Connecting Device for an
Electrical Conductor with a Marking Device

This invention relates to a connecting device according to the preamble of Claim 1.

Widely varying models of such connecting devices are known. They can be made in a single-pole or multi-pole model. In preferred models, the electrical conductors are fixed without screws by means of at least one compression spring.

To designate/identify the conductors, the marking elements are advantageous or perhaps even necessary, provided they have a printable identification surface or a surface that can be written upon in some other way. The arrangement of these elements on the connection devices or in the vicinity of the connection devices often causes a problem because the available space is very limited.

~~The object of this invention is to solve this problem~~According to an aspect of the invention, there is provided a connecting device for connection of an electrical conductor on a bus bar or the like with a connection element, in particular, a friction spring for the fixation of the electrical conductor with at least one actuation element which has a plug-in duct and with at least marking device which is made as a plug-in element for designation, wherein each plug-in element has a head and a shaft; and wherein the marking device is arranged on the actuation element, whereby the shaft engages in the plug-in duct and the head rests against the actuation element.

~~This problem is solved by the object of Claim 1. Advantageous versions of the invention will be found in the subclaims.~~

According to embodiments of the invention, the marking devices are arranged in a particularly space-saving manner on the actuation element of the connecting device.

Embodiments of t~~T~~he invention is particularly suitable for actuation elements of connecting devices in the push-in technique. Here it ~~is~~may be

particularly advantageous because precisely when the connecting devices are designed for conductors with a small cross-section, only little space is available for the attachment of markers or marking devices. In contrast, the actuation elements may offer an existing advantageous spot for the attachment of the marking devices.

This is because the space on the actuation element is in this way almost used doubly: on the one hand, for the actuation function, and on the other hand, for the marking function. The operability of the push-in connection is not impeded in the process by the marking function.

As an alternative, we can also figure on arranging marking devices on the actuation elements of connection devices using a different connection technique, for example, especially on actuation devices for extension spring terminals or IDC terminals.

The connection devices as such can again be employed on plug-in devices, terminal blocks, or other instruments of the most varied kind.

A particularly advantageous way of handling each plug-in element exists when the shaft, according to a preferred embodiment, is made cylindrical, whereby the basic diameter of the cylinder is less than the inside diameter of each plug-in duct and whereby the shaft of each plug-in element has at least one drastically deformable locking pin, which extends at least over the terminal section of the shaft. By the basic diameter, we mean the diameter of the massive shaft upon which the locking pin or pins are molded. Alternate embodiments for the cylindrical shape are