

SAFETY EQUIPMENT

EARTHING AND SHORT-CIRCUITING DEVICES

Earth Connecting Elements

Universal earth clamps, clamping
range 20 or 30 mm

EN/IEC 61230 (DIN VDE 0683 Part 100)



Universal earth clamp with insulated handle connected to a fixed ball point.

- For earth connection to fixed ball points, phase T pins, round and flat conductors
- For wide clamping ranges up to 30 mm
- Type PK1 protected against twisting

Technical Data

Clamping unit, shaft	Cu alloy/gal Sn
Spring load unit	St/gal Zn

*) Clamping range and maximum cable cross section for universal clamps at:

Fixed ball point Ø	Phase T pin Collar width	Rd / Fl Clamping range	Cable cross section
20 / 25 / 30 mm	15 / 18 mm	—	95 mm ²
— / 25 / 30 mm	—	—	120 mm ²



Type	Fixed ball point Ø	Phase T pin Collar width	Rd / Fl Clamping range	For cable cross section	Max. short-circuit current I_k 1 s	Part No.
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A Universal Earth Clamps, with Wing Bolt

*) see table for clamping ranges and maximum cable cross sections for universal clamps

UEK 25 FS	20 / 25 mm	15 mm	20 mm	25 ... 120 *) mm ²	23.7 kA	774 034
UEK 30 FS	25 / 30 mm	18 mm	30 mm	25 ... 120 *) mm ²	23.7 kA	774 130

B Universal Earth Clamps, with insulated Handle

*) see table for clamping ranges and maximum cable cross sections for universal clamps

UEK 25 HG	20 / 25 mm	15 mm	20 mm	25 ... 120 *) mm ²	23.7 kA	774 234
UEK 30 HG	25 / 30 mm	18 mm	30 mm	25 ... 120 *) mm ²	23.7 kA	774 330

C Universal Earth Clamps, with Tommy Bar

*) see table for clamping ranges and maximum cable cross sections for universal clamps

UEK 25 SKN	20 / 25 mm	15 mm	20 mm	25 ... 120 *) mm ²	23.7 kA	774 434
UEK 30 SKN	25 / 30 mm	18 mm	30 mm	25 ... 120 *) mm ²	23.7 kA	774 530

Clamps must have the same maximum short-circuit current as earthing and short-circuiting conductors (I_k 1 s in A)!



Earth Connecting Elements

SAFETY EQUIPMENT

Ball head caps Ø20 or 25 mm, rigid EARTHING AND SHORT-CIRCUITING DEVICES

EN/IEC 61230 (DIN VDE 0683 Part 100)

- For earth connection to fixed ball points, Ø20 or 25 mm
- Ball head cap with wing bolt or insulated handle
- Type PK1 protected against twisting



Ball head cap with insulated handle connected to an earth connecting plate.

Technical Data

Clamping unit, shaft	Cu alloy/gal Sn
Spring load unit	Cu alloy/gal Sn



Type	Fixed ball point Ø	For cable cross section	Max. short-circuit current I_k 1 s	Part No.
A Ball Head Caps, rigid, with Wing Bolt				
KKH 20 FS	20 mm	25 ... 120 mm ²	23.7 kA	772 312
KKH 25 FS	25 mm	25 ... 150 mm ²	29.6 kA	772 322

B Ball Head Caps, rigid, with insulated Handle

KKH 20 HG	20 mm	25 ... 120 mm ²	23.7 kA	772 313
KKH 25 HG	25 mm	25 ... 150 mm ²	29.6 kA	772 323

Clamps must have the same maximum short-circuit current as earthing and short-circuiting conductors (I_k 1 s in A)!

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Earth Connecting Elements

Earth connection units

EN/IEC 61230 (DIN VDE 0683 Part 100)



Earth connection unit with wing bolt.

- For earth connection to M12/M16 connection units or grooved ring Ø16 mm
- Wing bolt or tommy bar
- Type PK1 or PK2 protected against twisting

Technical Data

Terminal lug	E-Cu/gal Sn
Wing nut	Cu alloy/gal Sn

Type	Dimensions	Protection against twisting	For cable cross section	Max. short-circuit current I_k 1 s	Part No.
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A Earth Connection Units with Wing Nut

EAS EK FM 12	M12	PK1	25 ... 150 mm ²	29.6 kA	775 621
EAS EK FM 16	M16	PK1	25 ... 150 mm ²	29.6 kA	775 631

B Earth Connection Units with Wing Bolt

EAS EK FS 12	M12 x 15 mm	PK1	25 ... 150 mm ²	29.6 kA	775 626
EAS EK FS 16	M16 x 15 mm	PK1	25 ... 150 mm ²	29.6 kA	775 636

C Earth Connection Sockets for Fixed Earthing Point with grooved Ring

*) for cable lengths \geq 2500 mm: max. up to 95 mm²

EAB RN 16 FS	Ø16 mm	PK2	25 ... 150 *) mm ²	29.6 kA	790 150
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D Earth Connection Sockets for Fixed Earthing Point with grooved Ring

*) for cable lengths \geq 2500: max. up to 95 mm²

EAB RN 16 SKN	Ø16 mm	PK2	25 ... 120 *) mm ²	23.7 kA	790 160
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Clamps must have the same maximum short-circuit current as earthing and short-circuiting conductors (I_k 1 s in A)!

Earth Connecting Elements

SAFETY EQUIPMENT

Earth milling clamps

EARTHING AND SHORT-CIRCUITING DEVICES

EN/IEC 61230 (DIN VDE 0683 Part 100)

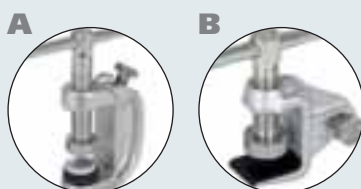
- For earth connection to flat profiles up to 40 mm
- Milling plate, disc springs and long tommy bar for reliable contact
- Type PK1 protected against twisting



Earth milling clamp used for coated steel masts.

Technical Data

Clamping unit	MCl/gal Zn
Shaft	Ms/gal Zn
Milling plate	hardened steel/chrome-plated
Spring	Spring steel



Type	Clamping range	For cable cross section	Max. short-circuit current I_k 1 s	Part No.
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A Earth Milling Clamp for flat Profiles With disc springs

EFK FL40 SKN	up to 40 mm	25 ... 95 mm ²	18.7 kA	792 190
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B Earth Milling Clamp for flat Profiles

EFK FL30 SKN	up to 30 mm	25 ... 50 mm ²	9.9 kA	792 030
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Clamps must have the same maximum short-circuit current as earthing and short-circuiting conductors (I_k 1 s in A)!

SAFETY EQUIPMENT

EARTHING AND SHORT-CIRCUITING DEVICES

Earth Connecting Elements

Earthing kit



Earthing busbar and earthing cables mounted on a tubular earth electrode.

Technical Data

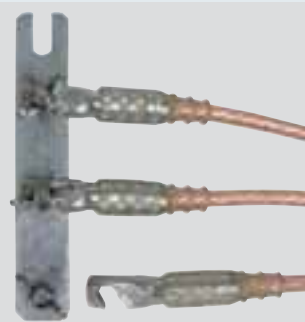
Tubular earth electrode St/tZn

Bolt M10 x 35 mm StSt (V2A)

Handle Wood

Earthing busbar St/tZn

- For overhead line systems
- For driving the tubular earth electrode into the ground
- Kit includes tubular earth electrode, three-pole earthing busbar and artificial leather bag



Crimped cable lugs, **PK3** type: Hook-type cable lug protected against twisting mounted on a three-pole earthing busbar.

Type	Model	Total length l_G	Part No.	
A Earthing Kit				
Pos.	Qty.	Type	Description	Part No.
1	1		Tubular earth electrode with drill	644 000
2	1	ESS 3P M10 FM	Three-pole earthing busbar	799 019
3	1	KLT 121 25 16	Artificial leather bag, empty	766 601
ES 3P FL ER	Earthing kit, complete	1000 mm	799 009 new	

Single Parts for Earthing Kit

Tubular earth electrode with drill

Total length l_G	Position	Part No.
1000 mm	1	644 000

Three-Pole Earthing Busbar

With slot, to be mounted on the tubular earth electrode and for hook-type cable lug type PK3

Type	Dimensions	Position	Part No.
ESS 3P M10 FM	180 x 30 x 5 mm	2	799 019 new

