HARTING’s type 2 charging socket was designed for charging electric vehicles with alternating current. It is only suitable for installing in an AC charging station or wall box. Use this product only to charge electric vehicles with AC power for the European market. This type 2 charging socket may only be used together with the charging cables provided with type 2 charging plugs, in accordance with IEC 61851-1 and IEC 62196-2.

Construction of the charging socket

Step 1:
Mount the locking actuator (1) and the water drainage (6).

Step 2:
Make sure that the flange gasket (5) rests against the rear of the charging socket (3). Place the hinged cover on the socket.

Step 3:
Remove the locking actuator (1) and the water drainage (6).

Step 4:
Check the position of the flange gasket. Make sure that the flange gasket is seated properly on the charging socket.

Step 5:
Mount the locking actuator (1) and the water drainage (6). Locking actuator (1) => max. torque 1.7 Nm Water drainage (6) => max. torque 1.2 Nm.

General safety instructions

Requirements for staff
Any work on installation and maintenance of this type 2 charging socket may only be carried out by appropriately qualified staff. In the EU, only qualified technicians, in accordance with DIN EN 50110-1/-2 and IEC 60 364 may carry out such work. The relevant national accident prevention regulations must also be observed.

Protection against electric shock
There is a risk posed by exposed electrical components during any assembly, maintenance and dismantling work carried out on the type 2 charging socket. The relevant national accident prevention regulations must also be observed.

Danger to life due to electric shock! Risk of death, severe injuries and burns.
- Connectors are electrical components which may only be installed by specialist staff.
- Never plug or unplug connectors while they are live (energised)!
- Users must ensure that the charging socket is properly installed and that it protects against electric shock.
- Improper use of the type 2 charging socket can cause explosions, electric shocks and short circuits.

Contact assignments

Mating side according to IEC 62196-1/-2 (refer to Fig. 2)

Wall thickness with locking actuator: maximum of 5.5 mm (refer to Fig. 3)

Step 1: Remove the locking actuator (1) and the water drainage (6).

Step 2: Make sure that the flange gasket (5) rests against the rear of the charging socket (3). Mount the flange gasket (5) on the rear of the charging socket (3) (refer to Fig. 3).

Step 3: Carefully guide the charging socket (3) through the wall cut-out from the front. Make sure that the flange gasket (5) is seated properly on the charging socket.

Step 4: Attach the charging socket (3) and the hinged cover (2) from the inside to the mount-
Operating the motorised locking actuator

The type 2 charging socket is equipped with a motorised locking actuator that locks the plugged-in charging socket into place during the charging process.

- Apply the voltage. The locking pin comes out, thus locking the charging plug in the charging socket.
- You can evaluate the locking status by checking the signal cables (blue cable) (refer to Fig. 5).
- Connect the cable from the locking actuator to the charging controller.
- ATTENTION! Exceeding the activation time leads to an overload of the motorised locking actuator (max. activation time is 200 ms).

Locking the charging plug into position

Lock the charging plug by changing the polarity.

Unlocking the charging plug

Unlock the charging plug by changing the polarity.

Operating the magnetic locking actuator

- Apply voltage to the solenoid. The locking pin moves out of the solenoid. This ensures that the charging plug is locked into the charging socket.
- Note that the voltage must be permanently applied to the solenoid for the locking mechanism to function. You can evaluate the locking status or the position of the locking pin using the micro-switch.
- If the voltage at the solenoid drops, the locking pin retracts and the charging plug becomes unlocked. Remove the charging plug from the charging socket (refer to Fig. 6).

Contact assignments

<table>
<thead>
<tr>
<th>Pin 1: motor (red)</th>
<th>Pin 2: signal (blue)</th>
<th>Pin 3: motor (black)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage 12 VDC</td>
<td>Average running current: ≤ 250 mA</td>
<td>Maximum current consumption of solenoid: 200 mA</td>
</tr>
<tr>
<td>Max. current consumption of micro-switch (signal): 250 VAC</td>
<td>Max. switching voltage of micro-switch: 24 VDC</td>
<td></td>
</tr>
<tr>
<td>Max. current consumption of micro-switch (signal): 100 mA</td>
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</tbody>
</table>

Operations

**Requirements for staff!**

Any work relating to the installation, commissioning and maintenance may only be carried out by appropriately qualified staff.

**NOTE:**

Mount the charging socket firmly into a charging column (the housing) (refer to the general/special safety instructions).

Make sure that the charging socket is protected so that the user cannot accidentally contact it.

Contamination, dirt, moisture or damage can lead to electric shock!

- Make sure that the charging socket is protected so that the user cannot accidentally contact it.
- Before the commissioning, make sure that the charging socket is in perfect working order.
- Use only undamaged and dry charging cables.
- Note that the functional safety of the charging socket is not ensured if there are suspicious or defective components.
- ATTENTION! Remember that a defective charging socket may never be used. They cannot be repaired.
- Replace a damaged charging socket immediately.

**Risk of material damage!**

Check the proper functionality of the locking system at regular intervals.

- Make sure that the locking system is handled properly. Otherwise, improper usage may destroy the locking system.

**Risk of injury! Risk of material damage!**

Ensure that the locking system is handled properly before each use.

- Check the locking system regularly for damage. If the locking system emits smoke or melts, do not touch the charging cable, charging plug or charging socket.
- Immediately stop the charging process on the vehicle.
- Press the emergency stop button if there is one available at the charging station.

**NOTE!** Only use components that conform to IEC 62196-2 for the charging socket.

Risk of injury! Risk of material damage!

- Make sure that the charging plug is always properly and completely inserted into the charging socket.
- Note that the charging plug may only be removed when it is unlocked.
- Only unlock the charging plug after the charging process has ended. The required unlocking time varies according to the manufacturer of the charging socket.
- Improper use of the charging socket (e.g. pulling the charging plug out of the charging socket with great force) can cause severe damage from electric arcs and personal injury. Electric arcs can result in death or serious injury.

Cleaning

Clean the charging socket regularly to ensure that it functions correctly and has a long service life.

**Risk of injury! Risk of material damage!**

- When cleaning, avoid harsh cleaning agents, water jets or steam jet cleaners. Never immerse the individual components in water.
- Always clean the charging socket including the contacts with a dry cloth.

Storage

Store the charging socket only in a dry, clean place.

Troubleshooting

If you discover malfunctions while maintaining the charging socket, take the following measures to identify abnormalities and defective/damaged components:

- If damage is detected, replace the entire charging socket. Repair is not permitted.
- If individual components are defective (such as the hinged cover and locking actuator or lifting magnet), you can replace such damaged parts.
- Send conspicuous assemblies back to the manufacturer for repair.
- NOTE! All installation, initial commissioning and maintenance work may only be carried out by appropriately qualified staff.
- Always disconnect the charging socket from the power supply before starting your work.
- Observe the maximum tightening torque of the fastening screws during the assembly!

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3. **Risk of injury! Risk of material damage!**

   - Make sure that the charging socket is properly and completely inserted into the charging column (the housing) (refer to the general/special safety instructions).

   - Note that the functional safety of the charging socket is not ensured if there are suspicious or defective components.

   - ATTENTION! Remember that a defective charging socket may never be used. They cannot be repaired.

   - Replace a damaged charging socket immediately.

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