## MOBILE EARTHING AND SHORT-CIRCUITING DEVICES

## **PHASE CLAMPS**



## PHASE CLAMPS FOR RECTANGULAR-SECTION CONDUCTORS: FLAT BARS, BAR PACKETS OR FLAT IRON OF VARIOUS THICKNESSES

The classic phase clamp for rectangular-section conductors is in the shape of a small vice. The classic clamp is a screw-fastening clamp applied on the conductor bar, fastened firmly between the clamp body and the mobile bit, driven by a screw. Under such circumstances, the fastening force of the clamp on the conductor is provided by the clamping torque of the clamp actuation screw. Both the clamp body and the bit are items aluminium alloy die cast items. The clamp actuation screw is provided with a "RO bayonet" end which allows the easy attachment and detachment of the clamp from the "RO bayonet" coupling systems of insulating sticks. The dismounting of the clamp from the conductor is made by the simple opening of the clamp (by opening the bit-lowering screw with sufficient free space), followed by the detachment of the clamp from the conductor.

The automated phase clamp for rectangular-section conductors is also a screw-operated fastening clamp, the conductor bar being tightened firmly between the clamp body and the mobile bit driven by a screw. Additionally, this type of clamp is provided with a system of levers and springs that allows the automated movement of the clamp bit upon the contact of the clamp bit upon the conductor bar upon which it shall be fastened, a movement which provides the pre-fastening of the clamp on the conductor. Subsequently to this phase, which provides much easier handling the clamp, it must be fastened firmly on the conductor by actuating the screw and locking the bit position. Similar to the classic clamp, the automated clamp includes two main aluminium alloy die cast items and an operating screw provided with a "RO bayonet" end piece. The detachment of the clamp from the conductor is similar to the one used by the classic clamp, more exactly the screw is unscrewed until there is sufficient space to detach the clamp from the bar.





## PHASE CLAMPS FOR ROUND-SECTION: MULTI-CORE CONDUCTORS, RIGID BARS, T-TYPE FIXED COUPLINGS OR OTHER PARTS ASSEMBLED PERMANENTLY ON CONDUCTORS IN POWER SUBSTATIONS

The classic reduced phase clamp for round-section conductors is in the shape of a vice and is provided with two teeth to facilitate its remote hanging on conductor arranged horizontally or slightly inclined towards the ground. The reduced classic clamp is a clamp with screw fastening, where the conductor bar is firmly fastened between the clamp body and the screw-driven mobile bit. The body of the classic reduced clamp on the conductor is ensured by the fastening torque of the clamp actuation screw. The body of the classic reduced clamp is made of extruded aluminium profiles with excellent shock-resistance properties, and the bit is obtained as an aluminium cast body. The actuation screw of the clamp is provided with a "RO bayonet" end which allows the easy attachment and detachment of the clamp from the "RO bayonet" coupling systems of insulating sticks. In order to facilitate the fastening of the clamp on the conductor, the movement of the clamp bit towards its fastening on the conductor is facilitated by the presence of a compression spring which, by extension, facilitates the fastening of the screw. The clamp is detached from the conductor by the simple opening of the clamp (by unscrewing the screw that withdraws the bit to provide sufficient space), followed by the lifting of the clamp from the conductor.

The automated phase clamp for conductors with round section is also a screw-actuated clamp, upon application the conductor bar (part) being clamped firmly between the clamp body and the mobile bit driven by a screw. The automated clamp includes two main items obtained by aluminium cast body and the actuation screw provided with a "RO bayonet" terminal. This type of clamp if provided additionally with a system of levers and springs which allows the automated movement of the clamp bit after it had been hanged on the conductor bar ( or on the fixed T-type coupling), a movement which allows the pre-fastening of the clamp on the conductor. Subsequently to this phase, the clamp must be fastened firmly on the conductor by actuating the screw and locking the bit position.

The detachment of the clamp from the conductor is similar to the one of the reduced classic clamps - specifically the screw is unscrewed until the bit withdraws sufficiently to create enough space to **lift the clamp from the conductor**.