

# E Meter Test Equipment

# QCD

# **Quick Connection Device for Electricity Meter Test**



The QCD Quick Connection Device is used together with electricity meter test systems, and is especially recommended for situations where saving time is important. The device enables electricity meters to be mounted and connected rapidly for the purposes of adjustment, test and verification.

Because of its universal construction the QCD quick connection device may be used for the support and connection of practically all types of electricity meters.

This QCD quick connector may be used with current levels up to 80 A for long period testing, and with up to 100 A for short periods of time. The connector is available in three different versions, which may be used together with single and three phase meters.

The QCD is delivered complete as a ready to use unit, and may be easily fixed to the aluminium structure of MTE Meter Test Equipment meter suspension racks, or to their associated trolleys.

### Description

Sprung contact fingers are used to make the connection to the meter. These carry the currents and the voltage neutral, and they may be moved sideways and fixed in any desired position. The minimum distance between two adjacent contact fingers is 10 mm.

It is also easily possible to remove or switch the finger positions, this accommodates the unit to the multitude of different connection modes in use today - transformer connected, aron, symmetrical / unsymmetrical, etc., meters. The QCD can be guickly and simply adapted as required.

The contact finger configuration may changed to correspond to the meter, for example, the fingers may be quite simply removed to test a single phase meter on a three phase QCD, and then later, the tests completed, the fingers are restored for three phase meter testing.

A optional base plate is available, which is used in the case of modernisation and / or extension of existing meter test systems.

The quick connection devices are fixed to the suspension rack in exactly the same way as a meter is connected, and they are then able to receive the meters which are to be tested.

The elements are mounted on a conducting metal base, and fulfil the existing regulations for meter insulation testing.

## **Types**

The following types of QCD quick connection devices are available:

- QCD 1 I ⇒ For testing single phase meters
- QCD 3 I ⇒ For testing three phase meters
- QCD 3 I/U ⇒ For testing three phase meters with

jumping finger contact system.

The QCD 1 I and QCD 3 models are designed to supply the meters under test, quite quickly and simply, with the necessary currents. The test voltage phases are connected manually to the voltage connection terminals on the suspension rack.

The QCD 3 I/U is constructed identically to the QCD 3 I, with the difference that the voltage connection is assured over a jumping finger contact system. The jumping finger are designed to be adapted to the various terminal block configurations in actual use.

Should it be necessary to interrupt the measurement voltage supply, or if the jumping finger voltage connection is not required, it is easy to move this aside and the voltage connections are automatically broken.

In order to furnish the necessary pressure against the meters, the QCD 3 I and QCD 3 I/U models are equipped with a tension lever.

The QCD 1 I is not equipped with this tension lever, in this case the meters are fixed with a tension slider block. However, it is optionally possible to equip also this model with the tension lever on special request.

### **Technical Data QCD**

### **Dimensions**

Type Width QCD 1 I 150 mm QCD 3 I 200 mm QCD 3 I/U 200 mm

#### **Electrical Data**

Maximum current

over long periods: 80 A

Maximum current: 100 A (max. 10min/h)

Voltage: 400 V