

Crimping technology for uninsulated terminals

Made as: ring terminals (KO type acc. to Ergom), spade terminals (KW type acc. to Ergom), pin terminals (KI type acc. to Ergom), blade terminals (KP type acc. to Ergom).

Material: sheet E-Cu, thickness $s=0,8$ to 4 mm acc. to DIN 90500 or DIN 1787.

Surface: tin-plated 4 mm.

Design: copper sheet, hard soldered.

- Ring terminals – KO: DIN 46234 and VG 88710 over 10 mm².
- Spade terminals – KW: DIN 46234 (ref. to tubular part).
- Pin terminals – KI: DIN 46230 and VG 88708 (10÷16 mm²).
- Blade terminals – KP: DIN 46234 (ref. to tubular part).

Rated sizes: 0,5÷300 mm².

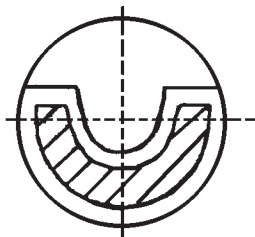
Terminals for rated sizes 0,5÷6 mm² are in principle designed for a particular range of wire cross-sections, e.g. a 6 mm² terminal may be used to 4÷6 mm² cross-sections. The terminals over 6 mm² may be used only for the wire of a considerable cross-section. There is a code stamped on each terminal, e.g. 4-2,5. It defines the screw size the terminal is designed for (M4 in this case) and the rated cross-section of the terminal (2,5 mm²).

Application:

The terminals are used to fix the wire with a screw joint to: bus-bar, switchgear housing, electric device and apparatus, etc. Joining terminals are used to join two wires: "to butt" (KL type) or "to splice" (KLZ type).

Crimping technology:

Most frequently used manner of crimping the terminals is compression with "one notch" (fig. 1) or "double notch" (fig. 2).



Rys. 1



Rys. 2

By compressing with "one notch" owing to local material deformation of terminal as well as conductor we receive the joint of very good electric conductivity (low passage resistance) and good electric characteristics. Due to relatively little force required to crimp the terminal, the compression with "one notch" is widely used in hand crimping tools. For compressed joints of very good electric conductivity as well as high mechanical strength required, the tools with crimping dies for "double notch" should be used. Owing to the use of "two compressing notches" the local deformation of conductor and terminal is smaller and wider than in case of a crimping die with "one notch". In this way it is possible to achieve the joint of the same high electric conductivity as by "one notch" but with higher mechanical strength.