xChargeIn

Frequently Asked Questions
for users

Powering Business Worldwide

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1 General information and operation

1.1 Which types of vehicles can be charged at the EATON xChargeIn?

The EATON xChargeIn can charge all vehicles having a standard Type 1 or Type 2 charging socket in compliance with IEC 62196 and a Mode 3 charging. You can find an overview of the current vehicle models and the respective socket types in the version overview at www.eaton.com/evc.

1.2 May other devices besides vehicles be operated at the EATON xChargeIn?

The EATON xChargeIn is a specially developed charging station for charging electrically operated vehicles. Therefore, the operation of other devices is not permitted.

1.3 How is a charging procedure started?

For EATON xChargeIn versions without authorization (RFID, key switch), a charging procedure is already initiated when connecting the charging cable to the charging station and vehicle. The charging station automatically locks the plug and charging is started.
For versions with RFID or key switch, an authorization is first necessary (operation of the key switch or by holding the RFID card/tags in the area of the RFID symbol). A successful authorization will be indicated by a series of increasing tones whereby the charging station starts the charging.

1.4 How is a charging procedure ended?

The charging procedure is ended by unplugging the charging cable at your vehicle. The plug in the EATON xChargeIn is then automatically unlocked in the cable can be unplugged.

1.5 Can the plug of the charging cable at the EATON xChargeIn be locked?

Yes. For versions with Type 2 socket, the plug is automatically locked as soon as it is plugged into the EATON xChargeIn. Unlocking occurs after completion of a charge by disconnection on the vehicle side. If a connection did not occur on the vehicle side, the EATON xChargeIn will automatically unlock again after one minute.

1.6 Which plug and cable types may be used for charging (applies to EATON xChargeIn with Type 2 socket)?

Only Type 1 and Type 2 plugs and cables in accordance with Standard IEC 62196 may be used. If you have additional questions, please contact your service partner or vehicle manufacturer.

1.7 Which cable cross-sections may be used for charging (applies to EATON xChargeIn with Type 2 socket)?

Only plugs and cable types conforming to IEC 62196 may be used for operation on the EATON xChargeIn. The respective plugs are resistance-coded (results from the maximum permitted charging current and thus also the permitted cable cross-section). If you have additional questions, please contact your service partner or vehicle manufacturer.

1.8 Why do the outer status LED segments light up orange when I plug the cable into the EATON xChargeIn?

This happens when the EATON xChargeIn is connected to a KeContact M10 system and a charging cable is plugged into the EATON xChargeIn without a connected vehicle. This status shows “*Waiting for a vehicle*”.

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1.9 May the charging cable be permanently connected to the EATON xChargeIn (affects EATON xChargeIn with Type 2 socket)?

EATON recommends unplugging the charging cable after every charging procedure and storing in a suitable location to prevent possible premature material fatigue.

1.10 Can the charging procedure be controlled by external devices?

Yes. The EATON xChargeIn has a connection for enabling charging by external devices (e.g. ripple control receivers of the energy supplier, photovoltaic systems, time switches, home controllers and similar). For example, this allows charging to only occur if your photovoltaic system is producing enough power or when your energy supplier offers cheaper rates in the evening and no other consumers in your household require the available power more urgently.

1.11 How can the EATON xChargeIn be cleaned?

Cleaning the housing of the charging station, if necessary, using a moist cloth. Stubborn dirt can be removed using a mild, solvent-free, non-scouring cleaning agent.

1.12 Can the housing of the EATON xChargeIn be painted or have labels and similar applied?

The EATON xChargeIn consists of a removable design hood as well as the actual housing for the electronics. Only the design hood can have labels applied or be painted.

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2 Possible faults

2.1 The charging procedure does not start

Possible causes	Solution
The plug was not plugged in correctly	Unplug the plug and plug it in again
The charging procedure was not carried out correctly	Follow the instructions in chapter "Starting/completing a charging process"
The plug may possibly be dirty in the locking area or it may be damaged	Clean the plug or have it replaced by and authorized expert
The vehicle does not require energy or it has a fault	Check the vehicle
The vehicle is programmed to charge at a later starting time.	Check the vehicle

2.2 The status LED does not light up/flash

Possible causes	Solution
No supply voltage	Check the FI circuit breaker and circuit line breaker and switch on if necessary
The internal glass fuse is defective	Have an authorized expert replace the glass fuse
Defective	Please contact your dealer or service partner

2.3 The status LED lights up/flashes red

Possible causes	Solution
The plug was unplugged during the charging procedure: The plug was not locked correctly	Unplug the plug and plug it in correctly, observe that it locks correctly
The plug was not plugged in correctly; interlocking therefore not possible	Plug in the plug quickly
The plug on the charging station supplies an invalid state: Fault in the cable	Unplug the plug and plug it in correctly; replace the cable, if necessary
Temperature shut-off - The permitted temperature in the charging station has been exceeded	• Unplug the plug and wait until the charging station has cooled down • Switch off the supply voltage of the charging station (installed or superordinate FI circuit breaker and line circuit breaker) and unplug the charging cable at the vehicle and at the charging station. Switch on the voltage supply again
Defective	Please contact your dealer or service partner

2.4 The plug at the EATON xChargeIn does not lock

Possible causes	Solution
The plug was not plugged in correctly; interlocking therefore not possible	Plug in the plug quickly
The plug on the charging station supplies an invalid state: Fault in the cable	Unplug the plug and plug it in correctly; have the cable replaced by an authorized expert, if necessary

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2.5 The plug at the EATON xChargeIn does not unlock

Possible causes	Solution
The charging process was not completed by the vehicle	Complete the charging process according to the instructions of the vehicle manufacturer
The plug may possibly not unlock due to tension	Press the plug in briefly and connect again to the vehicle. Then end the charging procedure again

2.6 The vehicle is not (fully) charged

Possible causes	Solution
Power reduction due to excessive temperature by the vehicle or the charging station	• Protect the vehicle and the charging station from direct sunlight during the charging procedure (carport, garage etc.) • Visual inspection of the plug and socket device to see if it is dirty, worn or damaged • If the problem persists, please contact your dealer or service partner
No enable due to external control device (energy supplier, photovoltaic system etc.)	Check whether any control devices are preventing charging at specific times

2.7 Authorization at the EATON xChargeIn expires upon plugging in the cord at the vehicle

Die Erfahrung zeigt, dass durch so genanntes “Kontaktprellen” im Fahrzeug bei manchen Fahrzeugtypen eine zuvor erfolgte Autorisierung an der Wallbox erlöschen kann. Dieser Effekt kann auftreten, wenn eine Ladesitzung zuerst autorisiert und erst danach das Ladekabel am Fahrzeug angesteckt wird.	Stecken Sie Ladekabel zuerst an Wallbox und Fahrzeug an und autorisieren Sie die Ladung erst anschließend.

3 Mechanical damage and replacement parts

3.1 The device shows damage after unpacking

If you suspect you have received a defective device, please fill out the accompanying "Repair Order" form and return the device to your dealer or service partner.

3.2 Which replacement parts can be ordered?

The design housing, as well as the cable hanger can be ordered as replacement part. Other defective parts on the EATON xChargeIn must be replaced by EATON in the course of a "Repair Order" (accompanying form). Please contact your dealer or service partner.

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4 Accessories

4.1 Can a EATON xChargeIn with Type 2 socket be converted to a fixed cable?

No. Converting to a fixed cable is not possible.

4.2 Is there a cable extension for the wall box?

For reasons of operational safety, EATON strongly recommends the use of one single, sufficiently long cable without intermediate pieces or couplings. For reasons of compatibility, it is also assumed that when using extensions, specific contacts are not connected through and thus an error-free charging is not possible.

4.3 Installing the EATON xChargeIn on a base

For installing the EATON xChargeIn in the open field, a Nirosta base can be ordered. The base comes in versions for single or double installation of the EATON xChargeIn. Please refer to the instructions for the base for more details.

4.3.1 What kind of subsurface is required for the base?

A level and load-bearing subsurface is required for the setting up. To ensure a secure and permanent anchoring, we recommend using a cement foundation. Mounting the column on asphalt is not allowed! For details on setting up the base, please refer to the instructions for the base.

5 Ordering options

5.1 How can unauthorized access to the charging station be prevented?

The EATON xChargeIn can be ordered in different versions. Unauthorized charging can be prevented through the use of RFID or key switch (half-cylinder lock).

5.2 Can a key switch or RFID sensor the retrofitted?

The EATON xChargeIn can be optionally ordered with key lock or RFID module. When ordering, please already observe that a subsequent installation of an RFID sensor or key lock by the user is not possible.

5.3 Key switch ordering option

5.3.1 Does a half-cylinder lock have to be installed?

The EATON xChargeIn is supplied from the factory with an installed half-cylinder lock. A subsequent installation of your own half cylinder is possible.

5.3.2 Which half-cylinder lock can be ordered?

The cylinder lock must fulfill the following requirements:

- Profile half cylinder according to EN 1303 or DIN 18252
- Dimension A = 30 mm (for A=31 mm a minimal overhang occurs in the housing)
- Adjustable lock nose

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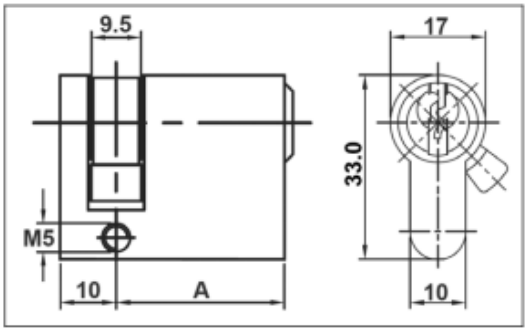

Profile half cylinder – dimension in millimeters

5.3.3 How can I install my own half-cylinder lock?

For detailed installation instructions, please refer to the user manual in the "Installing/removing the cylinder lock" chapter.

5.3.4 Who should I contact if I lose all the keys?

In this case, a repair is only possible by a locksmith or by EATON. For repair orders, please fill out the accompanying "Repair Order" form and return the device to your dealer or service partner.

5.4 RFID order option

The EATON xChargeIn can be optionally ordered with an RFID sensor for non-contact authorization of the user.

5.4.1 Can I use my own RFID cards/tags?

Yes. The EATON xChargeIn can administer up to eight RFID cards/tags.

5.4.2 Which RFID cards/tags can be used?

MIFARE cards/tags according to ISO14443 can be used.

5.4.3 How are additional RFID cards/tags programmed?

The EATON xChargeIn is supplied with one RFID card from the factory with the RFID order option. The first RFID card that is detected by the charging station will automatically be stored as the master card.

The authorization by an RFID master card is necessary for the programming of additional RFID user cards. The programming mode can be activated and deactivated using the RFID master card.

You can find a more detailed description in the user manual in the "Programming RFID user cards" chapter.

5.4.4 Where can I purchase RFID cards/tags?

RFID cards/tags are commercial electronic components and can be purchased from a dealer. Please contact your dealer or service partner if you have additional questions.

5.4.5 Can RFID cards/tags be deleted from the EATON xChargeIn?

Yes. However, the deletion of all stored RFID user cards is only possible by opening the device (see installation manual).

5.4.6 Can RFID cards/tags be read out from the EATON xChargeIn?

No.

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5.4.7 What should I do if I lose my RFID cards/tags?

If an RFID card/tag is lost, we recommend deleting the remaining cards/tags stored in the EATON xChargeIn and then programming in the remaining cards/tags again. However, the deletion of all stored RFID user cards is only possible by opening the device (see installation manual).

5.5 PLC modem order option

5.5.1 What is a PLC modem (Power Line Communication) used for in the EATON xChargeIn?

Power Line Communication (PLC) is used for communicating with the vehicle via the ISO 15118 protocol as well as the remote querying of vehicle states via the Internet (applies to "Connected" versions with Daimler vehicles). Please refer to your vehicle manual to see whether your vehicle already supports ISO 15118 communication.

6 Warranty

The EATON xChargeIn has a 24 month warranty. Please contact your dealer or service partner for warranty claims.

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