

Operator: \_\_\_\_\_

Address: \_\_\_\_\_

Postal code: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

### **Charging station identification**

Type (e.g. Smart 22,  
eMobility Gateway): \_\_\_\_\_

Serial number: \_\_\_\_\_

Firmware version: \_\_\_\_\_

Short description (project name / project number / installation location (e.g. parking garage, floor F, parking space 117) / connection to a backend system or MENNEKES ativo):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### **Identification of energy metres compliant with calibration law (if necessary)**

Year of manufacture of the meter: \_\_\_\_\_

Type designation of the meter (e.g. eHZ-KW8E2A5L0EF2P or EM2389): \_\_\_\_\_

Serial number of the meter (e.g. 09-45-4d-48-00-Fd-C9-31-02-E1 or ZJ5403660002): \_\_\_\_\_



Maintenance may only be performed by a qualified electrician.



For charging stations that comply with calibration law, the following applies:

Work on components that are subject to calibration law may only be performed by a **certified** service technician. Otherwise the charging station is no longer compliant with calibration law. All the necessary information is available on request.

### Operating and installation manual

Notes on performing the individual steps and on safety, e.g. warning notices are not described here, but can only be found in the operating and installation manual for the respective charging station.

|  | OK                       |
|--|--------------------------|
| The operating and installation manual, especially the chapters / sections related to safety, has been read and understood. | <input type="checkbox"/> |

### Maintenance intervals

Select the maintenance intervals with due consideration of the following aspects:

- Age and condition of the device
- Environmental influences
- Mechanical stress
- Last test reports

The following maintenance work must be carried out at least every six months or annually.

# 1. Maintenance work that must be carried out at least every six months.

## 1.1 Housing exterior

| Maintenance work   | Remark | OK                       |
|--|--------|--------------------------|
| Visual inspection for defects and damage carried out.  |        | <input type="checkbox"/> |
| Lock function checked (e.g. cover lock, front panel lock).<br>▶ Clean, grease and adjust locks if necessary. |        | <input type="checkbox"/> |
| Charging station checked for cleanliness.<br>▶ Clean charging station if necessary.                          |        | <input type="checkbox"/> |

## 1.2 Housing interior

| Maintenance work   | Remark | OK                       |
|--|--------|--------------------------|
| Charging station checked for foreign objects.<br>▶ Remove foreign objects if necessary.<br>▲ Note for a charging column: If an insect infestation is found, the charging column can be filled with a base filler (e.g. expanded clay, 4 mm ... 8 mm grain size, approx. 5 litres). |        | <input type="checkbox"/> |
| Visual inspection for dryness carried out.<br>▶ Remove foreign objects from the seal if necessary.<br>▶ Drain the charging station if necessary.<br>▶ Carry out a function test if necessary.  |        | <input type="checkbox"/> |
| Check the fastening to the foundation and/or wall.<br>▶ Retighten bolts if necessary.  |        | <input type="checkbox"/> |
| Connection to earthing system checked.   |        | <input type="checkbox"/> |
| For charging stations compliant with calibration law:<br>Visual inspection of components relevant to calibration for presence and damage performed (e.g. QR code (public key), seal sticker, lead seal).   |        | <input type="checkbox"/> |

### 1.3 Socket panel / charging socket (if present)

| Maintenance work  | Remark | OK                       |
|---|--------|--------------------------|
| Function and legibility of the display / LED info field checked.  |        | <input type="checkbox"/> |
| Hinged lid / swing flap / shutter checked for ease of movement and complete closing.  |        | <input type="checkbox"/> |
| Swing flap lock checked (if present).   |        | <input type="checkbox"/> |
| Function of key-operated switch checked (if present).   |        | <input type="checkbox"/> |
| Charging socket contacts checked for contamination and foreign objects.<br>▶ Clean charging socket and remove foreign objects if necessary. |        | <input type="checkbox"/> |
| Check the socket drainage for tight fit and free flow of hoses.   |        | <input type="checkbox"/> |

### 1.4 Charging cable (if present)

| Maintenance work   | Remark | OK                       |
|--|--------|--------------------------|
| Visual inspection carried out for observable defects (e.g. kinks, cracks).   |        | <input type="checkbox"/> |
| Charging cable checked for cleanliness and foreign objects.<br>▶ Clean charging cable and remove foreign objects if necessary. |        | <input type="checkbox"/> |

## 1.5 Electrical switching and safety devices

| Maintenance work  | Remark | OK                       |
|---|--------|--------------------------|
| Visual inspection carried out for observable defects (residual current device, line circuit breaker, contactors, phase sequence measuring relay, etc.). |        | <input type="checkbox"/> |
| Function of residual current device checked. Press the test button for this purpose.  |        | <input type="checkbox"/> |

## 1.6 Ventilation system (if present)

| Maintenance work   | Remark | OK                       |
|--|--------|--------------------------|
| Both filter mats checked (at the fan and air outlet opening).<br>▶ Replace filter mats if necessary. |        | <input type="checkbox"/> |
| Fan checked.<br>▶ Replace the fan if necessary.<br>▲ Note: Down-regulate the thermostat for testing. |        | <input type="checkbox"/> |

## 1.7 Lighting for the energy meters (for AMEDIO charging stations compliant with calibration law)

| Maintenance work   | Remark | OK                       |
|--|--------|--------------------------|
| Lighting checked for function.<br>▶ Replace the lamps if necessary.<br>▶ Observe EN 55015 when replacing.<br>Recommendation: Osram ST PIN 10 0.9 W/2700K G4 CL |        | <input type="checkbox"/> |

## 2. Maintenance work that must be carried out at least once annually.

| Maintenance work  | Remark | OK                       |
|---|--------|--------------------------|
| Foundation checked (if present).                                      |        | <input type="checkbox"/> |
| Supply line terminals checked.<br>▶ Retighten terminals if necessary. |        | <input type="checkbox"/> |

### 2.1 Electrical system

| Maintenance work  | Remark | OK                       |
|---|--------|--------------------------|
| Inspection of the electrical system in accordance with IEC 60364-6 and the respective applicable national regulations (e.g. DIN VDE 0105-100 in Germany). |        | <input type="checkbox"/> |
| ■ Protection against direct contact   |        | <input type="checkbox"/> |
| ■ Protection against indirect contact   |        | <input type="checkbox"/> |
| ■ Overcurrent and surge protection  |        | <input type="checkbox"/> |
| ■ Documents (e.g. circuit diagrams, instructions) and safety stickers complete  |        | <input type="checkbox"/> |

## 2.2 Repetition of measurements and tests according to IEC 60364-6

| Tasks   | OK   |
|---|--|
| Repetition of measurements and tests according to IEC 60364-6 and the applicable national regulations (e.g. DIN VDE 0105-100 in Germany) performed and documented. *<br>■ Residual current device tripping current [mA]: _____ / _____<br>■ Residual current device switch-off time [ms]: _____ / _____<br>■ Earthing resistance [ $\Omega$ ]: _____<br>■ Mains configuration: _____<br>■ Voltage measurement [V]: _____<br>■ Rotating field direction: _____ / _____<br>■ Continuity of the protective conductor: _____<br>■ Loop impedance: _____ | <input type="checkbox"/>   |
| Function check and load simulation performed via the MENNEKES test box.<br>■ Status A (No vehicle connected)<br>■ Status B (Vehicle connected but not ready to charge)<br>■ Status C (Vehicle connected and ready to charge, ventilation not required)<br>■ Status D (Vehicle connected and ready to charge, ventilation required (gassing batteries))<br>■ Status E (Error - short circuit between CP and PE)  | <input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/> |

\* external test reports can be attached to this document.

## 2.3 Calibration validity (for charging stations that comply with calibration law)

| Maintenance work  | Remark | OK                       |
|---|--------|--------------------------|
| Calibration validity checked.<br>► Have the charging station recalibrated if necessary.<br>▲ Note: The calibration validity period is specified by measurement and calibration law. The start time of the calibration validity period is the year of manufacture of the meter and the year of manufacture of the charging station (see name plate). |        | <input type="checkbox"/> |

## 2.4 Lighting for the energy meters (for AMEDIO charging stations compliant with calibration law)

| Maintenance work   | Remark | OK                       |
|--|--------|--------------------------|
| ► Replace the lamps (preventive measure).<br>► Observe EN 55015 when replacing.<br>Recommendation: Osram ST PIN 10 0.9 W/2700K G4 CL |        | <input type="checkbox"/> |



### 3. Maintenance performed (please complete)

| Tasks  | OK                       |
|--|--------------------------|
| Customer informed that the charging station must be checked for external damage daily / on every charge.   | <input type="checkbox"/> |
| No defects found.<br>If defects / open points were found, write them down here:<br><hr/> <hr/> <hr/> <hr/> | <input type="checkbox"/> |

#### Maintenance company contact details

Maintenance company: \_\_\_\_\_

Name of technician: \_\_\_\_\_

Telephone number: \_\_\_\_\_

Email: \_\_\_\_\_

**Driving directions**

Driving distance in km: \_\_\_\_\_

Home location: \_\_\_\_\_

**Working time, service**

from \_\_\_\_\_ o'clock to \_\_\_\_\_ o'clock

**For the customer (noted)**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature / stamp: \_\_\_\_\_

**For the maintenance company (activities were performed in accordance with this document)**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature / stamp: \_\_\_\_\_

**Remarks**