

What does the MID – MEASUREMENT DEVICE DIRECTIVE mean for the Kentix SmartPDU electricity meters?

MID stands for “Measuring Instruments Directive” (MID) and is the “Directive 2004/22/EC of the European Parliament and of the Council of 31 March 2004 on measuring instruments”.

provisions of the MID?

The MID defines basic and metrological requirements and refers to ten different measuring devices (electricity meters, water meters, gas meters ...) in the field of legal metrology. The previous initial verification by the weights and measures authority or a state-approved inspection body is replaced by a conformity assessment procedure in which the involvement of a body selected and notified by the manufacturer is mandatory. Under this procedure, the manufacturer is given responsibility for the first placing on the market and the first putting into service within the EU. Accordingly, national law applies.

For this purpose, the manufacturer must choose a conformity assessment procedure prescribed in the MID, by which he ensures the conformity of the measuring instrument with the MID under the supervision of a notified body. Only then is it possible to place the measuring instrument covered by the MID on the market or put it into operation. The meter must be accompanied by a declaration of conformity, which is often printed in the operating instructions. After commissioning the measuring device, the responsibility for the correctness of the measurement results is transferred to the user.

When does recalibration have to take place?

The MID is independent of the legal metrological verification. In Germany, measuring instruments are considered to be calibrated if their conformity has been established in a prescribed conformity assessment procedure and they are marked accordingly.

The user of the measuring instrument is still responsible for the timely application for recalibration. The calibration validity period is specified in the national calibration regulations. For electronic electricity meters according to MID marking, it is eight years in Germany.

When an MID device is placed on the market, we declare its conformity with the MID in the operating instructions. The number of the type examination certificate can also be seen there.

The device contains the MID conformity marking:

CE - M23 - 0102

(1) - (2) - (3)

(1) CE Marking

(2) Metrology code M + year of placing on the market

(3) Identification number of the notified body

The year following the year of placing on the market is decisive for the date of recalibration. The calibration validity period depends on the applicable national law. In Germany, it is 8 years and can then be extended for a further 8 years by a state-approved testing body, i.e. not the manufacturer.

Information on calibration renewal

The MessEG and the MessEV also stipulate that not every meter has to be recalibrated after the calibration validity period has expired, but that a so-called sampling procedure can be used. In this process, meters of identical design with the same calibration year are grouped into so-called lots and a number of meters for this lot is determined as a sample meter according to a statistical procedure. In order to extend the calibration period of a lot, the selected meters are removed and tested at a state-approved testing center. If the inspection shows that the sample meters meet the requirements of the verification regulations, the verification validity of the entire lot is extended and all measuring instruments belonging to the lot may continue to be used for measurements. If the result of the test is negative, all meters in the lot must be replaced by the end of the current year.