



Single-phase short-circuiting device for round cross-section bars

SR EN 61230 R

Code: Msp - CCU - S_p/I_p - S/O/P/p
 Msp - CA - S_p/I_p - O/P
 Msp - CCTU/E - S_p/I_p - O/p

Intended use: earthing of **round cross-section bars** in transformer stations: multicore flexible conductors, rigid bars with round sections, fixed "T" couplings or other parts with round section mounted permanently on conductors in power stations.

Application: from the ground, by the hanging of the phase clamp on the round-section conductor, followed by the tightening of the clamp actuator screw.

Classic / automatic phase clamps must be handled using an insulating stick according to the installation, provided with "RO bayonet" coupling system.

Constructive phase clamps:

- ✓ Classic Universal Clamp (CCU)
- ✓ Automatic Clamp (CA)
- ✓ Lightweight Classic Universal Transversal Clamp (CCTU/E)*

The short-circuiting device equipped with CCTU clamp cannot be used on fixed "T" coupling

Components:

- Phase clamp - 1 piece
- Earthing cable – 1 piece
- Manual earthing clamp – 1 piece

Packing: waterproof bag.

Other equipment to be used in conjunction:

- connecting insulating stick type PMU 110-2 B/ba / PMU 220-2 B/ba / PMU 400-3 B/ba

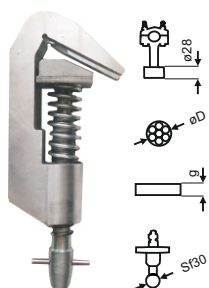
Tips: considering the inclined position from the ground and at the height of conductors in transformer stations, we firmly recommend the permanent mounting on such conductors of "T" fixed couplings or other round cross-section parts to provide ergonomic conditions for the mounting of the phase clamp of the short-circuiting device.



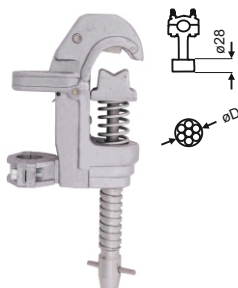
General technical characteristics of short-circuiting devices applicable on rectangular cross-section bars

Earthing S _p cable cross-section (mm ²)	16	25	35	50	70	95	120
Nominal short-circuit current for t = 1 s I _{sc} (kA)	4	6,25	8,75	12,5	17,5	23,75	30
Shock (peak) nominal current for t = 0,02 s I _{sd} (kA)	10	15,63	21,9	31,25	43,75	59,38	75
Test short-circuit current for t = 1 s (kA)	4,6	7,2	10,06	14,38	20,13	27,31	34,5
Test shock (peak) current for t = 0,02 s (kA)	11,5	17,97	25,16	35,94	50,31	68,3	86,25
Power factor (according to SR EN 61230)				2,5			

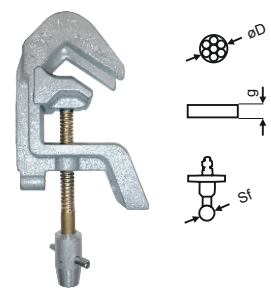
Phase clamp type	Classic universal clamp (CCU)	Automatic clamp (CA)	Lightweight Classic Universal Transversal Clamp (CCTU)
Diameter of the conductor where the phase clamp can be applied øD (mm)	9 ÷ 32	17 ÷ 32	3 ÷ 45
Maximum length of the earthing cable I _p (m)			
- cable with a cross-section of 16 to 70 mm ²	10	17,5	10
- cable with a cross-section of 95 or 120 mm ²	10	8	10



CLASSIC UNIVERSAL CLAMP (CCU)



AUTOMATIC CLAMP (CA)



LIGHTWEIGHT CLASSIC UNIVERSAL TRANSVERSAL CLAMP (CCTU/E)