

Labour protection laws obligate

Maintenance tests for earthing and short-circuiting devices

Entrepreneurs are responsible for the safety and health of their workers. In accordance with labour protection laws they have to ensure that all necessary protection measures are taken and adhered to when working at electrical installations.

Therefore, when working at electrical installations and equipment, the relevant parts of the installation are isolated. However, just tripping a switch to isolate the installation is by far not enough. Between isolating an installation and the access release of the work site further reliable information on the state of the installation, measures to prevent maloperation and malfunction, protection in case of maloperation and malfunction as well as protection against potential hazards from adjacent parts of the installation is required. For this purpose the 5 safety rules were drawn up:

- ⇒ Isolate
- ⇒ Protect against restart
- ⇒ Check absence of power
- ⇒ **Earth and short-circuit**
- ⇒ Cover or safeguard adjacent live parts.

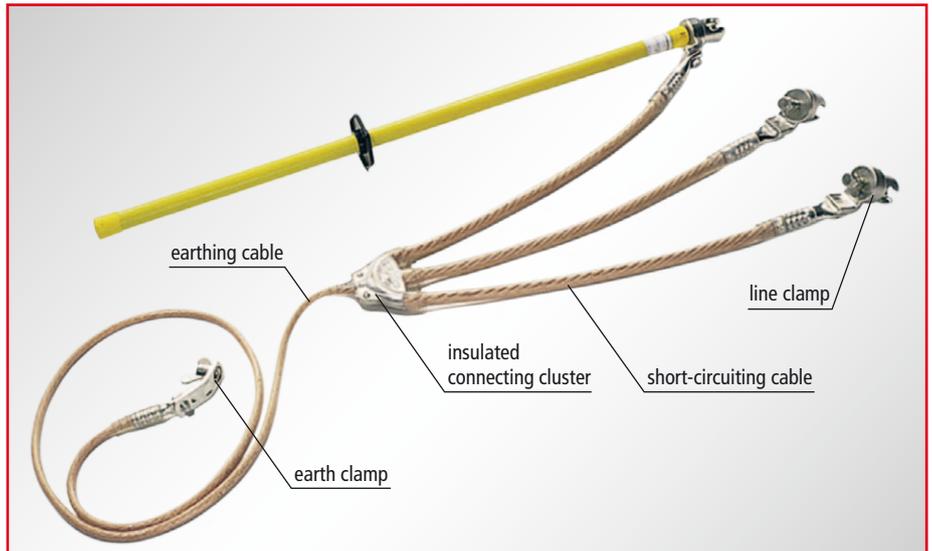
Qualified electricians are familiar with these vital rules. But what about the safety and reliability of devices and equipment by which essential information is gained or work sequences are safeguarded? Any measure is just as safe as the safety equipment used.



Faulty earthing and short-circuiting device, short-circuiting cable with advanced black colouration

If faulty earthing and short-circuiting devices might present a danger to persons, measures to remedy these defects have to be taken according to the German labour protection law and the German ordinance on industrial safety and health.

Installers have to rely on earthing and short-circuiting devices when performing maintenance and repair work at isolated installations. These devices protect them from serious health hazards (fatal electric shock or burns caused by electrical arcs) in the event of accidental restart or interference voltage and atmospheric overvoltage.

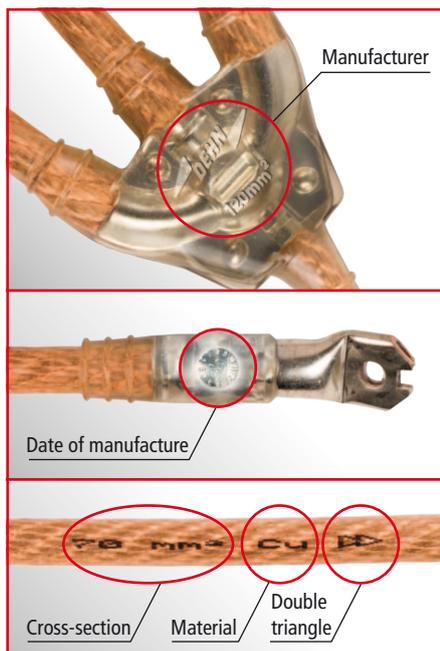


Earthing and short-circuiting device in accordance with EN 61230, new equipment with ball head cap and earthing rod

In accordance with the latest regulations a risk analysis is required for work at electrical installations and equipment. Based on this risk assessment sequences of operation and protection measures, which are supposed to prevent health risks due to electrical energy, have to be defined.

After performing a risk assessment, the type, scope and intervals of tests have to be determined for earthing and short-circuiting devices.

Earthing and short-circuiting is a key element of the five safety rules.



Does your equipment provide these markings?

This ensures that the installation is dead as long as work is performed even in case of interference voltage, atmospheric overvoltage or accidental restart. However, this protection measure is also just as good as the equipment used and its proper use.

This means that only the right choice of the device, its proper condition and the correct mounting in the installation ensure that the installation is isolated. Therefore regular training and instruction of electricians are essential.

Safety from one source - because safety is indivisible. Top quality, customer proximity and a wide range of services make DEHN + SÖHNE a reliable partner for safety equipment:

- ⇒ We stand ready to assist you in choosing the right safety equipment and devices.
- ⇒ We offer seminars on occupational health and safety in electrical installations with confirmation of participation.

We offer test services such as maintenance tests of earthing and short-circuiting devices, but also maintenance tests of voltage detectors, switching rods and fuse tongs exceeding 1 kV.

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