

Phase Connecting Elements

Phase screw clamps for overhead line conductors Ø4 to 85 mm

- Phase clamps for connecting single-pole and three-pole earthing and short-circuiting devices to overhead lines
- Coupling aid for safe coupling to overhead line conductors
- Easy coupling due to spring tension
- Type PK1 or PK2 protected against twisting, long threaded T pin shaft

SAFETY EQUIPMENT

EARTHING AND SHORT-CIRCUITING DEVICES

EN/IEC 61230 (DIN VDE 0683 Part 100)
Threaded T pin shaft DIN 48087



Phase screw clamps used on an overhead line.



Phase screw clamp with fixed coupling aid for safe coupling



Phase screw clamp with spring tension

Technical Data

Spring load unit	Al alloy
Clamping unit	Al alloy
Shaft	Cu alloy/gal Sn or StSt
Coupling aid	St/gal Zn



Crimped cable lugs, **PK1** type: Standard cable lug with cut-out for protection against twisting.



Crimped cable lugs, **PK2** type: Standard cable lug without cut-out which can be connected to components from other manufacturers. Only available on request.



Clamp with long shaft and earthing rod with aluminium cone coupling.

SAFETY EQUIPMENT

Phase Connecting Elements

EARTHING AND SHORT-CIRCUITING DEVICES



Type	Clamping range Ø	Protection against twisting	For cable cross section	Max. short-circuit current I_k 1 s	Part No.
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A Standard Phase Screw Clamps

Short-circuit-proof, even in case of corroded conductor cables due to weathering

PSK 4 30 SQ	4 ... 30 mm	PK1	25 ... 70 mm ²	13.8 kA	784 201
PSK 10 65 SQ	10 ... 65 mm	PK1	25 ... 120 mm ²	23.7 kA	784 301

B Phase Screw Clamps with Coupling Aid

Short-circuit-proof, even in case of corroded conductor cables due to weathering

PSK 4 30 SQ EH	4 ... 30 mm	PK1	25 ... 70 mm ²	13.8 kA	784 401
PSK 10 65 SQ EH	10 ... 65 mm	PK1	25 ... 120 mm ²	23.7 kA	784 501

C Phase Screw Clamp with Spring Tension

Easy coupling with spring-loaded clamp

PSK FV 4 30 SQ	4 ... 30 mm	PK1	25 ... 70 mm ²	13.8 kA	784 480
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D Phase Screw Clamp with wide Clamping Range

Ideally suited for use with Al and Al/St conductor cables, tubular busbars and fixed phase points

PSK 10 85 SQ	10 ... 85 mm	PK2	25 ... 120 mm ²	23.7 kA	784 085
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E Phase Screw Clamp

Ideally suited for angled positions

PSK 12 30 SQ	12 ... 30 mm	PK2	25 ... 95 mm ²	18.7 kA	784 032
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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)!

Phase Connecting Elements

SAFETY EQUIPMENT

Ball head caps and universal clamps EARTHING AND SHORT-CIRCUITING DEVICES

EN/IEC 61230 (DIN VDE 0683 Part 100)
Threaded T pin shaft DIN 48087

- Phase clamps for connecting single-pole and three-pole earthing and short-circuiting devices
- Type PK1 protected against twisting



Connecting the universal clamp to a fixed ball point.

Technical Data

Clamping unit	Cu alloy/gal Sn
Shaft	Cu alloy/gal Sn
Spring load unit	Cu alloy/gal Sn or St/Zn

Two types of ball head caps are available:

- Rigid ball head cap
- Adjustable ball head cap (4x 90°)

The adjustable ball head cap allows the user to connect the earthing and short-circuiting device to fixed ball points that are installed in difficult positions. In the vast majority of cases, the use of angled fixed ball points is therefore no longer necessary.



Rigid ball head cap



Adjustable ball head cap (4 x 90°)



SK: Hexagon shaft



SQ: T pin shaft (bayonet locking mechanism)



SAFETY EQUIPMENT

Phase Connecting Elements

EARTHING AND SHORT-CIRCUITING DEVICES



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 Ball Head Cap, rigid, hexagon Shaft

KKH 20 SK	20 mm			25 ... 120 mm ²	23.7 kA	772 310
KKH 25 SK	25 mm			25 ... 150 mm ²	29.6 kA	772 320

B Ball Head Cap, rigid, T pin Shaft

KKH 20 SQ	20 mm			25 ... 120 mm ²	23.7 kA	772 311
KKH 25 SQ	25 mm			25 ... 150 mm ²	29.6 kA	772 321

C Ball Head Cap, adjustable (4 x 90°), hexagon Shaft

KKH 20 D SK	20 mm			25 ... 120 mm ²	23.7 kA	772 330
KKH 25 D SK	25 mm			25 ... 150 mm ²	29.6 kA	772 340

D Ball Head Cap, adjustable (4 x 90°), T pin Shaft

KKH 20 D SQ	20 mm			25 ... 120 mm ²	23.7 kA	772 331
KKH 25 D SQ	25 mm			25 ... 150 mm ²	29.6 kA	772 341

E Universal Clamp, hexagon Shaft

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

UK 25 SK	20 / 25 mm	15 mm	20 mm	25 ... 120 *) mm ²	23.7 kA	773 034
UK 30 SK	25 / 30 mm	18 mm	30 mm	25 ... 120 *) mm ²	23.7 kA	773 130

F Universal Clamp, T pin Shaft

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

UK 25 SQ	20 / 25 mm	15 mm	20 mm	25 ... 120 *) mm ²	23.7 kA	773 234
UK 30 SQ	25 / 30 mm	18 mm	30 mm	25 ... 120 *) mm ²	23.7 kA	773 330

*) 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



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

Phase Connecting Elements

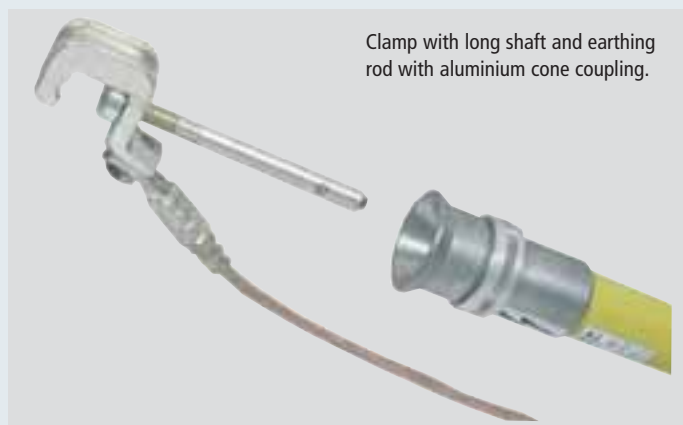
Clamps with long shaft

SAFETY EQUIPMENT

EARTHING AND SHORT-CIRCUITING DEVICES

EN/IEC 61230 (DIN VDE 0683 Part 100)
Threaded T pin shaft according to DIN 48087

- Phase clamps for connecting single-pole and three-pole earthing and short-circuiting devices to overhead lines
- Long threaded T pin shaft for earthing rods with robust aluminium cone coupling
- Type PK1 protected against twisting



Rigid ball head cap with long shaft and earthing rod.

*) 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

Technical Data

Clamping unit	Cu alloy/gal Sn
Shaft	Cu alloy/gal Sn
Spring load unit	Cu alloy/gal Sn or St/Zn



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 Ball Head Cap, rigid, long T pin Shaft

KKH 20 SQL	20 mm			25 ... 120 mm ²	23.7 kA	772 314
KKH 25 SQL	25 mm			25 ... 150 mm ²	29.6 kA	772 324



B Universal Clamp, long T pin Shaft

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

UK 25 SQL	20 / 25 mm	15 mm	20 mm	25 ... 120 *) mm ²	23.7 kA	773 236
UK 30 SQL	25 / 30 mm	18 mm	30 mm	25 ... 120 *) mm ²	23.7 kA	773 331

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