OPERATING INSTRUCTIONS

Battery Charger Mode 2 Basic and Mode 2 Universal

OVERVIEW



IMPORTANT SAFFTY INSTRUCTIONS

Read all the instructions before using this product! Save instructions for future reference.

WARNING

RISK OF FIRE OR ELECTRIC SHOCK

Inadequate sockets or improperly installed socket-outlets may cause electric shock or fire when charging.

- The charging cable must only be operated on a suitable socket that has been installed in accordance with specifications from the national laws and standards.
- · The charging cable must only be operated in properly grounded power networks. A special "IT" version of the charging cable is available for non-grounded networks.
- Unsupervised charging is only permitted at an industrial or household socket-outlet that has been checked by an electrician.
- Unsupervised charging at a household socket-outlet that has not been checked by an electrician may lead to a fire inside the house.
- Only use socket-outlet outdoors that are protected against splashes of water.
- Unauthorized people, particularly children, must not be able to access the charging cable or vehicle during unsupervised charging.

\Lambda WARNING

RISK OF EXPLOSION

The charging cable may produce sparks and ignite flammable or explosive vapours as a result.

· Do not use charging cables in areas with risks of explosion.

A WARNING

RISK OF ELECTRIC SHOCK, SHORT CIRCUIT, FIRE, EXPLOSION Use of a damaged charging cable, a damaged or faulty socket/coupling of of a damaged or fault ICCB (control), or improper use of the charging cable, or non- observance of the safety information may cause short circuits, electric shocks, explosions, fires, or burns.

· Visually check all components for damage. Do not use damaged components!

SYMBOLS

Not suitable for IT-net

- ₩ Minimum ambient temperature
- Do not use just any type of extension cord!



- Do not use travel adapters!
- Do not use multiple sockets!
- \mathcal{B} Do not use charging cables with damage to the casing, connectors, or connection cables
- Do not expose to direct sunlight
- Follow the operating instructions



Type 2 vehicle connector

A WARNING

WARNING indicates a danger with a moderate risk of causing death or serious injury if it is not avoided.

- · Only connect charging cables to properly installed and undamaged sockets, and to fault-free electrical installations that have been checked by an electrician.
- Check the connectors and ICCB housing for damage (breakages, cracks) and dirt before use. Do not use charging cables that have damaged or dirty connectors, or a dirty housing
- Do not open the ICCB. Dangerous electrical voltages may be present inside the housing, that can lead to electric shock or death.
- Do not carry out any alterations or repairs to the charging cable (e.g. replacement of plug).
- Never immerse charging cable, plug or connector in water..
- Always use the correct country version of the grid cable (Mode 2 Universal) or of the charging cable (Mode 2 Basic).
- The vehicle connector will not fit vehicles marked with a letter other than a white 'C' in a black hexagon.

A WARNING

RISK OF FIRE OR ELECTRIC SHOCK

Improper use of the charging cable can cause electric shock.

- Do not touch the contacts of the vehicle connector.
- · Do not insert any objects into the vehicle connector or the separation point.
- Protect all contacts against moisture.
- · Mount the ICCB close to the socket-outlet to prevent tensile stress on it.

CHANGING THE POWER CABLE (ONLY MODE 2 UNIVERSAL)







2. Unscrew the power cable separation point anticlockwise. Choose a suitable mains plug type (see below).



3. Insert the power cable separation point into each other so that the bar on one side slides into the recess on the other.



4. Tighten the power cable separation point clockwise until it audibly clicks into place and the gap between the two parts is completely closed.

USE

Major stress may cause damage to the cable or ICCB.

- Do not pull cables over sharp edges
- Avoid driving over the charging cable
- Avoid kinks or torsion on the cable
- Avoid excessive loads on the cables



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/ WARNING

RISK OF FIRE OR ELECTRIC SHOCK Risk of serious or deadly injuries due to electric shock or fire.

- Only replace the power cable if the charging cable has been unplugged from the main and the vehicle.
- Always keep connections away from moisture and dirt.
- Only use the original power cable.



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PLUG VARIANTS

When ordering Mode 2 Basic or Universal, specify the country and plug type (e.g. 'Germany EF 10 A'). Further countries on request.

- EF 10 A__Austria, Belgium, Bulgaria, Croatia, Estonia, France, Germany, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Sweden, Ukraine, Czech Republic, Turkey
- EF 8 A Finland, Greek, Hungary, Italy, Poland, Spain
- G 10 A__United Kingdom, Ireland
- J 8 A Swiss

K 8 A__Denmark

CEE blue 16 A__All countries

CEE blue 32 A All countries

CEE red 16 A__All countries

CEE red 32 A All countries

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CHARGING

A WARNING

RISK OF FIRE OR ELECTRIC SHOCK Risk of serious or deadly injuries due to electric shock and fire.

- Adhere to the specified sequence during the charging process
- · Do not disconnect the veh charging process
- If the LED D lights up red at yellow, there is a fault in the The installation must be che electrician.

 Do not disconnect the vehicle cable during the charging process If the LED D lights up red and the LED A flashes yellow, there is a fault in the building's installation. The installation must be checked by a specialised electrician. No connection to mains / switched off		• ·					
yellow, there is a fault in the building's installation. The installation must be checked by a specialised electrician. A Battery charging Charging completed / Beady for charging A A A A Battery charging	•	-		_			
1. Connect the power plug to the power outlet Connection to grid	•	yellow, there is a fault in the building's installation. The installation must be checked by a specialised				Ċ	
Connection to grid	No	connection to mains / switched off	- •	٠	٠	•	
Self-test ICCB in progress WHITE WHITE GREEN 2. Remove protective cap and connect the vehicle coupler to the vehicle inlet Image: Connect the vehicle coupler to the vehicle inlet Self-test passed Image: Connect the vehicle coupler to the vehicle inlet Image: Connect the vehicle coupler to the vehicle inlet Battery charging Image: Connect the vehicle coupler to the vehicle inlet Image: Connect the vehicle coupler to the vehicle inlet Charging	1. Connect the power plug to the power outlet						
2. Remove protective cap and connect the vehicle coupler to the vehicle inlet Self-test passed Ready for charging Battery charging Charging completed / Beady for charging		Connection to grid	- •	•	•	GREEN	
pler to the vehicle inlet Self-test passed		Self-test ICCB in progress	- •	WHITE	WHITE	GREEN	
Self-test passed • White GREEN Ready for charging • • • • Battery charging • • • • Charging completed / Ready for charging • • • •	2.		I-				
Battery charging GREEN GREEN GREEN GREEN GREEN GREEN		Self-test passed	- •			GREEN	
Charging completed / Ready for charging		Ready for charging	- •		GREEN	GREEN	
Charging completed / Ready for charging		Battery charging	- •	GREEN	GREEN		
		Charging completed / Ready for charging	- •			GREEN	

3. Finish charging process following the vehicle user manual.

4. Disconnect vehicle connector and fit protective cap

5. Disconnect grid plug

ERROR MESSAGES



Restart of charging process / service required (the first time this occurs, disconnect the vehicle coupling, remove the mains plug and then restart the charging process)

Error in the vehicle (contact a workshop should this occur repeatedly)	- •	RED	
Error in the ICCB (contact a workshop should this occur repeatedly)	- •	BLUE	、 / RED ()
Infrastructure error (if this occurs repeatedly, have the house installation checked by an electrician)	- •	YELLOW	、 ノ RED ノ ヽ

TECHNICAL DATA

ELECTRICAL DATA	
Charging power	1/3-phasig 1,2 kW – 22 kW
Nominal voltage range	110 – 400 V
Nominal current	6 – 32 A
Frequency	50 – 60 Hz
Residual current circuit breaker (RCD)	\leq 30 mA AC, \leq 6 mA DC
Max. charging current grid plug	6 A/8 A/10 A (country specific)
Max. charging current industrial plug	16 A/32 A (only Mode 2 Universal)

TRANSPORT AND STORAGE

WARNING

An unsecured, incorrectly secured, or incorrectly positioned charging cable may slip when braking, when changing direction, or in the event of an accident, and may endanger occupants.

- · Never transport charging cables unsecured.
- Always stow charging cables securely and protect from damages.
- · Never transport charging cables in the passenger compartment (e.g. on or in front of the seats).

DISPOSAL

The crossed-out wheeled bin logo requires the separate collection of waste electric and electronic equipment (WEEE). Such equipment may contain dangerous and hazardous substances. These tools must be returned to a designated collection point for the recycling of WEEE and must not be disposed as unsorted municipal waste. By doing so, you will help to conserve resources and protect the environment. Contact your local authorities for more information.

Children must not play with plastic bags and packaging material, due to possible injury or danger of suffocation. Store such material safely or dispose of environmentally friendly.

SAFETY FUNCTIONS

Self-test, residual current detection, monitoring of CP communication, monitoring of the protective conductor (not with the IT variant), monitoring of the relays, overcurrent detection, detection of overvoltage and undervoltage, temperature monitoring for the ICCB, temperature monitoring of the mains plug (country-specific), derating

PROPERTIES Ambient temperature Protection class ICCB Weight ICCB Max. overall length IC-CPD

-25 °C to +50 °C IP67 ca. 5 kg 7 m



GREN/ GREN/ GREN/ GREN/ GREN/ GREN/

GREEN

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