

Technical information

General user information

Connectors

Connectors are components which in normal use (under live) are not to be engaged or disengaged under live.

Plug and socket devices

(under live or load) may be engaged or disengaged when live or under load.

Termination methods

- Screw connection

A screw connection is a detachable electrical connection between a conductor and a screw clamp. Screw clamps are designed acc. to DIN/EN 60999/VDE 0609. The chart below shows the screw size and the required clamping and testing torque.

Screw size	M2.5	M3	M3.5
Torque (Ncm)	40	50	60

- Solder connection

Besides the soldering of single wire with solder irons or soldering machines the method of wave soldering or infra-red vapor phase soldering has gained great importance for connectors for printed boards or flexible wiring.

When wires are soldered it has to be watched that no single strand stick out which could lead to a short circuit and that no large solder joints occur which would reduce the clearance and creepage distances unfavourably.

Testing and valuation of solder joints and the relevant components is regulated in DIN EN 60068 part 2–20.

- Crimp connection

A crimp connection is a non-detachable electrical connection between a conductor and a crimp contact produced with the crimp technology. The requirements for crimp connections are defined in DIN IEC 60352 part 2. An important point for the quality of a crimp connection is the achieved tensile strength of the termination. Since easy to measure the tensile strength is a practicable means for quality control purposes. The diagram below shows the required minimum tensile strength depending on the wire size.

