# **Operating instructions**

for reduction socket from AC charging stations





# Introduction

Thank you for choosing INO-Charge specialized reduction socket with internal electronic system and output standardized socket for 230V or 400V AC. This specialized reduction socket is used to switch on AC charging stations (including wallbox) so that it can be used to connect any charger for all electric scooters, electric bikes, electric mopeds, electric scooters, or even historic electric cars that use a built-in AC 1-phase charger or for other electrical devices using a standard 230V AC power supply.

These instructions will help you familiarize yourself with the operation of this specialized reduction socket, when after reading the mentioned instructions you will be sure of trouble-free operation and thus get the maximum benefit from your "eco-smart" device.

#### **SAFETY**

A specialized reduction socket is a technical device that connects to all standardized AC charging devices for electric cars (so-called EV vehicles) and, after switching on the switch, turns the 230V or 400V output socket into an active state to the mains AC source. This is a Class 1 item of electrical equipment in accordance with IEC 61140. The unit is designed for indoor and outdoor use with connection to an adequate Mennekes TYPE 2 charging socket. The equipment has been manufactured in accordance with the current state of the art and recognized safety standards.

# Improper operation or incorrect use may result in:

- Injury or death to operator or third parties
- Damage to equipment and other property of the operator
- Inefficient operation of equipment

# All persons who carry out maintenance or service must:

- Have the appropriate qualifications
- Have knowledge and experience with electrical installation
- Read this operating manual carefully and follow it
- Always disconnect the device from the power supply before removing the cover

The device may not be used by persons (including children) with reduced physical, sensory or mental abilities, or lack of experience and knowledge, unless they have been given supervision or instruction regarding the use of the equipment by a person responsible for their safety.

Mennekes TYPE 2 connector and standard 230V socket is in accordance with EN 62196-1 and EN 62196-2. Additional adapters, extension cables or conversion cables must not be used!

If the installation or operation of the device is not in accordance with these instructions, the technical equipment of the specialized reduction socket may be damaged and thus void the manufacturer's warranty.

# **Disposal**

In accordance with European Directive 2002/96/EC on waste electrical and electronic equipment and its disposal, where it is legally established that used electrical equipment must be collected separately and recycled in an environmentally responsible manner. Make sure you return the used device to the dealer or obtain information about your local authorized collection and disposal system. Failure to comply with this EU directive may result in a negative impact on the environment.

# Copyright

This user manual is subject to copyright law. Text and images correspond to the technical level at the time of going to press. We reserve the right to make changes.

# **Documentation information**

The following instructions are a guide to the entire documentation. We cannot be held liable in any way for damages caused by non-observance of these instructions.

1. Documentation components

For facility operators:

Operating instruction for the specialized reduction socket

For the service:

• Instructions for repairing the specialized reduction socket

## 2. Archiving of documents

Hand over these installation instructions as well as all related documentation and any necessary tools to the equipment operator. He will ensure that they are stored so that instructions and tools are available when needed.

## 3. Symbols used

The following is an explanation of the symbols that appear in the text:



Immediate threat to life Risk of serious injury Risk of minor injuries Risk of property damage



Symbol of useful instructions and information

# **Shipping instructions**



#### Attention!

Risk of damage to the terminals of the specialized reduction socket!

• Make sure that the terminals are provided with a protective element during transport or transported in adequate packaging.



#### **Attention!**

Risk of damage to the charging station!

The internal parts of the specialized reduction socket are sensitive to conductive dust particles and moisture.

• Always transport the specialized reduction socket fully assembled.

The specialized reduction socket is supplied in one package

• During transport, the specialized reduction socket should remain in a protective package, bag, backpack or similar luggage.

# **Usage**



#### **Attention**

Follow the procedure for connecting to AC charging stations and follow the instructions on their display! Follow the connection steps in this manual! Never use force to disconnect connectors, etc.!

During use, avoid any liquid contact with the external or internal part of the specialized reduction socket, as this could lead to degradation or conductive connection between the contacts, which could cause a short circuit at the connection point, or damage to the control part of the station.

After finishing the operation, ALWAYS first turn off the control switch (to the "O" position) on the INO-Charge specialized reducer before disconnecting it from the AC charging station!!!

# **Technical parameters**

# Specifications:

- IEC 61851
- Output power 1 phase up to 7.3 kW
- Local control switch on the outside of the product
- Power consumption in off or standby mode is = 0 W
- Max. passing current up to 32 A
- Input voltage up to 230 V
- IP protection IP 54
- Operating temperature from -25 to 40 °C
- Operating humidity from 5% to 95%
- Reduction weight: 0.32 kg
- Size 120x70x60 cm

# **Basic information**



# Danger!

Improper handling or installation can lead to personal injury or property damage! Possible risk of personal injury and material damage to the charging station or other equipment due to improper use.

• Follow the user manual for proper operation

In the following section, the individual steps for the full use of this product in the form of a specialized reduction socket will be described.

This device works according to the possibility of electrical connection of the AC charging device in the electrical power distribution board at the installation site. The basic setting of AC charging devices is usually for outputs of 11kW or 22kW.

# Using a specialized reduction socket

The specialized reduction socket INO-Charge is equipped with the necessary standardized connectors and an important control element in the form of a switch that controls the AC charging device in which it is connected. Switching this switch will switch the AC charging device into operating mode and thus any electrical device of the given power can be connected to a standardized 230V AC outlet.



Before any use and start-up, check the condition and functionality of the AC charging device!

Immediate threat to life Risk of serious injury Risk of minor injuries Risk of property damage



Read the basic instructions for using this specialized reduction socket.

# 1) Connection to Mennekes TYPE 2 connector

Device assembly for connection:

Connector TYPE 2 INO-Charge AC device

Representation of individual devices for their subsequent connection





Illustration of individual steps for connection

# 2) Activation of operation

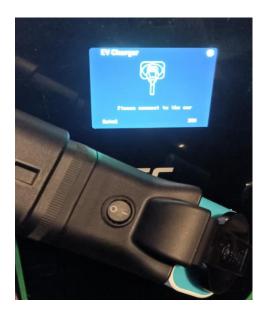
After inserting (with the control switch off - switch position "O") into the AC connector of the charging station, this charging station is in the "connection" mode, then turn this switch to the "I" position, the charging station is connected in the working mode.



Representation of switch position OFF ("O")



Representation of switch position ON ("I")



Display OFF ("O")



Display ON ("I")

ALWAYS turn off the control switch (to the "O" position) on the INO-Charge specialized reducer before disconnecting it from the AC charging station after the end of operation!!!



# Interruption of operating mode

If it is necessary to stop the operation, turn the control switch on the INO-Charge specialized reduction socket to the OFF "O" position and all operation will stop. Then pull out your INO-Charge reducer from the connector and put it in the transport package.

INOforUSE s.r.o. wishes you many happy kilometers and problem-free use of this INO-Charge specialized reduction.