

Crimping technology for tubular terminals Al-Cu

Made as: ring terminals, connecting terminals, pin terminals.

Materials: all types – E-Al grade acc. to DIN 40501 Teil 3 or DIN 1712 Teil 2.
E-Cu grade acc. to DIN 40500 Teil 2,3 or DIN 1787.

Surface: without coating.

Application:

Ring terminals (KCA; TMA) are used for connecting wire by means of a screw joint to bus-bar, switchgear, etc. Tubular connectors are used for electric connection of two wires of different cross-sections and different materials (LMAN; LMAN 36). This joint cannot be stressed mechanically. Aluminium-copper pin terminals (BMAN) are used for connecting wire to screw joints.

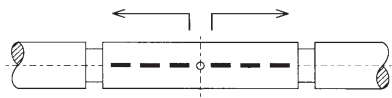
Crimping technology:

Terminals are crimped using tools with so called "hexagon" Crimping dies.

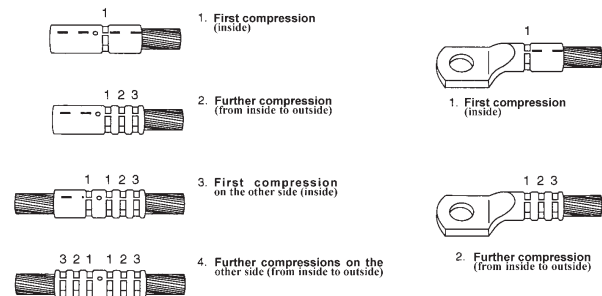


Owing to such compressing shape the joint with very high mechanical and electrical parameters is achieved. However, such joints need several compressions of terminal. The higher compression number the better the joint is.

It is very important in the case of power joints where transmission of large power and currents is required. The "hexagon" compression needs still considerable force to crimp a terminal so in case of such compression (even small wire cross-section) ZAE ERGOM recommends the use of hydraulic tools or hand-tools with a higher mechanical ratio (operated with both hands). In order to achieve a joint of required quality it is recommended to compress terminals to "hexagon" in the following way:

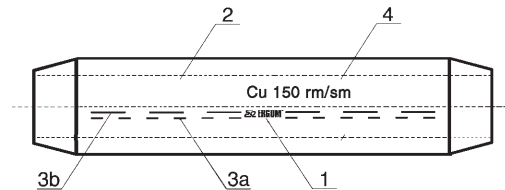


Correct direction and sequence of terminal compressions are marked with arrows.



There is a code stamped or overprinted on every terminal to indicate:

- terminal cross-section or screw hole diameter (in case of ring terminals)
- die seat No. to crimp a terminal
- graphic code of number and position of compressions required, made with narrow dies (hand tools) or wide dies (hydraulic tools).

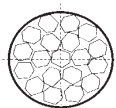


An example of such code is given below.

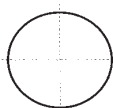
1. Trade mark.
2. Die seat No.
3. Marking of place and number of compressions.
 - 3a. Mechanic: narrow die.
 - 3b. Hydraulic: wide die.
4. Code of cable types (cross-section and profile).

All marked (recommended) crimp must be made. Please pay attention to use a proper die for the cross-section to which it is designed.

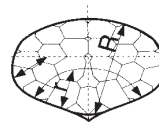
Types of cable wires



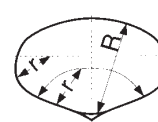
round multiwire
(rm)



round one-wire
(re)



sectored multiwire
(sm)



sectored one-wire
(se)