kV)	Effective length (mm)	Weight (g)	Head shape
VK-E-2200	536700	35	2200	1000	
VK-E-C-2200	536710	35	2200	1030	
VK-E-B-2200	536720	35	2200	1090	

Operating rod types and the rod head's shapes | length of 3000 mm EN 60832

Type	Product code	Rated voltage (kV)	Effective length (mm)	Weight (g)	Head shape
VK-E-3000	536900	120	3000	1400	
VK-E-C-3000	536000	120	3000	1430	
VK-E-B-3000	536910	120	3000	1490	

TELESCOPIC OPERATING RODS

Field of application

These rods are made of fibreglass reinforced synthetic resin. The tube with the smallest diameter is filled with poliurethane foam. It is suitable for applying different devices (short-circuiter, voltage detector, rescuing hook, cleaning tools, etc) on the SV, MV and HV networks. The segments of the telescopic rod are fixed in their extended state by spring-type locking buttons. They can be transported in their nested state by car. The different head shapes allow to connect the fittings or devices to the rod more easily. The telescopic rod types, the rod head shapes as well as the fittings which can be connector are summarized in the following table.

Basic rods without shaped heads



VK-TR-1500, VK-TR-C-1500, VK-TR-B-1500



VK-TR-2000, VK-TR-C-2000, VK-TR-B-2000



VK-TR-2500, VK-TR-C-2500, VK-TR-B-2500

Operating rod types and the rod head's shapes length of 1500 mm							EN 60832
Type	Product code	Rated Voltage (kV)	Effective length (mm)	Transport length (mm)	No. of rod segment	Weight (g)	Head shape
VK-TR-1500	526310	35	1500	790	3	930	
VK-TR-C-1500	526300	35	1500	790	3	970	
VK-TR-B-1500	526320	35	1500	790	3	1000	

Operating rod types and the rod head's shapes length of 2000 mm							EN 60832
Type	Product code	Rated Voltage (kV)	Effective length (mm)	Transport length (mm)	No. of rod segment	Weight (g)	Head shape
VK-TR-2000	546420	35	2000	1170	2	1000	
VK-TR-C-2000	546400	35	2000	1170	2	1080	
VK-TR-B-2000	546430	35	2000	1170	2	1110	

Operating rod types and the rod head's shapes length of 2500 mm							EN 60832
Type	Product code	Rated Voltage (kV)	Effective length (mm)	Transport length (mm)	No. of rod segment	Weight (g)	Head shape
VK-TR-2500	546510	10, 35, 120	2500	1400	2	1370	
VK-TR-C-2500	546500	10, 35, 120	2500	1400	2	1400	
VK-TR-B-2500	546520	10, 35, 120	2500	1400	2	1430	

TELESCOPIC OPERATING RODS

Field of application

These rods are made of fibreglass reinforced synthetic resin. The tube with the smallest diameter is filled with poliurethane foam. It is suitable for applying different devices (short-circuiter, voltage detector, rescuing hook, cleaning tools, etc) on the SV, MV and HV networks. The segments of the telescopic rod are fixed in their extended state by spring-type locking buttons. They can be transported in their nested state by car. The different head shapes allow to connect the fittings or devices to the rod more easily. The telescopic rod types, the rod head shapes as well as the fittings which can be connector are summarized in the following table.

Basic rods without shaped heads



VK-TR-3000, VK-TR-C-3000, VK-TR-B-3000



VK-TR-3000/2, VK-TR-C-3000/2, VK-TR-B-3000/2



VK-TR-4000, VK-TR-C-4000, VK-TR-B-4000

Operating rod types and the rod head's shapes length of 3000 mm							EN 60832
Type	Product code	Rated Voltage (kV)	Effective length (mm)	Transport length (mm)	No. of rod segment	Weight (g)	Head shape
VK-TR-3000	536110	120	3000	1340	3	1690	
VK-TR-C-3000	536100	120	3000	1340	3	1720	
VK-TR-B-3000	536120	120	3000	1340	3	1770	
VK-TR-3000/2	536130	120	3000	1700	2	1500	
VK-TR-C-3000/2	536150	120	3000	1700	2	1530	
VK-TR-B-3000/2	536140	120	3000	1700	2	1580	

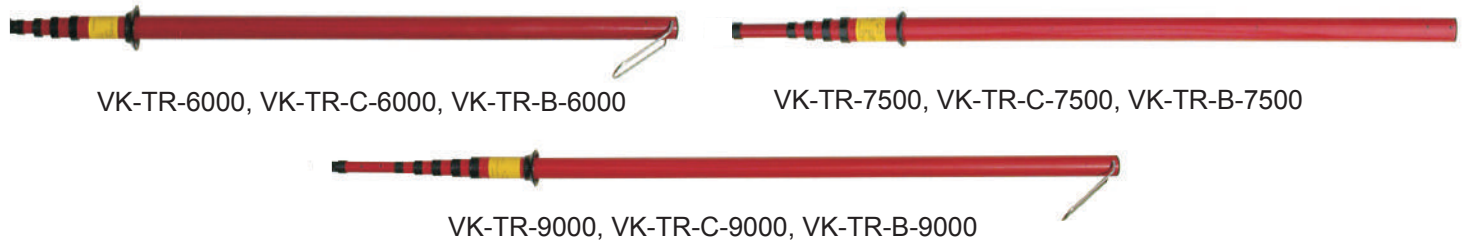
Operating rod types and the rod head's shapes length of 4000 mm							EN 60832
Type	Product code	Rated Voltage (kV)	Effective length (mm)	Transport length (mm)	No. of rod segment	Weight (g)	Head shape
VK-TR-4000	536210	120	4000	1600	3	1970	
VK-TR-C-4000	536200	120	4000	1600	3	2000	
VK-TR-B-4000	536220	120	4000	1600	3	2030	

TELESCOPIC OPERATING RODS

Field of application

These rods are made of fibreglass reinforced synthetic resin. The tube with the smallest diameter is filled with poliurethane foam. It is suitable for applying different devices (short-circuiter, voltage detector, rescuing hook, cleaning tools, etc) on the SV, MV and HV networks. The segments of the telescopic rod are fixed in their extended state by spring-type locking buttons. They can be transported in their nested state by car. The different head shapes allow to connect the fittings or devices to the rod more easily. The telescopic rod types, the rod head shapes as well as the fittings which can be connecter are summarized in the following table.

Basic rods without shaped heads



Operating rod types and the rod head's shapes | length of 6000 mm

EN 60832

Type	Product code	Rated Voltage (kV)	Effective length (mm)	Transport length (mm)	No. of rod segment	Weight (g)	Head shape
VK-TR-6000	536410	120	6000	1890	4	3370	
VK-TR-C-6000	536400	120	6000	1890	4	3400	
VK-TR-B-6000	536420	120	6000	1890	4	3430	

Operating rod types and the rod head's shapes | length of 7500 mm

EN 60832

Type	Product code	Rated Voltage (kV)	Effective length (mm)	Transport length (mm)	No. of rod segment	Weight (g)	Head shape
VK-TR-7500	536450	120	7500	2040	5	3620	
VK-TR-C-7500	536460	120	7500	2040	5	3650	
VK-TR-B-7500	536470	120	7500	2040	5	3680	

Operating rod types and the rod head's shapes | length of 9000 mm

EN 60832

Type	Product code	Rated Voltage (kV)	Effective length (mm)	Transport length (mm)	No. of rod segment	Weight (g)	Head shape
VK-TR-9000	536510	120	9000	2070	6	4880	
VK-TR-C-9000	536500	120	9000	2070	6	4910	
VK-TR-B-9000	536520	120	9000	2070	6	4940	



C type head
(hexagon)

Product code
536411



B type head
(bayonet)

Product code
536471



U type head
(universal)

Product code
536412



VK-K
maneuvering hook

Product code
536475



VK-C-B
(hexagon - bayonet)

Product code
536461



VK-C-UDI
(hexagon - UDI)

Product code
536462



VK-C-H
(hexagon - hook)

Product code
536416



VK-C-U
(hexagon - universal)

Product code
536463



VK-B-C
(bayonet - hexagon)

Product code
536472



VK-B-U
(bayonet - universal)

Product code
536417



VK-U-H
(universal - hook)

Product code
536418



VK-U-B
(universal - bayonet)

Product code
536413



VK-UDI-C
(UDI - hexagon)

Product code
536473



VK-EN-C
(switch)

Product code
536476



VK-U-C
(switch)

Product code
590437



VK-EN-U
(switch)

Product code
536419



VK-GO-C
(button - hexagonal)

Product code
536477

RESCUE ROD, HEIGHT MEASURING ROD, OPERATING ROD

VILLBEK Ltd.



VK-EM-1500 Insulating rescue rod

A Rescue rod for rescuing an injured technician. It is used to grasp the injured person by the waist and bring him back to a protected area.

Length	1500 mm
Insulated hook	400 mm
Weight	1,5 kg
Product code	536916



2012-12T Height measuring rod

The height measuring rod is supplied with one resting head. The T head allows operators to touch the exact spot to be measured.

Length	12 m
No. of rod segment	10
Transporting length	1,42 m
Weight	2,8 kg
Product code	536920



VK-TR-C-9000/ R Telescopic operating triangular rod EN 60832

Based on the working height to be reached, calculate the number of sections to be used and take off the unnecessary sections. Rest the telescopic stick on the floor on vertical position and start extending it close to the working place. Extend the first section until the locking pin fit on the hole. Repeat this operation with each subsequent section, always checking if the locking pins are properly fitted, until reach the working height. Weight 4,5kg. Closed length 170cm. Total length: 9m.

Number of elements	Rated Voltage (kV)
1.and 2.	0-120
1; 2. and 3.	0-120
1; 2; 3 and 4.	0-300
1; 2; 3; 4; and 5.	0-400
1; 2; 3; 4; 5 and 6.	0-400
1; 2; 3; 4; 5; 6 and 7.	0-400
Product code	536503



VK-RB-2006-H		EN 61230	CE
Thermic limit current	18 kA/2 s		
Dynamic limit current	45 kA/1 s		
Gripping capacity	Ø5-30 mm		
Product code	522780		

KÖF-C-9007-H		EN 61230	CE
Thermic limit current	For rail	23 kA/1 s	18 kA/2 s
	For wire	23 kA/1 s	18 kA/2 s
	Spherical stud	23 kA/1 s	18 kA/3 s
Dynamic limit current	For rail	57,5 kA	
	For wire	57,5 kA	
	Spherical stud	57,5 kA	
Gripping capacity	Ø30x10 mm rail Ø8-25 mm wire Ø25 mm stud		
Product code	522781		

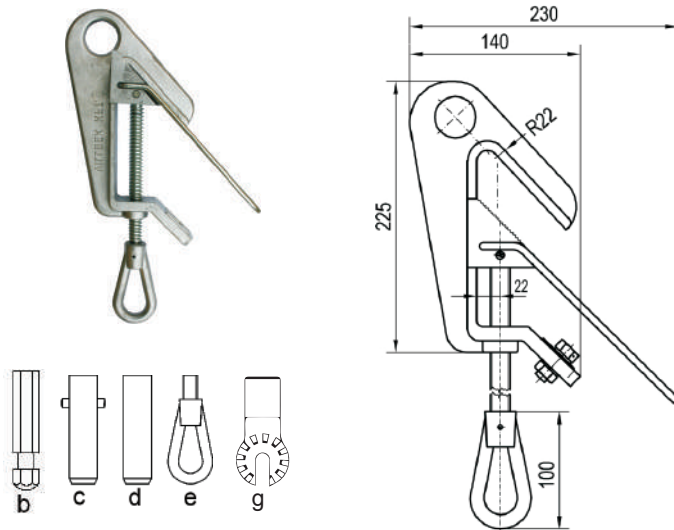
PC-400-H		EN 61230	CE
Thermic limit current	18 kA/2 s		
Product code	522782		

KÖF-C-9004-H		EN 61230	CE
Thermic limit current	18 kA/1 s		
Dynamic limit current	57,5 kA/1 s		
Gripping capacity	Ø0-27 mm		
Product code	522783		
Gripping capacity	Ø0-30 mm		
Product code	522784		

VK-NAF-2011/RR phase clamp		CE
The VK-NAF-2011/RR phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing whip. The earthing whip can be used for earthing of wire structured phase line of transformer stations and power plants. The clamp can only be pulled on the phase line.		
Thermic limit current	5 kA/1 s	
Dynamic limit current	12,5 kA	
Gripping capacity	Ø12-30 mm	
Product code	b:	536803
	c:	536802
	d:	536801
	g:	536804

ACCESSORIES CONNECTING TO THE ROD HEAD

VILLBEK Ltd.

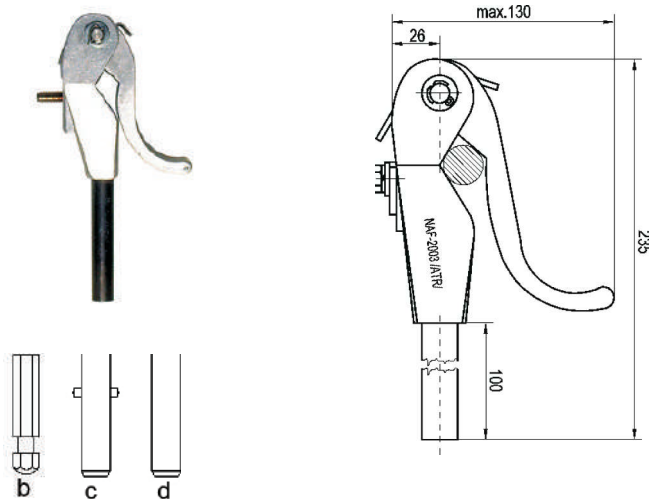


KN-9005/PC phase clamp

EN 61230 CE

The KN-9005/PC phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing whip. The earthing whip can be used for earthing of wire or pipe structured bus bars of transformer stations and power plants as well as the phase lines of the aerial lines.

Thermic limit current	40 kA/1 s
Dynamic limit current	100 kA
Gripping capacity	Ø5-70 mm
Product code	b: 510003 c: 510004 d: 510002 e: 510001 g: 510005

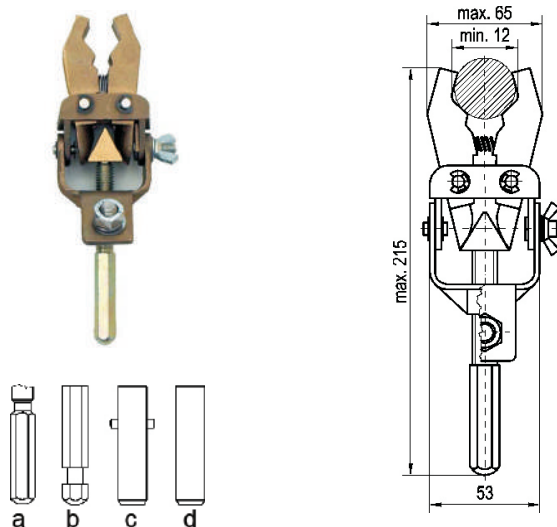


NAF-2003/ATR phase clamp

EN 61230 CE

The NAF 2003/ATR phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing whip. The earthing whip can be used for earthing of wire structured phase line of transformer stations and power plants.

Thermic limit current	7,2 kA/0,81 s
Dynamic limit current	15,9 kA
Gripping capacity	Ø18-30 mm
Product code	b: 536902 c: 536903 d: 536901



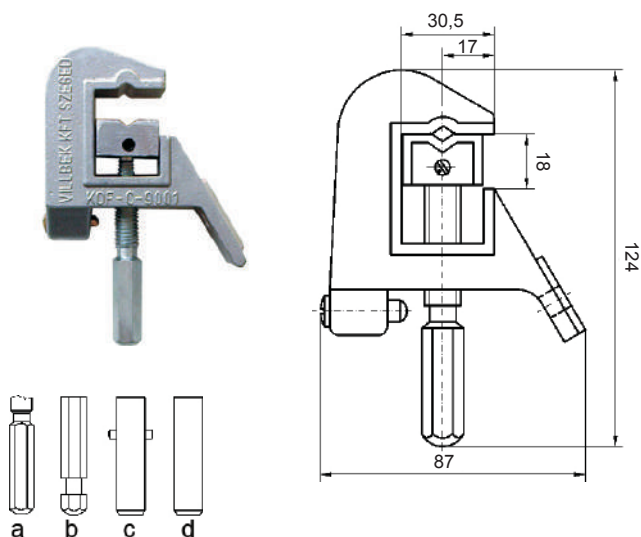
KÖF-9006/PC phase clamp

EN 61230 CE

The KÖF-9006/PC phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short circuiting device. The earthing device can be used for earthing of tube or wire structured bus bars of transformer stations and power plants as well as earhtig of installed earhtig studs and cable heads.

Thermic limit current	10 kA / 1 s
Dynamic limit current	25 kA
Gripping capacity	Ø12-40 mm
Product code	a: 541001 b: 541003 c: 541004 d: 541002

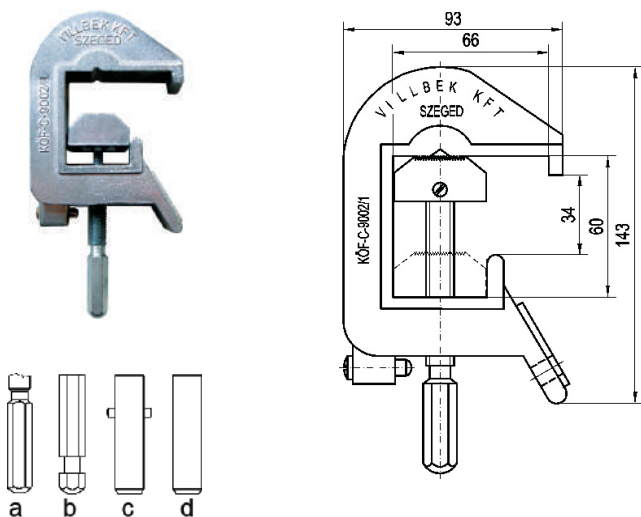
ACCESSORIES CONNECTING TO THE ROD HEAD



KÖF-C-9001 phase clamp EN 61230 CE

The KÖF-C-9001 phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short-circuiting device. The earthing device can be used for short-circuiting of rail structured bus bars of transformer stations and power plants.

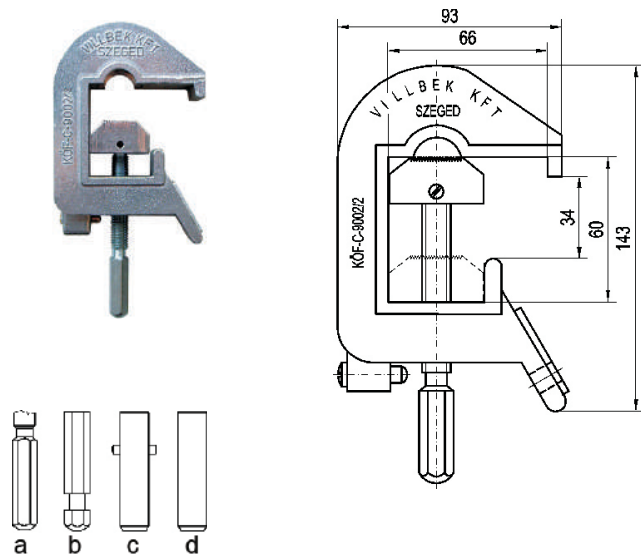
Thermic limit current	For rail	16 kA/1 s
	For wire	16 kA/1 s
Dynamic limit current	For rail	40 kA
	For wire	40 kA
Gripping capacity	Ø30 mm rail Ø6-18 mm stud	
Product code	a:	521504
	b:	521503
	c:	521502
	d:	521505



KÖF-C-9002/1 phase clamp EN 61230 CE

The KÖF-C-9002/1 phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short-circuiting device. The short-circuiting device can be used for short-circuiting of rail or wire structured bus bars of transformer stations and power plants.

Thermic limit current	For rail	20 kA/1 s
	For wire	20 kA/1 s
Dynamic limit current	For rail	50 kA
	For wire	50 kA
Gripping capacity	Ø60x10 mm rail Ø8-30 mm wire	
Product code	a:	521205
	b:	521206
	c:	521207
	d:	521208



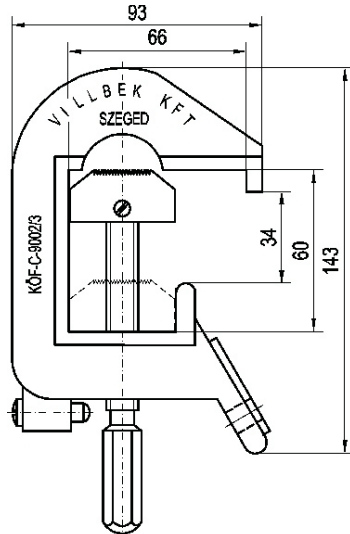
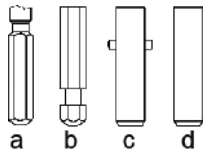
KÖF-C-9002/2 phase clamp EN 61230 CE

The KÖF-C-9002/2 phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short-circuiting device. The short-circuiting device can be used for short-circuiting of bus bars of transformer stations and power plants and can be put on the earthing studs shown below.

Thermic limit current	For rail	16 kA/1 s
	28 mm stud	16 kA/1 s
Dynamic limit current	For rail	40 kA
	28 mm stud	40 kA
Gripping capacity	Ø60x10 mm rail Ø25 mm earthing stud	
Product code	a:	521506
	b:	521515
	c:	521516
	d:	521517

ACCESSORIES CONNECTING TO THE ROD

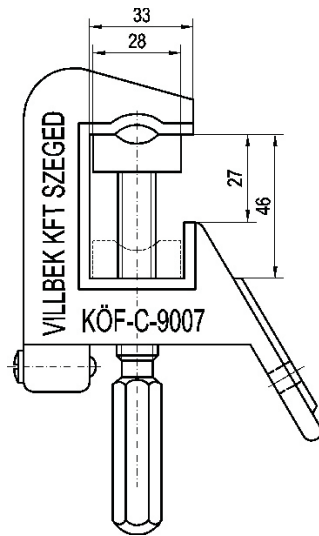
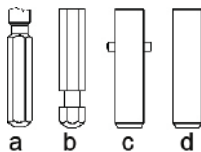
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KÖF-C-9002/3 phase clamp EN 61230 CE

The KÖF-C-9002/3 phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short-circuiting device. The short-circuiting device can be used for short-circuiting of rail or wire structured bus bars of transformer stations and power plants.

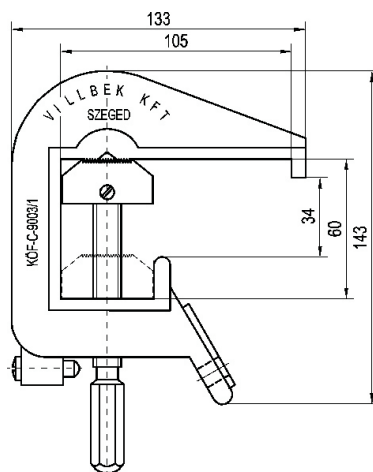
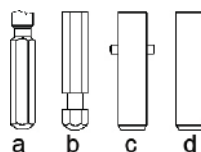
Thermic limit current	For rail	20 kA/1 s
	For wire	20 kA/1 s
Dynamic limit current	For rail	50 kA
	For wire	50 kA
Gripping capacity	Ø60x10 mm rail Ø30 mm wire	
Product code	a:	521522
	b:	521523
	c:	521524
	d:	521525



KÖF-C-9007 phase clamp EN 61230 CE

The KÖF-C-9007 phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short-circuiting device. The short-circuiting device can be used for short-circuiting of rail or wire structured bus bars of transformer stations and power plants as well as can be put on the spherical studs shown below.

Thermic limit current	For rail	23 kA/1 s	18 kA/2 s
	For wire	23 kA/1 s	18 kA/2 s
	Spherical stud	23 kA/1 s	18 kA/2 s
Dynamic limit current	For rail	57,5 kA	
	For wire	57,5 kA	
	Spherical stud	57,5 kA	
Gripping capacity	Ø30x10 mm rail Ø8-25 mm wire Ø25 mm spherical stud		
Product code	a:	521512	
	b:	521511	
	c:	521513	
	d:	521514	

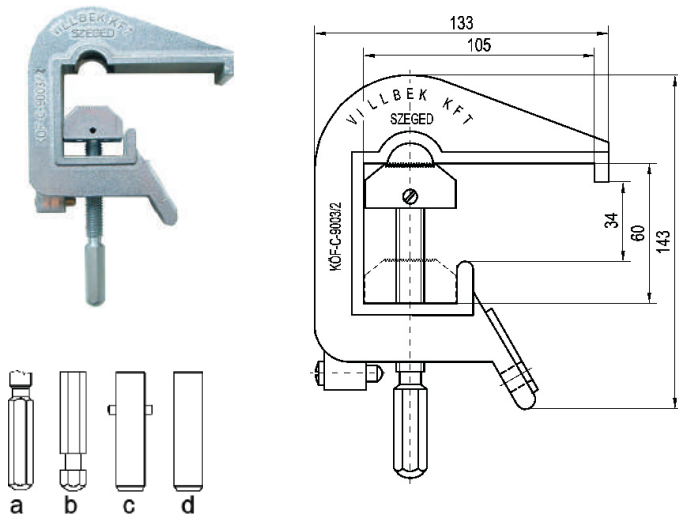


KÖF-C-9003/1 phase clamp EN 61230 CE

The KÖF-C-9003/1 phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short-circuiting device. The short-circuiting device can be used for short-circuiting of rail or wire structured bus bars of transformer stations and power plants.

Thermic limit current	For rail	20 kA/1 s
	For wire	20 kA/1 s
Dynamic limit current	For rail	50 kA
	For wire	50 kA
Gripping capacity	Ø100x10 mm rail Ø8-3 mm wire	
Product code	a:	521533
	b:	521508
	c:	521531
	d:	521532

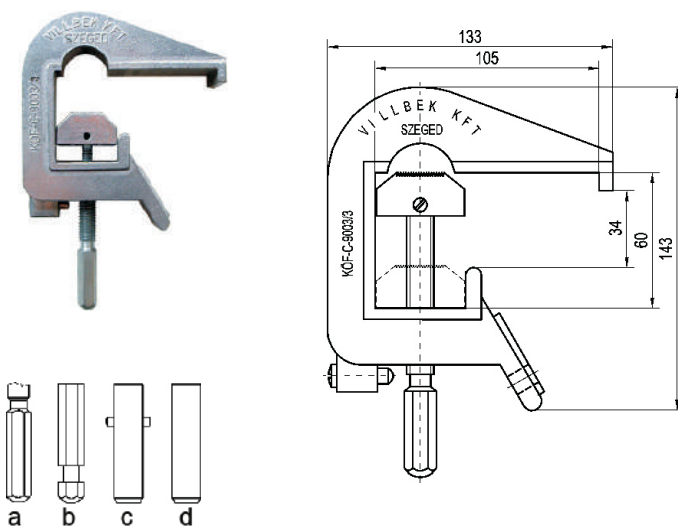
ACCESSORIES CONNECTING TO THE ROD HEAD



KÖF-C-9003/2 phase clamp EN 61230 CE

The KÖF-C-9003/2 phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short-circuiting device. The short-circuiting device can be put on bus bars of transformer stations and power plants as well as can be put on the earthing studs shown below.

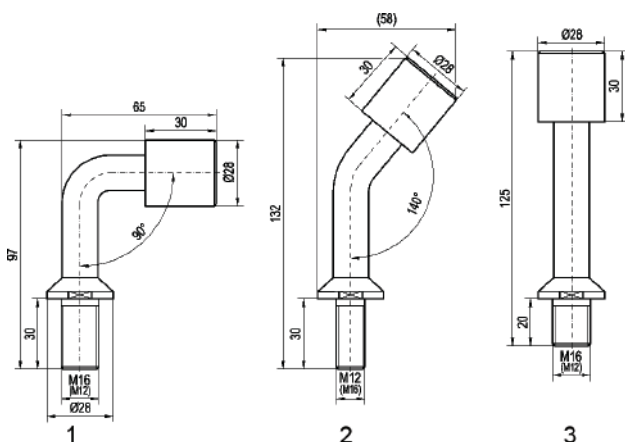
Thermic limit current	For rail	16 kA/1 s
	28 mm stud	16 kA/1 s
Dynamic limit current	For rail	40 kA
	28 mm stud	40 kA
Gripping capacity	Ø100x10 mm rail Ø28 mm wire	
Product code	a:	521507
	b:	521541
	c:	521542
	d:	521543



KÖF-C-9003/3 phase clamp EN 61230 CE

The KÖF-C-9003/3 phase clamp can be built in or can be connected to various operating rods and with copper wire we can get an earthing/short-circuiting device. The short-circuiting device can be used for short-circuiting of rail or wire structured bus bars of transformer stations and power plants.

Thermic limit current	Sínre	20 kA/1 s
	Sodronyra	20 kA/1 s
Dynamic limit current	Sínre	50 kA
	Sodronyra	50 kA
Gripping capacity	Ø100x10 mm rail Ø30 mm wire	
Product code	a:	521554
	b:	521551
	c:	521552
	d:	521553

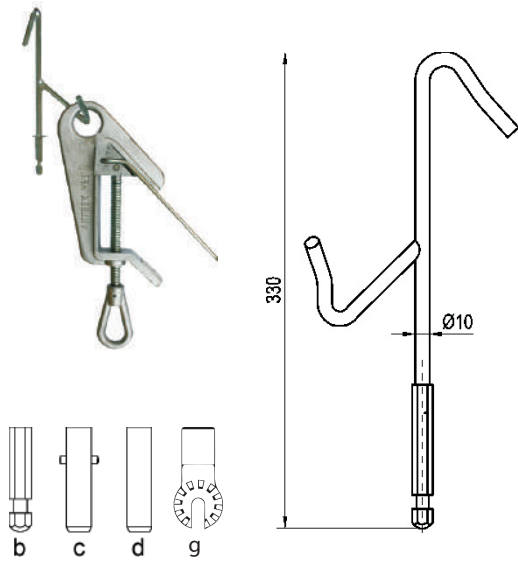


Earthing studs for KÖF-C-9003/2 and KÖF-C-9002/2 phase clamp

Product code	1:	521518
	2:	521519
	3:	521521

ACCESSORIES CONNECTING TO THE ROD HEAD

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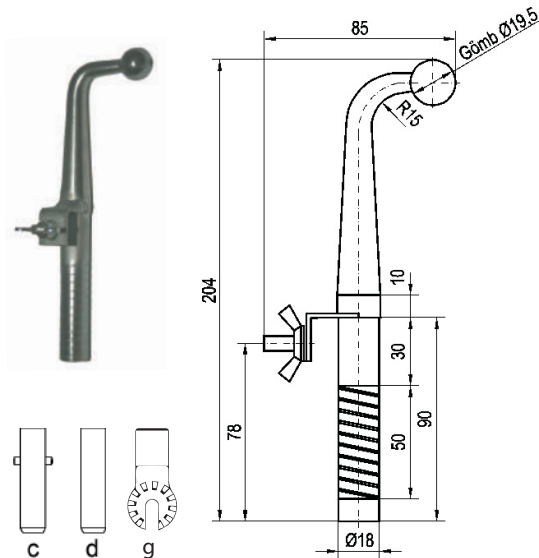
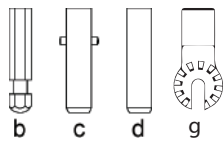


KN-9005/Fh applying hook

for KN-9005/PC phase clamp EN 61230 CE

By means of the lower arm of the applying hook KN-9005/Fh the KN-9005/PC can be put on the phase line of the tube or wire structured bus bars and aerial lines. Having put on, by means of the upper arm, the threaded rod can be rotated fixing the clamp on the phase line.

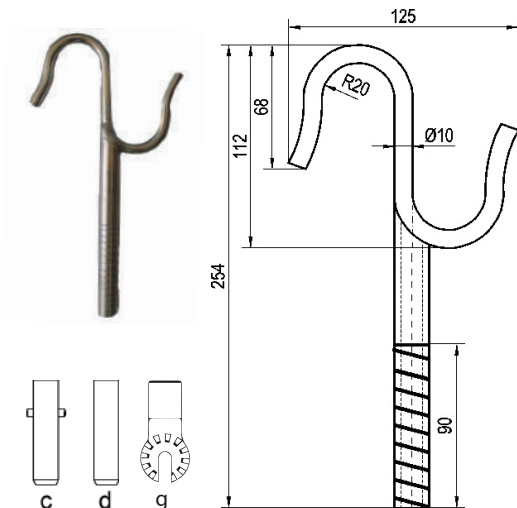
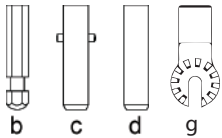
Product code	b:	510011
	c:	510012
	d:	510010
	g:	510013



Spherical switching head

The spherical switching head can be built in or can be put on various operating rods. So we can use it for switching the manually controlled disconnectors.

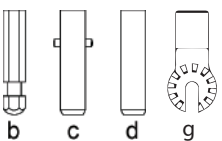
Product code	b:	536601
	c:	536602
	d:	536603
	g:	536611



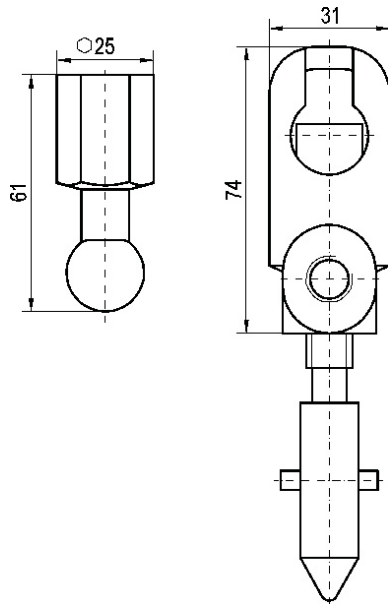
Hook

Connecting the hook to the operating rod.

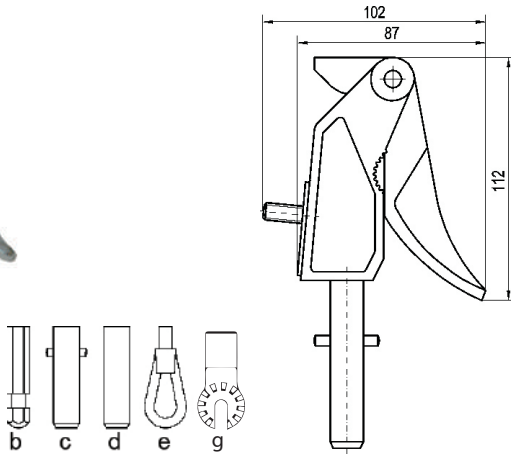
Product code	b:	536604
	c:	536605
	d:	536606
	g:	536613



ACCESSORIES CONNECTING TO THE ROD HEAD



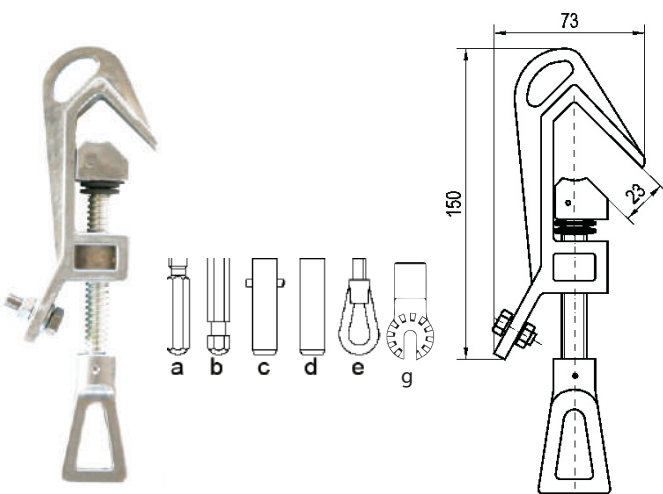
4202 phase clamp		CE
Thermic limit current	24 kA/0,5 s	
Dynamic limit current	60 kA/1 s	
Gripping capacity	Ø20 mm	
Product code	EL-20-004202	



4203 phase clamp		CE
Thermic limit current	40 kA/0,5 s	
Dynamic limit current	100 kA/1 s	
Gripping capacity	Ø25 mm	
Product code	EL-20-004203	



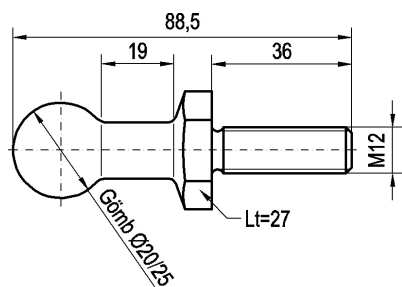
VK-RB-2006 phase clamp		EN 61230	CE
Thermic limit current	18 kA/2 s		
Dynamic limit current	45 kA/1 s		
Gripping capacity	Ø5-30 mm		
Product code	b: 547842 c: 547843 d: 547844 e: 547845 g: 547847		



VK-W-2006 phase clamp		EN 61230	CE
Thermic limit current	23 kA/1 s		
	18 kA/2 s		
Dynamic limit current	57,5 kA/1 s		
Gripping capacity	Ø6-23 mm		
Product code	a: 547850 b: 547851 c: 547852 d: 547853 e: 547854 g: 547856		

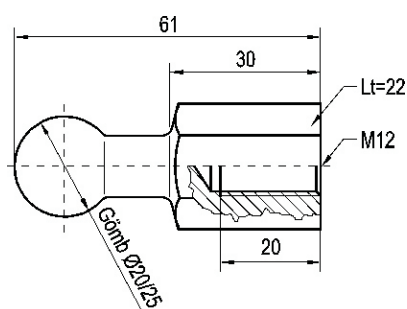
INSERTABLE BALL STUDS FOR CLAMPS "T" INTEGRATOR, WALL MOUNT

VILLBEK Kft.



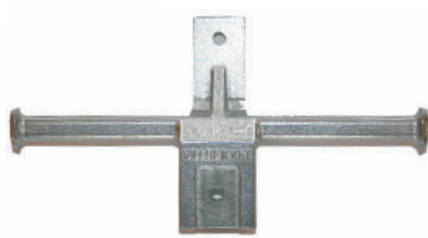
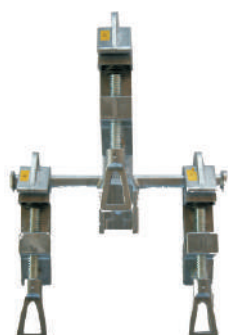
Ø 20 ball stud		CE
Thermic limit current	24 kA/0,5 s	
Thread size	M12	
Ball diameter	Ø20 mm	
Product code	V590151	

Ø 25 ball stud		CE
Thermic limit current	40 kA/0,5 s	
Thread size	M12	
Ball diameter	Ø25 mm	
Product code	V590107	



Ø 20 ball stud		CE
Thermic limit current	24 kA/0,5 s	
Thread size	M12	
Ball diameter	Ø20 mm	
Product code	V590144	

Ø 25 ball stud		CE
Thermic limit current	40 kA/0,5 s	
Thread size	M12	
Ball diameter	Ø25 mm	
Product code	V590136	



VK-RT-2006 "T" integrator

Lenght	240 mm
Height	120 mm
Product code	521528



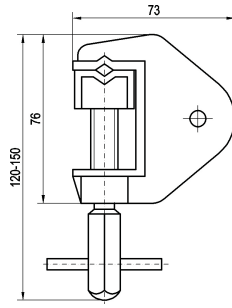
VK-FRZ-FT

Wall mount for
earthing devices

Earthing devices placement with wall bracket on the wall.

Product code	521509
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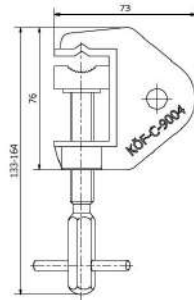
EARTHING CLAMPS, DISCHARGING WHIP



KÖF-C-9004 earthing clamp EN 61230 CE

Connecting copper wire to the clamp type KÖF-C-9004, we can get an earthing short-circuiting device. The earthing whip can be connected to rail or wire type earthing bus bars of transformers or power plants.

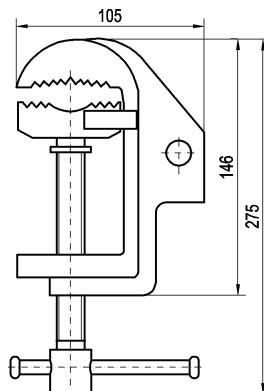
Thermic limit current	For rail	23 kA/1 s	18 kA/2 s
	For wire	23 kA/1 s	18 kA/2 s
	Spherical stud	23 kA/1 s	18 kA/3 s
Dynamic limit current	For rail	57,5 kA	
	For wire	57,5 kA	
	Spherical stud	57,5 kA	
Gripping capacity	Ø0-27 mm		
Product code	514001		
Gripping capacity	Ø0-30 mm		
Product code	514089		



VV-130-MÁV earthing clamp EN 61230 CE

Connecting copper wire to the clamp type VV-130-MÁV, we can get an earthing short-circuiting device. The earthing whip can be connected to rail or wire type earthing bus bars of transformers or power plants.

Thermic limit current	16 kA/0,5 s
Dynamic limit current	40 kA
Gripping capacity	Ø0-80 mm
Product code	521581



VK-E-1500/K discharging whip

EN 61230 CE

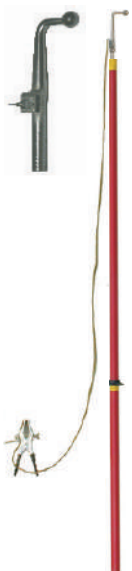
-One section operating rod, type VK-E-1500 (rated voltage of the rod 35 kV)

-Spherical switching head

-Earthing clip

-Wire with cross section of 6 mm² (length of wire 2,5 m)

Product code of the set	547110
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VK-E-2200/K discharging whip

EN 61230 CE

-One section operating rod, type VK-E-2200 (rated voltage of the rod 35 kV)

-Spherical switching head

-Earthing clip

-Wire with cross section of 6 mm² (length of wire 2,5 m)

Product code of the set	547120
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EARTHING ROD, DISCHARGING WHIP

VILLBEK Ltd.



VK-E-3000/R one section earthing rod set			EN 61230	EN 60832	CE
Cross section of the wire	Without wire	50 mm ²	70 mm ²	95 mm ²	120 mm ²
Thermic limit current	-	7,2 kA /1 s	7,2 kA /1 s	7,2 kA /1 s	7,2 kA /1 s
Dynamic limit current	-	16 kA	16 kA	16 kA	16 kA
Product code of the set	547138	547130	547132	547134	547136

- One section operating rod, type VK-E-3000 (rated voltage of the rod 120 kV)
- Phase clamp type KN-2003 / ATR
- Earthing clamp type KÖF-C-9004
- Wire with cross sections of 50, 70, 95 mm² (length of wire 4,5 m)



VK-E-3000/R one section earthing rod set			EN 61230	EN 60832	CE
Cross section of the wire	Without wire	50 mm ²	70 mm ²	95 mm ²	120 mm ²
Thermic limit current	-	10 kA /1 s	16 kA /1 s	20 kA /1 s	21 kA /1 s
Dynamic limit current	-	25 kA	40 kA	50 kA	53 kA
Product code of the set	547158	547150	547152	547154	547156

- One section operating rod, type VK-E-3000 (rated voltage of the rod 120 kV)
- Phase clamp type KN-9005 / PC
- Earthing clamp type KÖF-C-9004
- Wire with cross section of 50, 70, 95 mm² (length of wire 4,5 m)



EARTHING ROD, DISCHARGING WHIP



VK-TR-3000/R telescopic earthing rod set		EN 61230	EN 60832	CE	
Cross section of the wire	Without wire	50 mm ²	70 mm ²	95 mm ²	120 mm ²
Thermic limit current	-	7,2 kA /1 s	7,2 kA /1 s	7,2 kA /1 s	7,2 kA /1 s
Dynamic limit current	-	16 kA	16 kA	16 kA	16 kA
Product code of the set	547138	547170	547172	547174	547176

- Telescopic operating rod, type VK-TR-3000 (rated voltage of the rod 120 kV)
- Phase clamp type KN-2003/ATR
- Earthing clamp type KÖF-C-9004
- Wire with cross section of 50, 70, 95 mm² (length of wire 4,5 m)



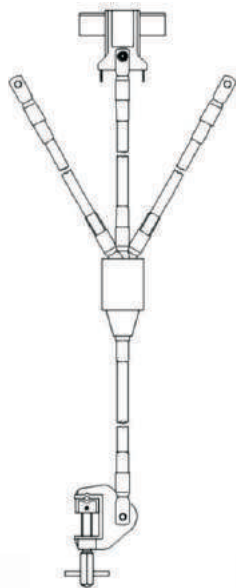
VK-TR-3000/R telescopic earthing rod set		EN 61230	EN 60832	CE	
Cross section of the wire	Without wire	50 mm ²	70 mm ²	95 mm ²	120 mm ²
Thermic limit current	-	10 kA /1 s	16 kA /1 s	20 kA /1 s	21 kA /1 s
Dynamic limit current	-	25 kA	40 kA	50 kA	53 kA
Product code of the set	547198	547190	547192	547194	547196

- Telescopic operating rod, type VK-TR-3000 (rated voltage of the rod 120 kV)
- Phase clamp type KN-9005/PC
- Earthing clamp type KÖF-C-9004
- Wire with cross section of 50, 70, 95 mm² (length of wire 4,5 m)



EARTHING AND SHORT CIRCUITING DEVICES

VILLBEK Ltd.



VK-NR-2000

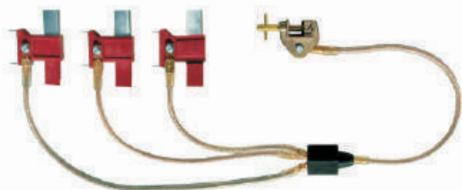
EN 61230



The earthing / short-circuiting device set is applicable for blade-type fuse sockets. During decoupling it is suitable for earthing / short-circuiting of equipment and networks particularly branch circuits where the switching, and disconnecting of them can be carried out by pulling out the blade-type fuse insert.

Components of the set:

- Four branched earthing wire structure, earthing and short circuit device with hook cable lug 400mmx550mmx750mm and 650mm (25mm²). Product code: 514024
- KÖF-C-9004 earthing clamp. Product code: 514001
- Removing handle with protective leather cover Product code of the safety grip: 504031
- Wrench, size 13
- Metal case
- Earthing blades



Blade type	Thermic limit current	Dynamic limit current	Blade size	Product code
3x NH 00	2 kA /0,5 s	3 kA	80	513006
3x NH 0	2 kA /0,5 s	3 kA	125	513007
3x NH 1	5 kA /0,5 s	7,5 kA	135	513008
3x NH 2-3	9,7 kA /0,5 s	17 kA	150	513009
3x NH 4	9,7 kA /0,5 s	17 kA	200	513010



VK-NR-2000-1

EN 61230



Components of the set:

- Four branched earthing wire structure, earthing and short circuit device with hook cable lug 400mmx550mmx750mm and 650mm (25mm²). Product code: 514024
- KÖF-C-9004 earthing clamp. Product code: 514001
- Removing handle with protective leather cover Product code of the safety grip: 504031
- Wrench, size 13
- Plastic case
- Earthing blades
- Product code of the set: 513004

Blade type	Thermic limit current	Dynamic limit current	Blade size	Product code
3x NH 00	2 kA /0,5 s	3 kA	80	513100
3x NH 1-3	5 kA /0,5 s	7,5 kA	135	513105



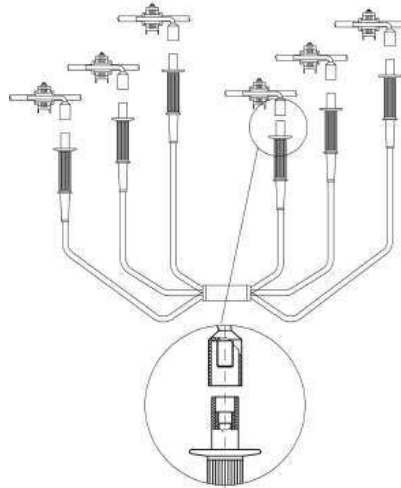
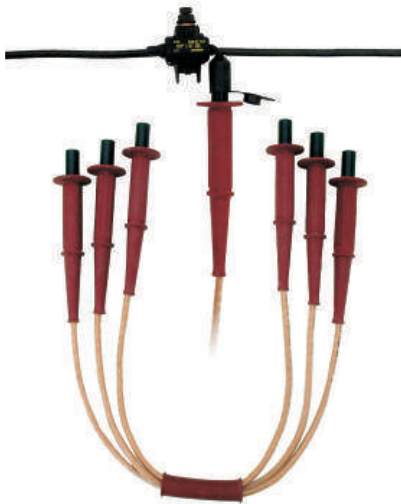
VK-E-350



To insert earthing cartridges or earthing bits with M10 connecting. To connect the earthing device to cartridges. Length: 355mm

Product code	547109
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EARTHING AND SHORT CIRCUITING DEVICES



SZL-FRZ-25

EN 61230 CE

The earthing / short-circuiting devices are for earthing and short-circuiting of the leads on the low voltage insulated networks, on the specified point. The piercing branch clamp with the threaded pipe is permanently fastened to the leads. During short-circuiting, the threaded ends of the 6 branched wire structure shall be driven into the branching pipes to the bottom. The set contains the short-circuiting apparatus. The piercing branch clamp and the threaded pipe shall be ordered additionally. The short-circuiting wire structure is delivered in a metal case.

Thermic limit current	5 kA/1 s
Dynamic limit current	12,5 kA
Earthing cable	25 mm ²
Product code	512100



Branching pipe threaded VK-P-M

CE

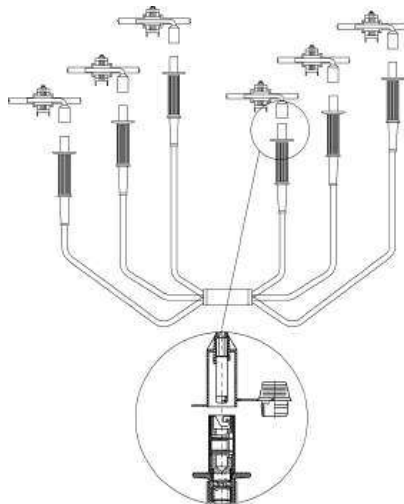
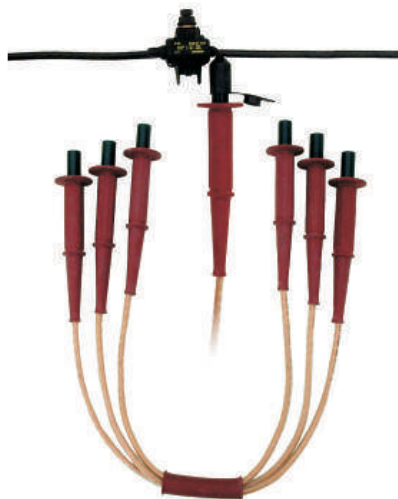
Product code	310004
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SZL-FRZ-L-16-16

EN 61230 CE

Set content:
1 earth cable in extra-flexible cooper, 16mm², length: 16m;
1 bronze earthing clamp, KÖF-C-9004; 1 bayonet plug;
plastic case

Product code	510421
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SZL-FRZ-B-25

EN 61230 CE

The earthing / short-circuiting devices are for earthing and short circuiting of the leads on the low voltage insulated networks, on the specified point. The piercing branch clamp with the bayonet pipe is permanently fastened to the leads. During short-circuiting, the bayonet sockets of the 6 branched wire structure shall be put into the branching pipes. The set contains the short-circuiting apparatus. The piercing branch clamp and the bayonet pipe shall be ordered additionally. The short-circuiting wire structure is delivered in a metal case.

Thermic limit current	5 kA/1 s
Dynamic limit current	7,5 kA
Earthing cable	25 mm ²
Product code of the set	510400

Branching pipe bayonet VK-P-B

CE

Product code	310006
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SZL-FRZ-L-16-16

EN 61230 CE

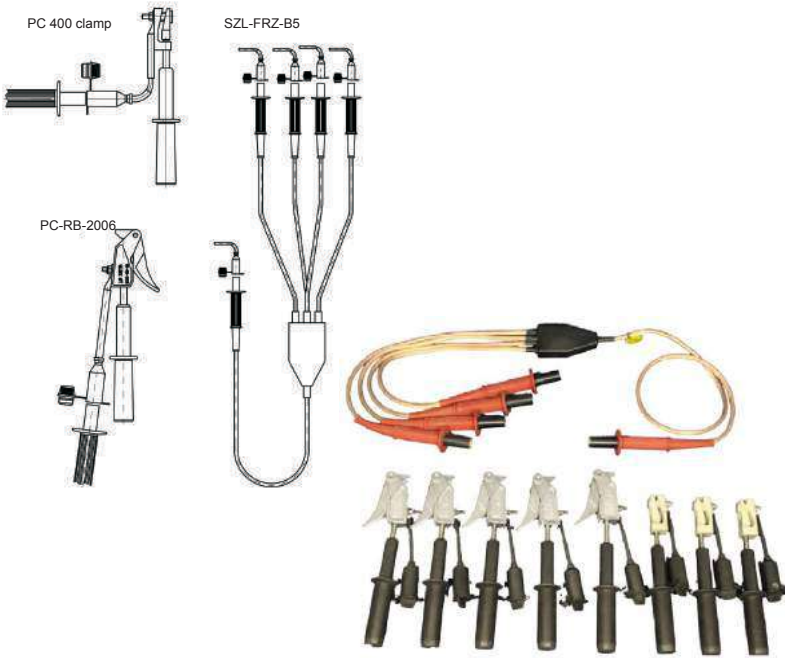
Set content:
1 earth cable in extra-flexible cooper, 16mm², length: 16m;
1 bronze earthing clamp, KÖF-C-9004; 1 bayonet plug; 1 plastic case

Product code	510421
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EARTHING AND SHORT CIRCUITING DEVICES

VILLBEK Ltd.



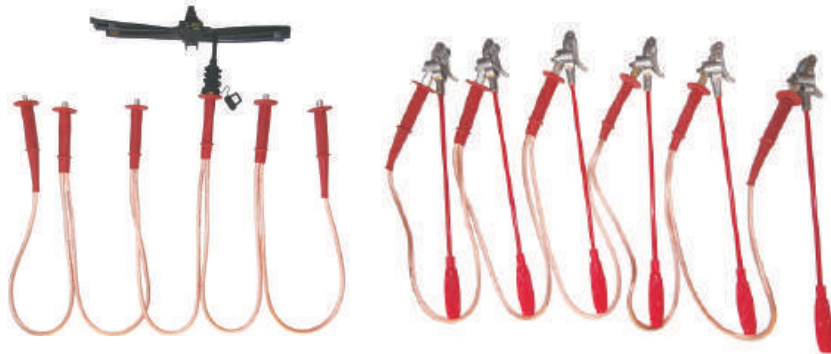
ABC KIT

EN 61230



The ABC earthing and short-circuiting equipment is for earthing and short-circuiting of low-voltage overhead line segment that have been disconnected for maintenance.

Thermic limit current	5 kA/1 s
Earthing cable	Cu 1,2 m 25 mm ²
Phase cable	Cu 1,8 m 25 mm ²
Diameter of the conductor	95 mm ² , Al conductor
Earthing point	5 mm, Cu bus bar
Product code	510450



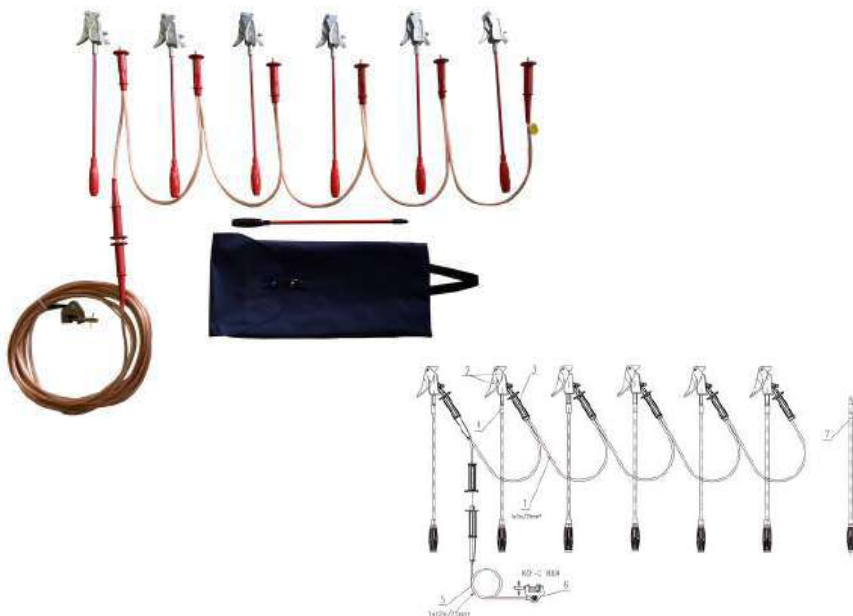
KIF-2011-BR

EN 61230



The KIF-2011 BR earthing and short-circuiting equipment is for earthing and short-circuiting of low-voltage bared and insulated overhead line segment that have been disconnected for maintenance.

Thermic limit current	5 kA/1 s
Gripping capacity	300 mm ² and 70 mm ²
Earthing cable	25 mm ²
Product code	510150



VK-BR-2006/2011

EN 61230



The VK-BR-2006/2011 earthing and short-circuiting equipment is for earthing and short-circuiting of low-voltage bared and insulated overhead line segment that have been disconnected for maintenance.

Thermic limit current	18 kA/2 s
Gripping capacity	5 mm - 30 mm
Earthing cable	25 mm ²
Product code	547927

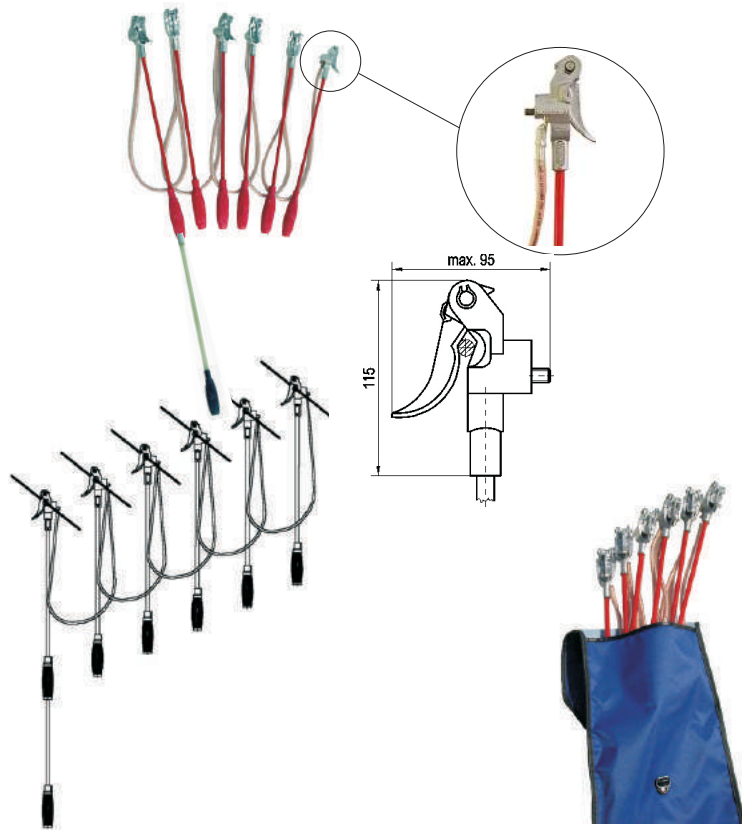
EARTHING AND SHORT CIRCUITING DEVICES

KIF-9001

EN 61230



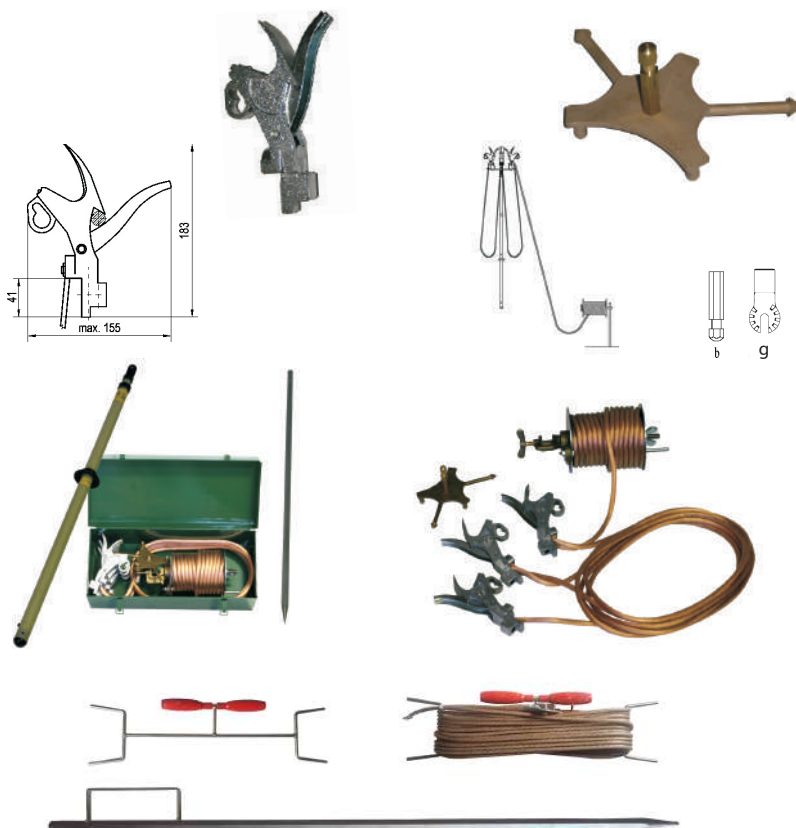
The earthing / short-circuiting device is for earthing and short-circuiting of low-voltage overhead line segment that have been disconnected for maintenance. The set consist of 6 aluminium cast spring connecting clamp with shaft of fibreglass synthetic resin and plastic handle (length: 52 cm) and 1 insulating rod extension with threaded joint. The phase clamps are connected to each other by extremely flexible copper cable (25mm²) with transparent protective insulation. The cable is connected to the phase clamps by cap-bolted joint without interrupting the continuity of the phase conductor. A device set is delivered in a waterproof canvas bag.



Thermic limit current	5 kA/1 s 7 kA/0,5 s
Dynamic limit current	12 kA
Earthing cable	25 mm ²
Gripping capacity	Ø5-14 mm
Product code of the set	510100
Product code of the clamp 9001	510101
Product code of the bag	510117
Product code of the extension	510104

KÖF-KJ-8901/1 phase clamp

KÖF-8901/cs clamp dispenser head



KÖF-8901

EN 61230

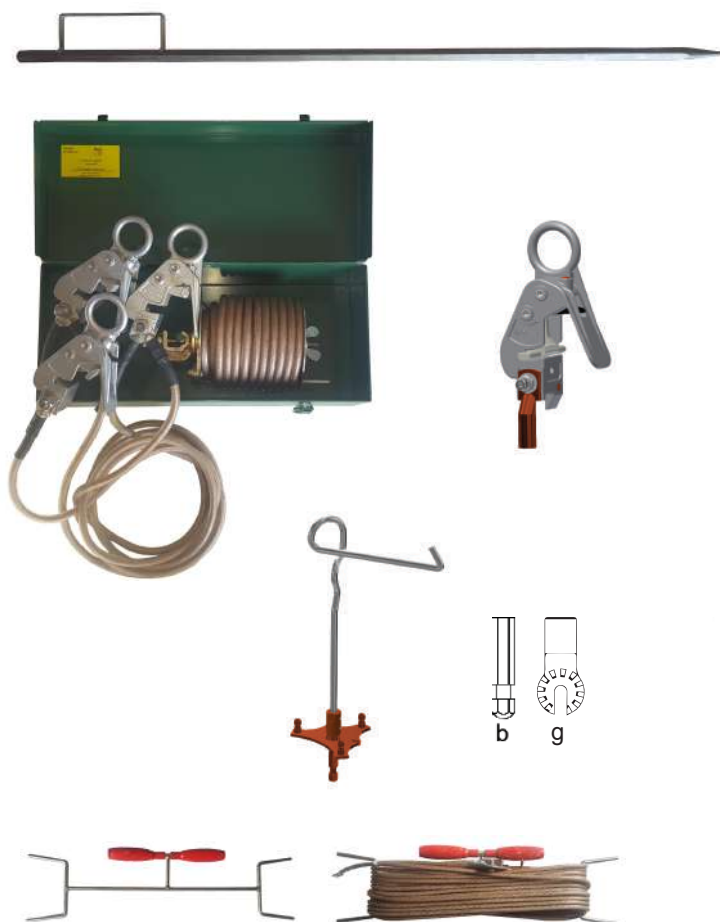


The earthing / short circuiting device is for earthing and short circuiting of medium voltage electric line segment that have been disconnected for maintenance. The complete set consists of phase clamps, mounting/removing tool, earthing cable and an operating rod. Items of the set can be ordered separately as well. The complete set thermic limit current: 6kA/1 sec

Thermic limit current /set/	6 kA/1s
Thermic limit current /clamp/	15 kA/1 s 12 kA/2 s
Dynamic limit current /clamp/	37,5 kA/1 s
Earth cable	25 mm ²
Gripping capacity of the clamp	Ø5-15 mm
Product code of the set	523000
KÖF-KJ-8901/1 product code	523002
KÖF 8901/cs product code	b: 523015 g: 523019
KÖF 8901/FSZ earthing probe	Ø17 mm
Product code	523014
KÖF 8901/C Cable holder	610/455mm
Product code	523101
KÖF 8901/D cable drum	523013
KÖF 8901/FSZ/H earthing probe	523017

EARTHING AND SHORT CIRCUITING DEVICES

VILLBEK Ltd.



KÖF 8901/FSZ/H EN 61230

KÖF 8901/FSZ/H earthing probe	Ø17 mm
Product code	V523017

KÖF-8901/AUT automatic earthing devices CE

The earthing / short circuiting device is for earthing and short circuiting of medium voltage electric line segment that have been disconnected for maintenance.

Product code	522850
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KÖF-KJ-8901/AUT automatic phase clamp CE

Gripping capacity	4-25 mm
Thermic limit current	20kA/1s
Dynamic limit current	42kA/1s
Product code	522851

KÖF 8901/AUT/CS dispenser head

Product code	b:	523115
	g:	523116

VK-O-95-4 EN 61230 CE

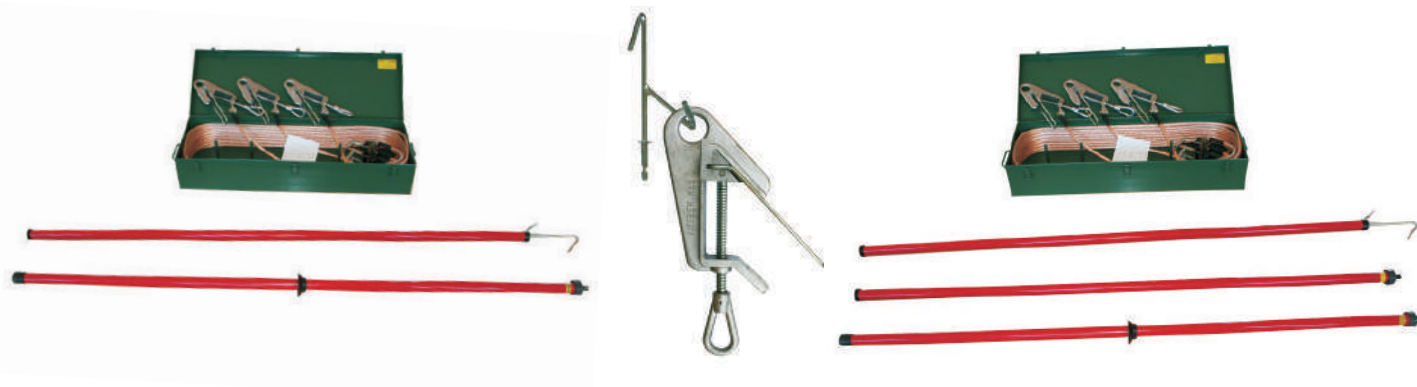
The VK-O-95-4 (95 mm² wire) earthing and short circuiting device is to earth and short circuit the overhead network per phase. The earth clamp shall be placed on the common earth potential.

Type	VK-O-95-4
Thermic limit current	20 kA/1 s
Dynamic limit current	50 kA
Gripping capacity of the clamp	Ø 5-70 mm
Product code	523111

VK-O-50-6 EN 61230 CE

The VK-O-50-6 (50 mm² wire) earthing and short circuiting device is to earth and short circuit the overhead network per phase. The earth clamp shall be placed on the common earth potential.

Type	VK-O-50-6
Thermic limit current	10 kA/1 s
Dynamic limit current	25 kA
Gripping capacity of the clamp	Ø 5-70 mm
Product code	523110

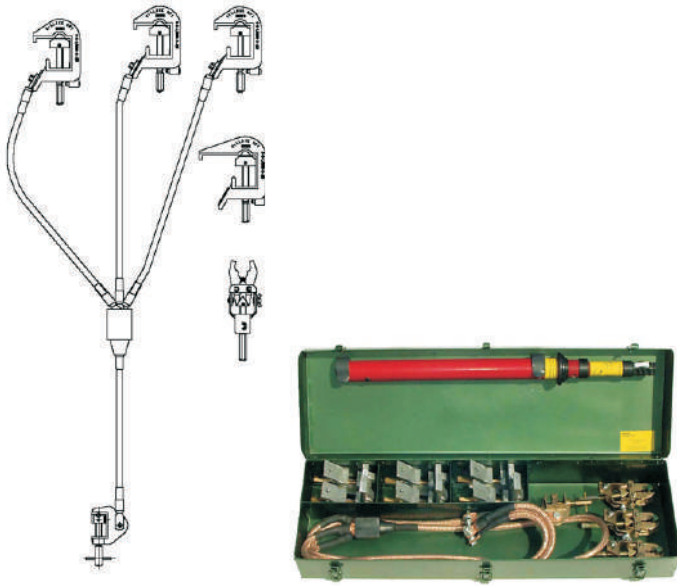


EARTHING AND SHORT CIRCUITING DEVICES

VK-FRZ-20/xx

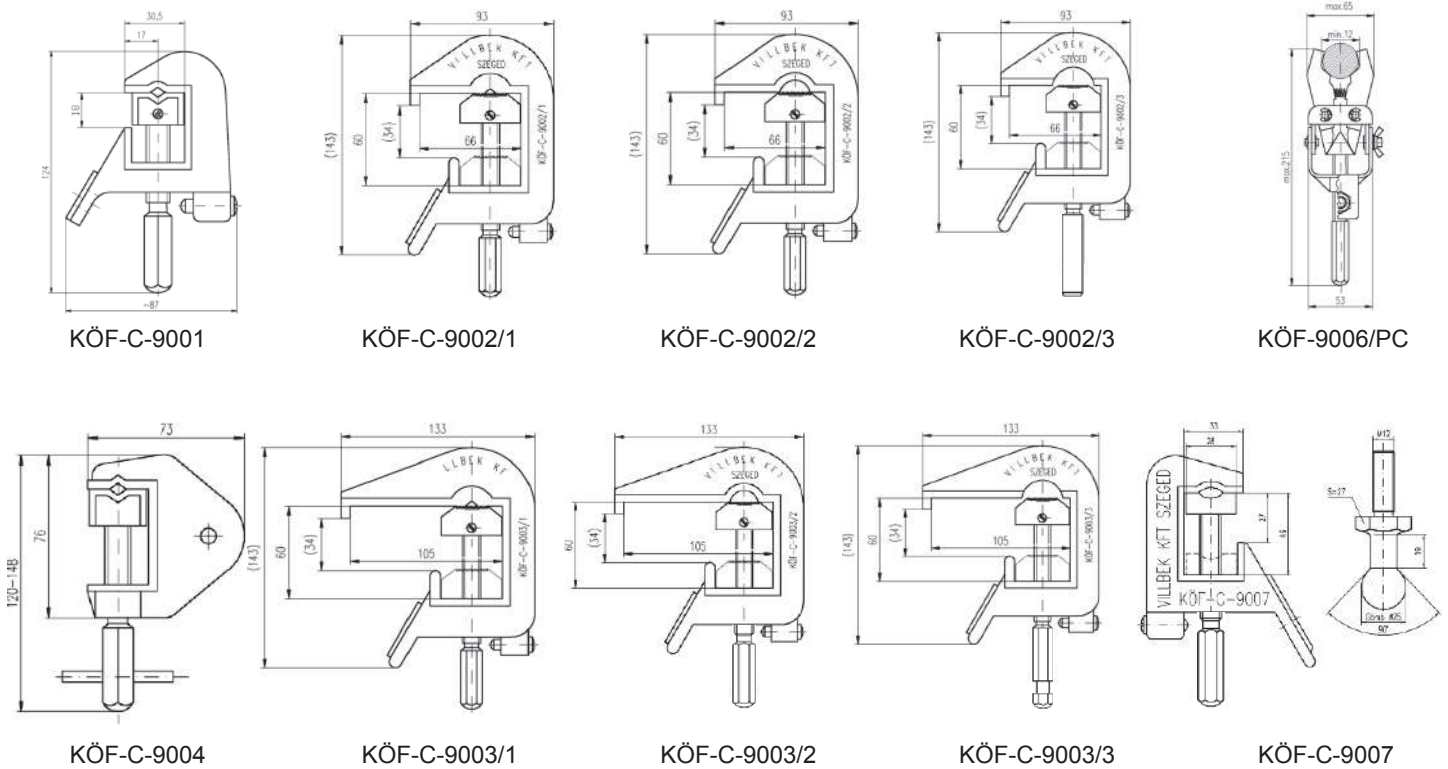
EN 61230 CE

The earthing/short-circuiting device set is designed for earthing and short circuiting of the flat bars, cable heads of the armoured distribution system, and transformer substations. The form of the phase clamps provides easy connection to the pre-manufactured studs, cylindrical contact pins as well as spherical studs. The placing of the phase clamps must be carried out with operating rods suitable for the appropriate voltage level.



VILLBEK Ltd.

Phase clamps can be found in the set



EARTHING AND SHORT CIRCUITING DEVICES

VK-3-RB-2006

EN 61230CE

Short-circuiting and earthing device for MV substation. 3pcs VK-3-RB-2006 aluminium alloy spring clamps mounted on VK-E-1500 insulated stick.

Capacity of the clamps	5-30mm
Thermic limit current	18kA/2s
Product code	V590429



VK-2R-C-1350, VK-2R-C-3000, VK-3R-C-7500

EN 60852

Connectable multiuse pole with two VK-2R or three VK-3R sections made of polyester and fiberglass tube 32mm diam. and polyurethane foam filling with U (Universal), B (Bayonet), or C (Hexagonal) head. According to EN 60852 standards.

Product code VK-2R-C-1350	V536114
Product code VK-2R-C-3000	V536112
Product code VK-3R-C-7500	V504002



Fuse clamp

CE

Fuse clamp is used for working on live parts with insulated rod of an installation with voltages exceeding 1 kV a.c. The operating clamp is used to remove and insert HV high-breaking-capacity fuses. The clamping jaws can be easily and quickly opened and closed by turning the telescopic rod. The fuse clamp has different endings to connect easily to the insulated telescopic rod.

Capacity of the clamp	45-70mm
Product code	V523018



VK-KDA

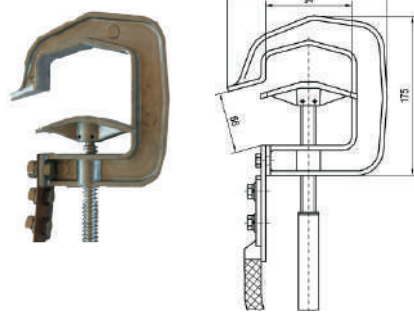
CE

Cable drum unreeling frame with aluminium rollers. Size can be set for the size of the drum. Weight: 18kg
Max load: 1000kg
Cable drum diameter: 400-1200mm

Product code	V504034
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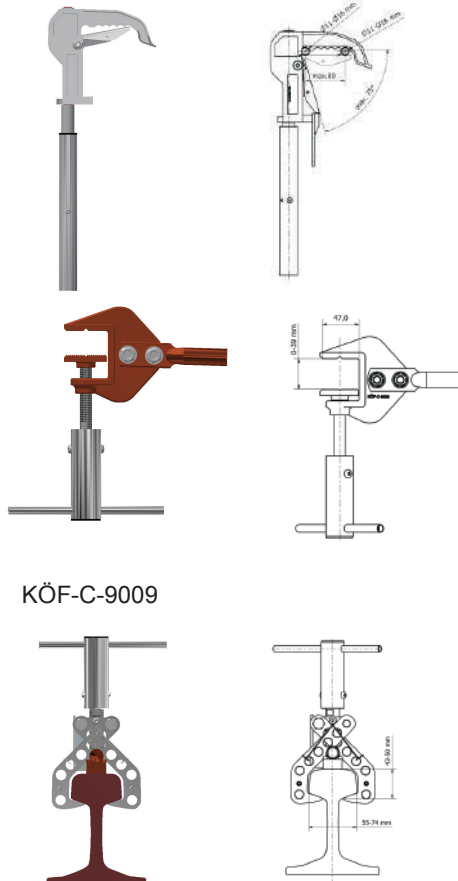
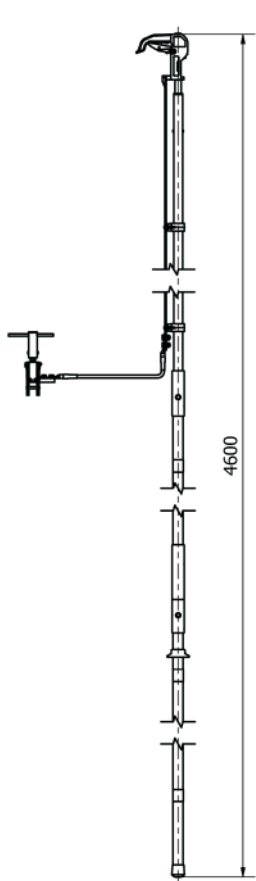
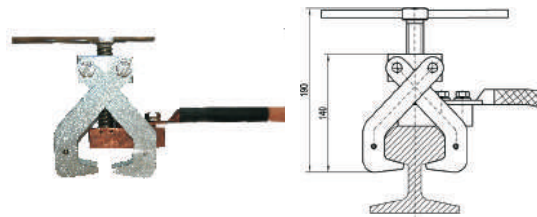
UNIPOLAR SHORT CIRCUITING DEVICE



VK-OM-FRZ EN 61230 CE

Unipolar short-circuiting device is suitable for connecting bus bar and overhead line.

Product code	522900
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VK-25-70315
VK-25-70316 EN 61230 CE

The VK-25-70315 and 70316 earthing rod equipment is for earthing 25 kV overhead line traction systems. The clamps of earthing devices have torque limiter.

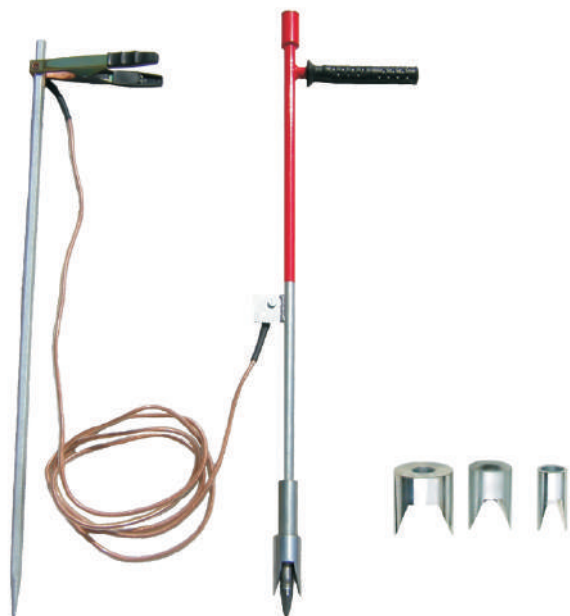
Type of device	70315	70316
Thermic limit current	12 kA/0,25 s	40 kA/0,25 s
Dynamic limit current	35 kA	
Earth cable	Lenght: 6100 mm; Cu 50 mm ² Lenght: 8100 mm; Cu 50 mm ²	
Weight of the set	13 kg	14 kg
Earthing clamp type	KÖF-C-9008	KÖF-C-9009
Torque of earthing clamp	22 Nm	
Torque of phase clamp	14 Nm	
Number of rod elements	2 pcs	

KÖF-C-9009

KÖF-C-9008

CABLE PIERCING TOOL, CABLE SHOOTING TOOL, EARTHING MAGNET LOCK

VILLBEK Ltd.



Cable piercing tool

The cable piercing tool helps to select the faulty cable during maintenance carried out on LV earth cable networks.

Rated voltage	0,4 kV
Lenght of wire	2,5 m
Cross section of wire	16 mm ²
Lenght of cable piercing tool	1 m
Lenght of earthing probe	1 m
Product code of the set	547450



Cable shooting tool

The cable shooting tool helps to select the faulty cable during maintenance carried out on LV and MV earth cable networks. The tool is operated by cartridges filled with different portions of gun powder.

Product code of the set	547460
Product code of 30 mm blade	547461
Product code of 45 mm blade	547462
Product code of red cartridge '50'	547463
Product code of blue cartridge '50'	547464



VK-FMZ04 Earthing magnet lock



The earthing magnet lock is suitable to 600-1500 V rated public transport purpose electrical DC earthing networks.

Thermic limit current	10 kA/1s
Adhesion force	1300 N
Product code	547465



VK-E-1150-A

Operating pole as single sections 1,15m. The pole being fitted with VK-A-1 adapter.

Product code	536740
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VK-A-1

Socket type VK-A-1 supports clamps being applied in an upward direction.

Product code	536478
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VK-FR-25/19 earthing hook



The earthing rod equipment is for earthing overheadline traction systems.

Gripping capacity	12-68mm
Product code	521582

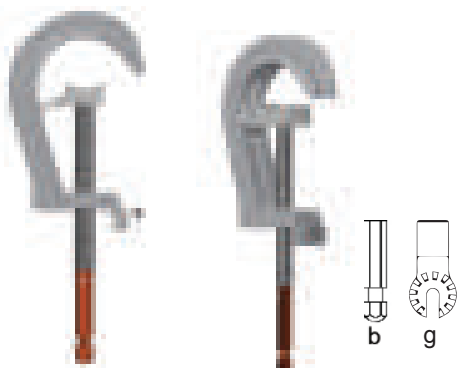


VK-FR25/MÁV automatic phase clamp



The earthing rod equipment is for earthing 25kV overheadline traction systems.

Gripping capacity	12-43 mm
Thermic limit current	8kA/1s
Dynamic limit current	20,1kA/s
Product code	522854



KÖF 9010 clamp for cylindrical conductors



Gripping capacity	10-104 mm	
Product code	b:	522855
	g:	522856

VOLTAGE DETECTORS FOR LOW VOLTAGE AND CONTACT PROBE

VILLBEK Ltd.



Elma LV voltage detectors

EN 61243-3

The voltage detector is a new and unique voltage tester with safety and lots of clever details including: long flexible cord, smart test rod attachment with spacers that fit perfectly in the socket. The instrument has auto select of function, making it virtually impossible to operate wrong. Self test. Double insulated, CAT IV 600 V, IP65. Both instruments complies to (EN 61243-3:2010, EN 61010-1:2010 and EN 61010-31:2002+A1:2008)

Technical specification	ELMA 2000x	ELMA 2100x
Display	LED	LED and LCD
Voltage display (LED)	12 V, 24 V, 50 V, 120 V, 230 V, 400 V, 690 V (AC/DC)	12 V, 24 V, 50 V, 120 V, 230 V, 400 V, 690 V (AC/DC)
Voltage display (LCD)	-	7,0-800/ 720 V (AC/DC)
Unipolar voltage detecting mod	100-690 V (AC)	
Phase order testing mod	200-690 V (50/50 Hz)	
Continuity testing with LED and sound	0-400 kOhm	
Testing power	<3,5 mA	
Operating temperature	-15...55 °C	
Weight	190 g	

Bag for the meter

Product code 6398167251



One-piece contact probe

Lenght	900 mm
Product code	401054

Bag for the one-piece contact probe

Lenght	900 mm
Product code	BA00202

Three-piece contact probe

Lenght	3x440 mm
Product code	401055

Bag for the three-piece contact probe

Lenght	500 mm
Product code	BA00432

EARTH FAULT LOCATION FINDER, LV PHASE COMPARATOR, CABLE IDENTIFIER

EARTH FAULT LOCATION FINDER



VKP-FZK20

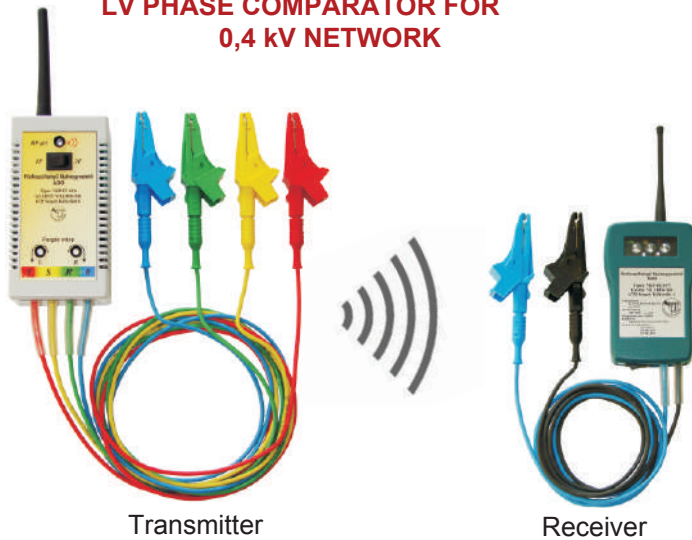
EN 61010-1 CE

EN 61326-1

The earth fault location finder is suitable for finding the location of the permanent earth fault of MV aerial networks. The sensitivity of the device can be changed by the push buttons. The measured values can be viewed on the LDC graphic display.

Product code	547916
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LV PHASE COMPARATOR FOR 0,4 kV NETWORK



Transmitter

Receiver

VKP-FE/04

EN 61010-1 CE

EN 61010-2-031

EN 61326-1

On 0,4 kV three-phase networks (aerial or insulated) the LV phase comparator is able to identify the phases between the base station and a remote point. The transmitter device shall be connected always to the phase conductor on the base station. Using the receiver device each phase of the base station can be identified at any point of the network, moving away from the base station. The transmitter and receiver communicate via radio frequency. The range of transmission may vary between 100 and 200 meters, depending on the transmission of the RF signal.

Product code	547912
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CABLE IDENTIFIER



Transmitter

Receiver

VKP-IKA

EN 61010-1 CE

EN 61010-2-031

EN 61326-1

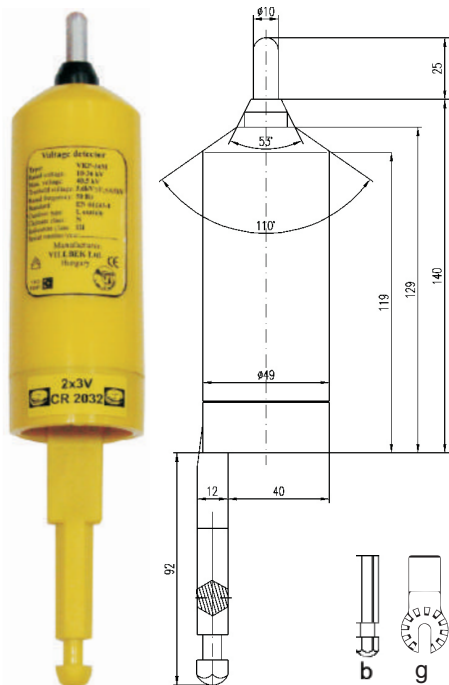
The VKP-IKA cable identifier is suitable for identifying uncharged earth cables. The device kit consists of two instruments, a rechargeable battery powered pulse transmitter and a battery powered pulse receiver. Connecting the transmitter unit to the end point of the uncharged cable, the cable to be found can be identified by the receiver on any point (in cable chamber or cable conduit) of the cable route. The radio communication between the transmitter and the receiver allows the range 100-2000 meters, depending from the radio signals.

Product code	547910
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VOLTAGE DETECTOR

VILLBEK Ltd.

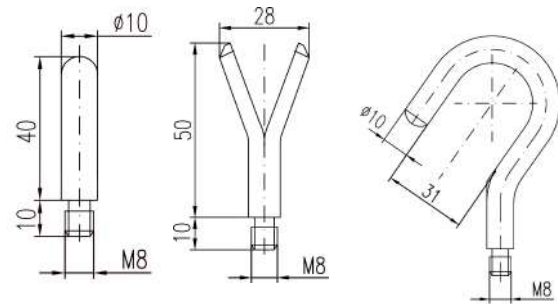
MINI VOLTAGE DETECTOR FOR MEDIM VOLTAGE



VKP-36M EN 61243-1

The voltage detector is for detecting the presence of voltage in the electrical equipments with the rated voltage of 10-36 kV. This type has smaller dimension than the other types. That is why it can be used very useful in difficult approach and narrow places. Detecting the rated voltage level the device gives audible signal and flashing light indication as well.

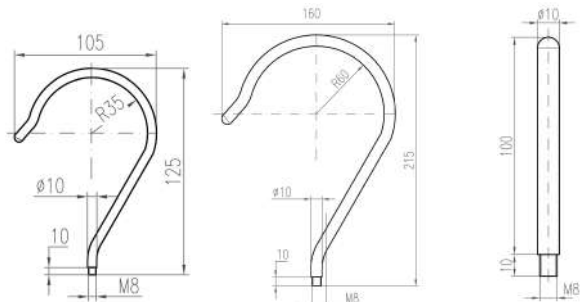
Rated voltage	10-36 kV
Max. voltage	40,5 kV
Threshold voltage	$3,6 \text{ kV} \leq U_k \leq 4,5 \text{ kV}$
Product code	b: 505004
	g: 505006



VOLTAGE DETECTORS FOR MV AND HV

EN 61243-1

They can be used for indicating rated voltage on medium voltage AC equipments. They can be used together with operating rods appropriate for the tested voltage levels. Detecting the rated voltage level the device gives audible signal and flashing light indication as well.



VKP-10

VKP-35

VKP-120



Type	Rated voltage	Max. voltage	Threshold voltage	Product code
VKP-10	3-10 kV	12 kV	$1,1 \text{ kV} \leq U_k \leq 1,3 \text{ kV}$	505001
VKP-35	10-35 kV	40,5 kV	$3,5 \text{ kV} \leq U_k \leq 4,5 \text{ kV}$	505002
VKP-120	120 kV	145 kV	$18 \text{ kV} \leq U_k \leq 48 \text{ kV}$	505005

VOLTAGE BRAKE INDICATOR, PHASE COMPARATOR

MEDIUM VOLTAGE BREAK INDICATOR



VKP-FAM-35



RG3622-1

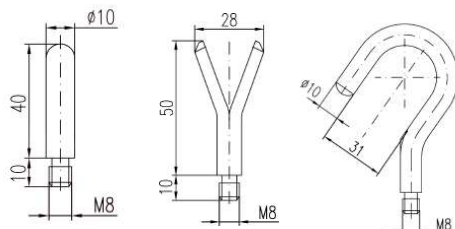
VKP-FAM-35

EN 61243-1

The device is suitable for monitoring the presence of voltage on the MV network during live working. If break may occur the equipment gives light and sound signal. The device can be used only with operating rod suitable for live working and tested for the related voltage level.

Rated voltage	6-35 kV
Max. voltage	40,5 kV
Treshold voltage	$1 \text{ kV} \leq U_k \leq 2 \text{ kV}$
Product code	505400

UNIPOLAR PHASE COMPARATOR



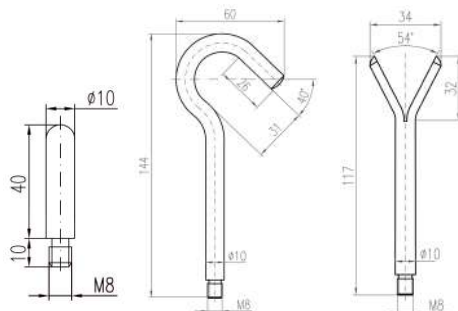
VKP-A-35

EN 61481

The device is suitable for comparing the phases of the live medium voltage systems to be connected to each other. Each step of the test is indicated by audible and light signals. The device can be used with operating rod, appropriate for the tested voltage level.

Rated voltage	10-35 kV
Max. voltage	40,5 kV
Treshold voltage	$3,5 \text{ kV} \leq U_k \leq 4,5 \text{ kV}$
Product code	505003

COMBINED UNIPOLAR PHASE COMPARATOR AND VOLTAGE DETECTOR



VKP-AF-638

EN 61243-1

EN 612481

It can be used for indicating voltage on medium voltage AC equipments or for phase comparison. We can choose between the two operating modes. The steps of the detection are accompanied by light and sound signals. The device can be used only with operating rod tested for the related voltage level.

Rated voltage	6-38 kV
Max. voltage	40,5 kV
Treshold voltage	$1,9 \text{ kV} \leq U_k \leq 2,4 \text{ kV}$
Product code	505300

RF PHASE COMPARATOR, DC VOLTAGE DETECTOR

RF PHASE COMPARATOR

VKP-RFA-638 **EN 61481**

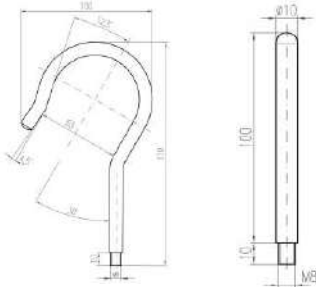


Transmitter
VKP-RFA 638/A



Receiver
VKP-RFA 638/V

The device is suitable for phase comparison of systems to be connected on live MV networks. The device set consists of a transmitter and a receiver unit with radio frequency communication. The receiver unit gives information via different light and sound signals whether the phase detected is the same or differs from the one detected by the transmitter. The comparison is continuous, there is no time limit. The communication distance of the two units is 15-20 m. The devices shall be used with the appropriate manipulating rods tested for the given voltage levels.



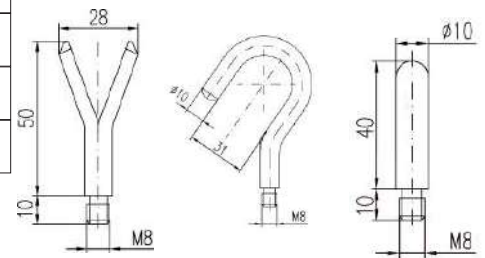
Type	Rated voltage	Max. voltage	Treshold voltage	Product code
VKP-RFA-638/A	6-38 kV	40,5 kV	$2 \text{ kV} \leq U_2 \leq 3,5 \text{ kV}$	505308
VKP-RFA-638/V				505309
VKP-RFA-638				505310

DC VOLTAGE DETECTOR

VKP-E-1 **EN 61230** **CE**

The instrument is applicable mainly in case of the electric trolley at direct voltage (subway train, tram, trolley). The voltage detector can be used only with insulated operating rod.

Rated voltage range	600-1200 V DC
Max voltage	1200 V DC
Voltage treshold	$U_1=120\text{V DC}; U_2= 450\text{V DC}$
Product code	515100



VOLTAGE DETECTOR

VKP-36M-S **CE**

The Compact Voltage Detector with LEDs (10-36kV) is a compact serie voltage detector, designed for indoor use. The Compact Voltage Detector voltage presence is indicated by a high-brightness LEDs indicator

Rated voltage	10-36 kV
Retracted length	450 mm
Extended length	1100 mm
Product code	510422



FIELD STRENGTH DETECTORS

VKP-TD-50M

EN 61010-1 EN 61326-1 CE

The VKP-TD 50 M field strength detector is a receiver having high sensitivity and selectivity. The unit is capable of detecting the electric field generated by 230V/50Hz network voltage cables. From a relatively great distance (a few meters) with the unit we can determine whether a cable is live and with the changing of the field strength we can infer whether the cables are live. The sensitivity is easily changeable with the button.

Product code	515515
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VKP-TD04-20K

EN 61010-1 EN 61326-1 CE

The VKP-TD04 20K field strength detector is a device with high sensitivity and selectivity. The unit is capable of detecting electric field generated by 0,4-20 kV network voltage - we can establish if network is live or not. The basic sensitivity of the device is set by the manufactured on the basis of a rated voltage given by the customer. A device is able to give reliable indication for only one set rated voltage.

Product code	510116
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VKP-TD-04KV

EN 61010-1 EN 61326-1 CE

The VKP-TD04KV field strength detector is a receiver having high sensitivity and selectivity. The unit is capable of detecting the electric field generated by 0,4 kV network voltage cables. From a relatively great distance (2-4 meters) with the unit we can determine whether a cable is live. The device is waterproof.

Product code	510117
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FIELD STRENGTH DETECTORS MOUNTABLE ON HELMET



VKP-D-35

EN 61010-1 EN 61326-1 CE

During pole climbing, the device mounted on the helmet gives a warning signal when the aerial line approached is live. When getting closer to the live component a faster and faster intermittent sound signal can be heard.

Rated voltage	10-35 kV
Product code	515110



VKP-TDS-35

EN 61010-1 EN 61326-1 CE

The VKP-TDS-35 type field strength analyzer's task is to warn the workers when it detects a 10– 35 kV energized equipment within up to a distance of 2 meters of approach. It detects the electric field strength, and if the signal exceeds the preset value, the sensor that is located inside the helmet will make a warning sound. The field strength detector can be placed inside the safety helmet. The device has a flexible inlay that can be inserted inside the helmet with the help of the grasping prongs.

Product code	515111
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RF AMMETER, FAULT LOCATION FINDER

VILLBEK Ltd.

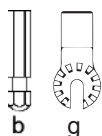
RF AMMETER SET



Transmitter



Receiver



VKP-AMM

EN 61010-1 CE

EN 61326-1

The VKP-AMM ammeter is suitable for quickly measuring the operating current of the 0,4-35 kV networks (bus-bar or aerial). The ammeter kit contains a RF transmitter and a receiver unit. The values measured by the measuring transmitter are transmitted by the built-in RF transmitter to the receiver unit. The values measured are shown by a LED display. The ammeter transmitter shall be applied by operating rod appropriate for the given voltage level. The range of RF transmission is 15 m.

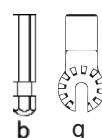
Measurement ranges	0-200 A
	0-500 A
	0-1000 A
	0-2000 A
Product code	g: 547908
	b: 547907

(SHALL BE CHOSEN WHEN ORDERING!)



Transmitter

Receiver



FAULT LOCATION FINDER SET

VKP-LZK04

EN 61010-1

CE

EN 61010-2-031

EN 61326-1

The device is suitable for find the fault location on the low-voltage insulated overhead lines. The set includes two unit: transmitter and receiver with adapter (which can be fixed to insulated sticks). Signals: audible and visible.

Product code	b: V515615
	g: V515617

ULTRASONIC CABLE HEIGHT METER, VOLTAGE DETECTOR FOR BUS-BARS

Measurable cable height range (min. Ø10 mm aerial line)	3-15 m
Measurable cable height range (min. Ø5 mm aerial line)	3-10 m
Measurable cable height range (min. Ø3 mm aerial line)	3-6 m
Number of measurable cables	5
Accuracy	1% ; ± 3digit
Minimum distance between the cables	15 mm
Operating temperature	-15°C - +45°C (built-in heat correction)
Radiating cone angle of the ultrasound	15°
Power supply	2 built-in 9V Ni-Mh batteries
Batteries lifetime	700-800 recharges
Charging voltage	Polarity independent 9-14 V DC (Battery charging from AC adapter or car charger.)
Consumption	30 mA
Supply voltage low indication	Battery empty message on the LCD display
Unit of the displayed height	cm
Product code	547920

VKP-UM15

EN 61230



EN 61326-1

The ultrasonic cable height (deflection) meter is suitable for measuring the height of the overhead cables. The device can measure and display cables of 5 different heights.



VOLTAGE DETECTOR FOR BUS-BARS



VKP-FF-35

EN 61010-1



EN 61326-1

The device is suitable for the continuous indication of voltage being present on bus bars and other equipments having nominal voltage of 10-36 kV. Its use is recommended for outdoor and indoor armored equipments, protected against moisture. The presence of voltage is indicated by a flashing light. It has no internal power supply, so its lifetime is unlimited. The device can be applied in a de-energized status, if the de-energizing was performed previously according the specifications.

Product code	515185
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OPERATING TESTER FOR LIGHTING, ELECTRICITY METER WITH DUMMY LOAD

VILLBEK Ltd.

OPERATING TESTER FOR LIGHTING



VKP-KLT04

EN 61010-1

CE

EN 61010-2-031

EN 61326-1

Type VKP-KLT04 is available for on-site testing lamps, which are used on public lighting system. The handle of meter is fast and easy with shoulder bag, device weight 2kg.

Output voltage	230 V/ 50 Hz
Power	max.100 VA (higher as required)
Battery	4x3,6 V Li.Ion /3,3Ah
Stored energy	kb. 40 Wh
Max. output current	0,5 A (AC)
Operating time	50 VA continuous load ca. 30 min.; 1 hour with discontinuous load
Protection	Short circuiting, overload current and overvoltage protection
Operating temperature	Battery – 10 A fuse 10°C - +40°C
Battery charging	from main adapter or from car charger

ELECTRICITY METER WITH DUMMY LOAD

VKP-MT-3F



VKP-M2



VKP-MT-3F

EN 61326-1

CE

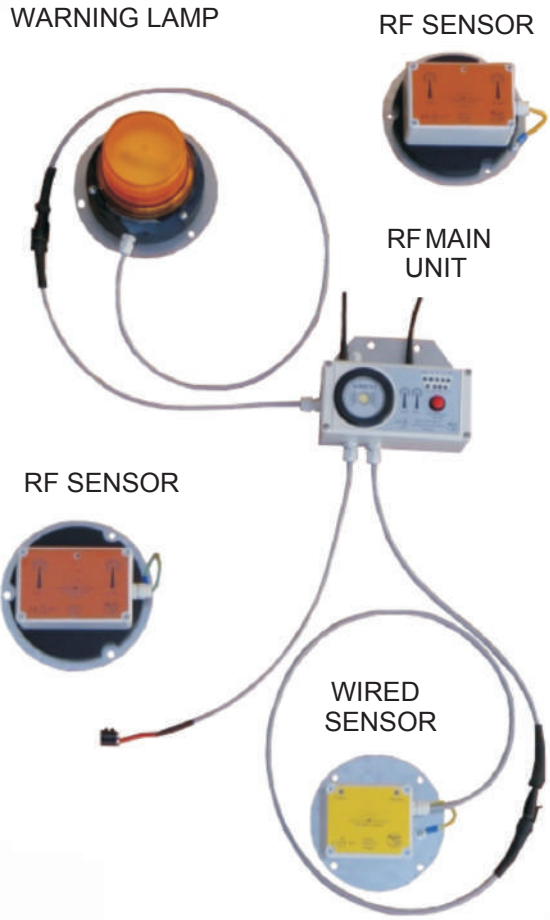
VKP-M2

EN 61010-1

EN 61010-2-031

The dummy load type VKP-MT/3F is applied to test the operability as well as significant measurement accuracy problems of the one or three-phase electricity meters. The current load can be set in for step between 4-60 A. The LCD displays the momentary voltage (V), load current (A), cosφ, momentary power (kW) and measured energy (Wh). Weight: 6,5 kg. The device is capable of simultaneously testing a phase or three-phase load. Accuracy ±1,5% depending on the load impedance. The handle of meter and reading of the measured datas are fast and easy with shoulder bag.

FIELD DETECTOR FOR AERIAL DEVICES



VKP-TD04-400L5

VKP-TD 04-400/LX **EN 61010-1** **CE**
EN 61010-2-031
EN 61326-1

It is suitable for alarm the operator of the aerial device when the boom or platform or bucket crosses the live working zone of the live line system. The environment of detecting always depends on where the detector is placed. The warning signals of detector are high power siren sound and/or caution light. Option, that blocks the move of controlled aerial device by output of a relay. On-demand more sensors can be placed on different points of the aerial device (L2 and L5), in addition user can choose four detecting voltage level by the built-on switch (L2 – L5).

Product code	547923
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1.	VKP-TD04-400/L1	Outplaced sensor for one voltagelevel supplied by car battery.
2.	VKP-TD04-400/L2	Central unit in operator cabin for four voltage level with max. 15 pieces of outplaced sensors (cable connection, self-power supplied), supplied by car battery-powered.
3.	VKP-TD04-400/L3	Outplaced sensor for four voltage level, supplied by built-in battery-powered.
4.	VKP-TD04-400/L4	Outplaced sensor for four voltage level, supplied by car battery-powered.
5.	VKP-TD04-400/L5	For four voltage level central unit in operator cabin supplied by car battery-powered with max 15 pieces of outplaced sensors (RF communication or combined with cable and RF, self-power supplied)

Detectedd voltage: 0,4 kV - 400 kV
 (SHALL BE CHOSEN WHEN ORDERING!)
 Distance of alarm: shall be chosen when ordering!
 Option: caution light and stop-relay

PROTECTIVE GLOVES, TOOL BAG, TENT FOR MAINTENANCE, AUTOMATIC SPLICE

VILLBEK Ltd.



Switching gloves VK-IV



EN 61482-1-2, EN 420, EN 388, EN 407, EN 12477

In case of LV equipments it is suitable for operating disconnectors and circuit breakers.

Sizes	8, 9, 10, 11, 12, 13
Product code	BA01285-BA01290



Tool bag

Can be ordered in three different sizes for electricians.

	Model dimensions	Product code
1.	240x240x100 mm	311266
2.	350x240x100 mm	311267
3.	350x300x100 mm	311268

Tent for maintenance



Dimensions:

- Width: 200 cm
- Length: 200 cm
- Height: 185 cm

Material:

- Framework consisting of painted tubes
- PVC canopy with artificial glass window

Installation:

- I. Set up the framework at the location of maintenance.
- II. Put the canopy on the metal framework (putting the fixing rings on the fixing pins).
- III. Closing the entrance on both sides (entrance and opposite) with pull fasteners
- IV. The covering with 30 cm extra length can be fixed with weighting.

Product code	547400
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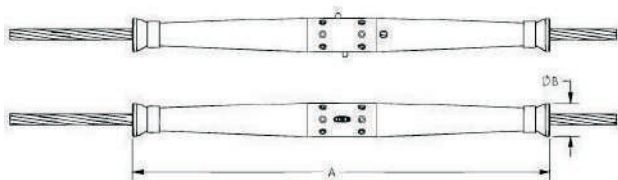
Automatic splice

ANSI C119.4-2011 ASTM B117

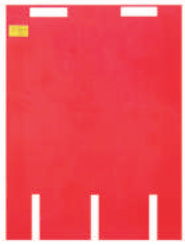
CRS - Corrosive Resistant Splice automatic splices are used on ACSR, AAC, AAAC conductor.

Features:

- Pop up tab to verify proper insertion
- Vent holes for moisture removal and air cooling
- Stainless steel spring and pilot cup to improve corrosion performance
- Rated to hold a minimum of 95% of RBS of the strand used
- Advanced synthetic inhibitor for superior corrosion protection
- Color coded strand guide for easy identification



INSULATING SHEETS, OIL CAN, AEROSOL CAN HOLDER



Size: 5x740x1000 mm
Product code: 547480

Size: 5x500x680 mm
Product code: 547470



Size: 5x1020x1100 mm
Product code: 547485

Size: 5x800x900 mm
Product code: 547475

Insulating sheets for separation EN 61229 EN 60243-1

For the armoured MV switchgears it can be used to separate the live parts from the uncharged ones during work. The separating sheets have certificates for 4 different sizes and types. On demand we manufacture and certify other sizes.

Rated voltage	10 kV, 20 kV
Material	Glass-fibre reinforced resin



Oil Can

Universal end-piece with fixing collar, operating ring, flexible spout.
Flexible spout: 200mm
Can capacity: 200 cm³ (0,2l)
Weight: 0,35kg

Product code	590017
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Aerosol Can Holder

Intended for safe application of paint and lubricant to energized equipment in hard-to-reach places or insecticide to bee and wasp nests, on poles and crossarm.

Product code	536399
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FAM-H Hook

Operated with the service rope. This hook enables to lift any part tools to the tops of the pole and bring it down.

Size	140x75x10 mm
Weight	0,1 kg
Material	Al
Product code	311125

VK-FAM-A Hook pole adapter EN 60832-2

Integrated to a hook pole. The hook pole adaptor is used in the same way as the universal end piece of the pole.

Size	120x47x45 mm
Weight	0,15 kg
Material	Al
Product code	311126

VK-FAM-T-KV Protector bag for dipped sleeves

Product code	311127
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VK-FAM-T-KE Protector bag for gloves

Product code	311128
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VK-FAM-KT Service rope gin

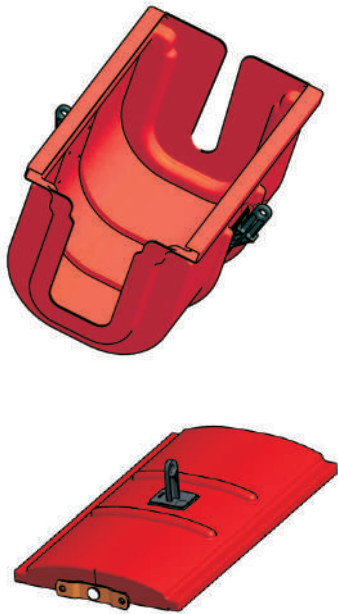
The service rope gin is used as an anchorage point for the service rope.

Size	450x450x130mm
Max. load	100 daN
Weight	1,5 kg
Product code	311129

VK-FAM-RT Stick hanger

Secured to a ring saddle for post, the stick hanger is used to hang poles equipped with a hanging hook awaiting their use.

Size	360x165x80mm
Weight	0,7 kg
Product code	311130



VK-KFSZB-40

For covering the double spanning under live working at medium voltage networks.

Class	4
Category	A: acid-proof W: extrem high temp. resistant -10 °C - 70 °C
Standard	IEC 61229:1993+A2:2002

	Class: 4 Cat. A,W VILLBEK Kft. 01/2013
	Typ: VK-KFSZB-40 IEC 61229:1993+A2:2002 Un=40000 V



Hydraulic long reach chain saw

Long reach chainsaws are intended for safely cutting and trimming trees from the ground or an aerial bucket. The dielectric property of the fiberglass extension tube will reduce the chance of electric shock when used near an energized electric line.

Standard:
MSZ EN 60832-1,
MSZ EN ISO 11681-2 CE



VK-FAM-F Pruning saw

The pruning saw is used to saw branches located in the vicinity of live parts.

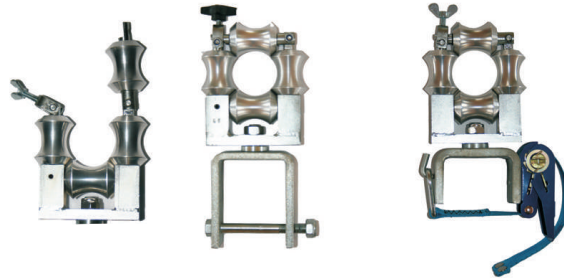
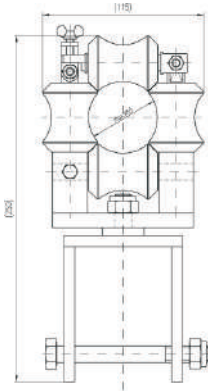


Weight	670 g
Length	460 mm
Product code	b: 311132
	g: 311131

LAYING ROLLER, CLIMBING TOOLS, THROWING ROPE

Laying roller with four pulleys

The laying roller can be used to build LV ABC network. Max. diameter of the bundle: 55 mm.



VK-4CST-CS

Product code	515515
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VK-4CST-H

Product code	515515
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Aluminium climbing equipment



Climbing tool made of special aluminium alloy for wooden poles.

Product code aluminium	311300
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Climbing tool made of forged iron for wooden poles.

Product code iron	311305
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VK-DK-1500 Throwing rope

The throwing rope is used to help the employee's to pull up tools easily to top level of the pole when they working on the pole. Length 15m, weight 1,3kg, rope diameter 8mm.

Product code	311057
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Set consist of:

- 1 pc 50m braided rope
- 1 pc 20m braided rope
- 2 pcs hand line hook
- 2 pcs fall arrester
- 1 pc service rope gin
- 3 pcs snatch block
- 2 pcs snap hooks

Service rope set



The service rope is used to hoist up to lineman and return to the ground the equipment and tooling required to perform the work.

Product code	311058
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Weight for the service rope VK-FAM-KKS



Product code aluminium	311059
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E-MAN helmet with built-in face protector

EN 397 EN 50365 CE

The E-MAN helmet has been developed according to state of the art science of crumple zones in modern vehicle design. The helmet is being equipped with a fully retractable visor providing protection for the entire face. E-MAN is introducing the CRASH BOX especially designed for partial or total destruction depending on the impact intensity. By destroying the CRASH BOX a certain amount of the impact energy will be taken over by the helmet shell while the rest of the impact energy is being forwarded to the suspension and from there to the head of the user. The functionality of the CRASH BOX is comparable to the crumple zones on contemporary cars. The E-MAN helmet series offers a variety of accessories and upgrades according to every user need and workplace condition: Ratchet system, 6 point textile suspension, helmet lights, chin straps (designed to fit the self releasing mounts on the E-MAN, all types of sweatbands etc. The helmet is tested according to EN 397 (440 V, -30 C), the face shield is tested according to EN 166, 167, 168, 170.



SICOR helmet with built-in face protector

EN 166 CE

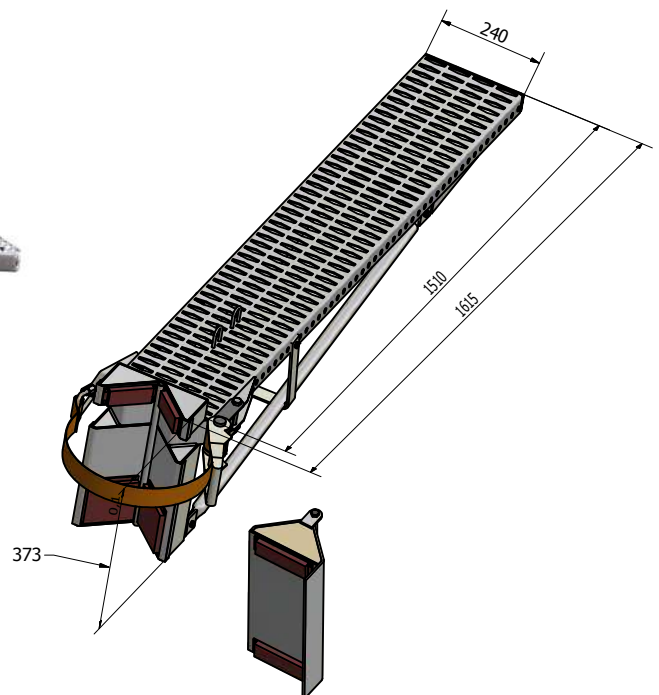
The reduced bulk of the face shield allows the operator to make simultaneous use of the two certified individual protection devices. The helmet is also available without the face shield (which may be added later). The technical features and appearance of the EDL-01 represent a decisive innovation compared to the products currently found on the market. The EDL-01 is EC certified in category III, based on the EN 397 standard (440 V, -20 C), built-in face shield that is EC certified under standard EN 166 in optical class 2.



Working platform

CE

Working platform for one person.
 Working platform sizes: Width: 240mm, Length: 1610mm, Height: 373mm
 Max load of use: 170kg
 Net weight: 11kg
 Flat device weight: 2,5kg



Product code platform	V547538
Product code flat device	V547539

SERVICES OF THE HIGH VOLTAGE LABORATORY

Electrical testing

- | | |
|--------------------------------|--------------------------------|
| 1. LV Voltage detectors | (MSZ EN 61243-3, MSZ 20862-79) |
| 2. MV Phase comparators | (MSZ EN 61481) |
| 3. Insulated operating rods | (MSZ EN 60855) |
| 4. MV and HV Voltage detectors | (MSZ EN 61243-1, MSZ 20866-75) |
| 5. Insulated tools | (MSZ EN 60900) |

Our company undertake the following tests:

6. Insulating sheets
7. Earthing/short-circuiting devices
8. Contact probes
9. Villbek and TE.M.A. ladders, platforms
10. Climbing tools
11. Villbek fall arrester for wooden poles, safety hook

Max. proof voltage: 100 kV

Repair, service, maintenance

In our workshop we undertake the repairs, services and maintenance of the following products:

Insulated operating rods, earthing/short-circuiting devices, voltage detectors, phase comparators, climbing tools and the Villbek and TE.M.A. products.



PPE testing

- | | |
|----------------------------|---------------------------------|
| 1. Insulating gloves | (MSZ EN 60903) |
| 2. Insulating sleeves | (MSZ EN 60984) |
| 3. PPE Safety harness | (MSZ EN 361) |
| 4. Safety lanyards | (MSZ EN 354) |
| 5. Connectors, rope access | (MSZ EN 362) |
| 6. Fall arrester | (MSZ EN 353-1, 353-2, 360, 355) |

Testing of live working tools

Certification from Hungarian Live Working Committee for testing of LV and MV live working tools, equipment and devices. Notified Institution for testing of protective equipment against electrical risks and falls from height.

Periodic testing of live working tools for LV:

I. Live working tools: Insulated covers, insulated tools and equipments

II. Protective equipments: Insulated gloves

Periodic testing of live working tools for MV:

I. Live working tools: Insulated operating rods, measuring and testing devices, bridging devices, insulated covers and covering elements, handling and fixing devices, climbing and work positioning devices, holding devices, universal tools for insulating rods, cleaning equipments under live working, others: operating rod holder, insulating piece.

II. Protective equipments: Insulating gloves, insulating sleeves

III. Periodic testing of aerial devices with insulated arm

REPAIR, SERVICE AND MAINTENANCE FOR THE LIVE WORKING TOOLS



In our workshop we undertake the repairs, services and maintenance of the following products:

- Hot Line insulated operating rods
- Insulated covers
- Phase comparators, ammeters and voltage brake indicators
- Insulated and metal ladders



Mobile high voltage laboratory

Basic equipments details:

- Adjustable single-phase transformer.
Max. proof voltage 0-100 kV / 50 Hz
- Voltage detector and phase comparator tester
- Insulated operating rod testing platform
- Water bath for insulating gloves and sleeves testing
- Mechanical tensile pad

Tests can performed at the location:

- LV, MV and HV insulated operating rods
- LV, MV and HV voltage detectors
- MV phase comparators
- LV and MV insulating gloves
- MV insulating sheets
- LV, MV and HV earthing/short.circuiting devices
- 1000 V live working tools
- Climbing irons
- Aerial devices with insulating arm

- Replacing parts and batteries
- If necessary set the default settings for voltage detectors
- In case of not compliance option for replacement



SPECIFICATION FOR SHORT-CIRCUITING AND EARTHING SYSTEM

Specification for short-circuiting and earthing system

1. Network, electrical installation characteristics

Network voltage: _____ kV Max. short-circuiting current (1s): _____ kA

Nature of the conductive materials: Basis Al _____ Basis Cu _____

Overhead lines Switchboard or substation

- Cross section of the conductors: min. _____ mm² max. _____ mm² -Earthing stud dia. (mm): mini. _____ max. _____

2. Characteristics of the earthing system

- Selected scheme (out of the three standard types shown below)

- Distance between live conductors (m): _____, between live conductors and earthing point (m) _____

- To place the clamps in position, the operator will stand: above the conductors _____ under the conductors _____ at the conductors level _____

- Cross section of the conductor _____ mm²

3. Earthing connection point

- Earth rods: dia. or thickness on side face (mm): _____ Flat bar, angle-bar, thickness (mm): _____

- Round conductor dia. (mm): _____

4. Operating rod

- Insulating rod: total length _____ Fixed _____ Connectable rod _____ Telescopic _____

5. Characteristics

- Selected connection type: Scheme no. _____

- Contact clamps _____

- Short-circuiting cable

• Length (m) _____

• Cross section Cu, Al (mm²) _____

- Grounding cable

• Length (m) _____

• Cross section Cu, Al (mm²) _____

- Connection of cables on clamps, earth clamps, trifurcation

• Direct connection by screw and nut

• Connection by means of crimped lugs

- Earth clamp, type _____

- Presence of a reel _____

- Insulating rod, type _____

- Application hook _____

SCHEME 1.



SCHEME 2.



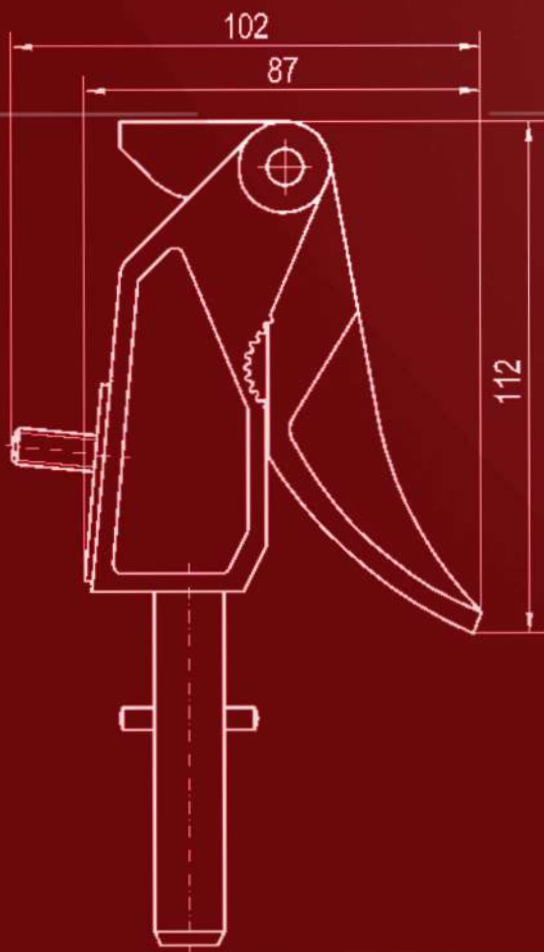
SCHEME 3.

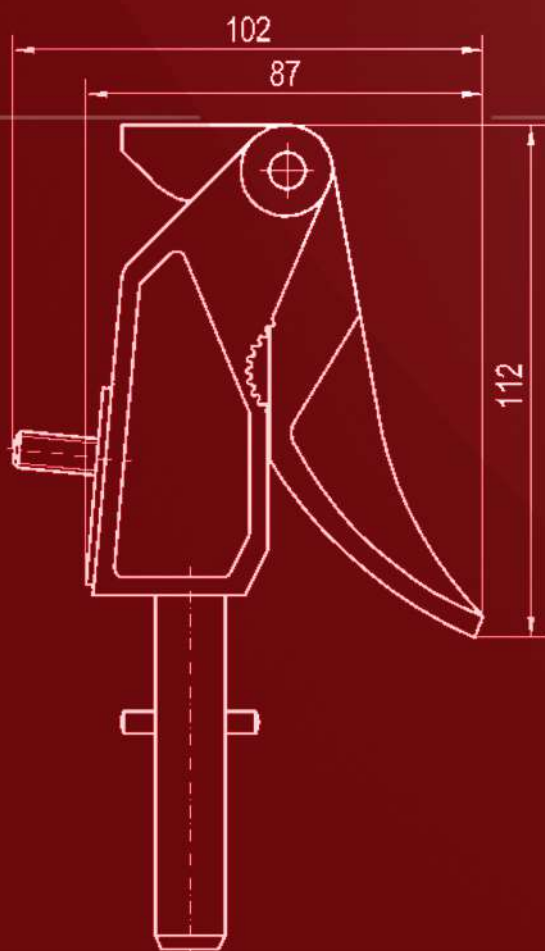


Accessories

- Carrying bag for sticks _____
- Canvas bag for equipment _____
- Carrying case for equipment _____
- Cable reel _____

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