

CC01, CC02, CC03, CC03T, CC04, CC04T, CC04HD, CC05, CC05T, CC05HD, CC06, CC06T, CC06TL, CC06HD, CS01, CS02, CS03, CS03T, CS04, CS04T, CS05, CS05T, CS06, CS06T, CC06TL

Electric vehicle charging cables & charging pigtails for charging stations

## **USER MANUAL**







## INTRODUCTION

METRON EV charging cables are designed for charging electric and plug-in hybrid vehicles from any public or home charging station. For Tesla vehicles we offer versions with integrated Tesla remote charge port opener and charging plug unlocker. We also provide EV heavy duty charging cables ("HD" line, drive-over proofness, 8 years warranty), so-called pigtail Type 1/2 cables (plug at one end of the cable and open ended at the other end of the cable) that are used for installation in wall-mounted or floor-mounted EV charging stations and special charging cables on request.

Any other use is not allowed and is regarded as improper use.

Before using the charging cable, please thoroughly read this manual and follow the instructions provided therein. Please keep the manual for future use. If you are unsure about the proper usage, please contact the manufacturer or your dealer before usage.

## **ADVANTAGES OF METRON EV CHARGING CABLES**



#### **IMPROPER USE**

Improper use can lead to personal injury or property damage, including electric shock, short circuit or fire. In such cases, the manufacturer and retailer accept no liability. Warranty will be voided in case of improper use. You must NOT:

- drive over the charging cable!
- drive over the charging plug!
- shake the charging cable while charging!
- walk on the charging cable while charging!
- walk on the charging plug!
- · handle the charging plug with wet hands!
- put your fingers or any other objects into the contact parts!
- use the charging cable if damaged!
- stretch the charging cable while charging!
- wrap the charging cable around your neck!
- pull the charging cable when it is plugged into the vehicle or charging station!
- spill water on the charger plug!
- intertwine the charging cable!
- pass the charging cable by throwing it in the air!
- hit the charging cable against the ground!
- have a tangled cable while charging!
- · dry the charging cable plug with a hairdryer!
- · leave the vehicle side charging plug on the floor when the charging cable is plugged into the charging station!
- squeeze the cable of the EV charging cable!

#### **GENERAL SAFETY INSTRUCTIONS**



- Carefully read this security instructions before using the product!
- Children are not allowed to use the charging cable.
- Keep animals away while using the charging cable.
- Avoid liquids entering the charging cable. Never use the charging cable if plugs are wet.
- Keep insects and other dirt away from the contact parts!
- Do not use the charging cable in a potentially explosive atmosphere.

## **SYMBOLS USED**

The following symbols are used in this manual and on the product:

$\triangle$	This symbol indicates a danger with a risk of coursing serious injury or death or damage if not avoided.
C€	CE symbol is a mark of conformity indicating that a product complies with European Union directives and regulations.
	This symbol signifies the requirement for separate disposal of electrical and electronic waste. See chapter disposal.
i	Please read the manual before using the charging cable.
4	Risk of electric shock due to dangerous voltage when used incorrectly.
Tamb	Do not use and store the charging cable below or above the specified temperature.

### **GET STARTED**



- Check charging cable before use.
- Do not use the charging cable if damaged!
- Do not use the charging cable if the socket and plug are wet.
- Don't unplug before turning off the charging.
- Always operate in the specified order of steps.
- 1. First remove the protective cap (if present).
- 2. Then insert the male side of your charging cable into EV charging station's Type 2 socket and the other side of the charging cable into vehicle charging socket.
- 3. When everything is connected the vehicle should start charging.
- 4. When your electric vehicle is fully charged you can end the charging process by first unplugging the charging cable from your vehicle and then from EV charging station.

## **TECHNICAL SPECIFICATIONS**

	CC03T, CC04, CC04T, CC04HD, CC05, CC05T, CC05HD, CC06, CC06T, CC06HD	stations CS01, CS02, CS03, CS03T, CS04, CS04T, CS05, CS05T, CS06, CS06T, CC06TL
Vehicle side plug type	CC01, CC02Type 1 (SAE J1772) female plug All othersType 2 (IEC 62196) female plug	CS01, CS02Type 1 (SAE J1772) female plug All othersType 2 (IEC 62196) female plug
Charging station side plug type	Type 2 (IEC 62196) female plug	None (pigtail) brown wireL1 (phase 1) black wireL2 (phase 2) grey wireL3 (phase 3) blue wireN (neutral) yellow-green wirePE (earth/ground) red & white wiresCP (control pilot)
Max. charging current	CC01, CC03xx20 A (1-phase) CC02, CC04xx32 A (1-phase) CC05xx3 x 20 A (3-phase) CC06TL3 x 30 A (3-phase) CC06xx3 x 32 A (3-phase)	CS01, CS03xx20 A [1-phase] CS02, CS04xx32 A [1-phase] CS05xx3 x 20 A [3-phase] CS06TL3 x 30 A [3-phase] CS06xx3 x 32 A [3-phase]
Maximum charging power	CC01, CC03xx4,6 kW (1-phase) CC02, CC04xx7,4 kW (1-phase) CC05xx13,8 kW (3-phase) CC06TL20,7 kW (3-phase) CC06xx22 kW (3-phase)	CS01, CS03xx4,6 kW (1-phase) CS02, CS04xx7,4 kW (1-phase) CS05xx13,8 kW (3-phase) CS06TL20,7 kW (3-phase) CS06xx22 kW (3-phase)
Rated voltage	230 Vac (max. 250 Vac) (1-phase versions) 400 Vac (max. 480 Vac) (3-phase versions)	230 Vac (max. 250 Vac) (1-phase versions) 400 Vac (max. 480 Vac) (3-phase versions)
Tesla remote for opening charge port and unlocking the plug – integrated in Type 2 plug	Only models that contain letter "T", Powered from replaceable battery CR2032 3V (battery lasts 3 years+ on average)	Only models that contain letter "T", Powered from replaceable battery CR2032 3V (battery lasts 3 years+ on average) or from 5-15V power supply in the charging station
Protective cap for vehicle side plug	optional UV resistant rubber cap	optional UV resistant rubber cap
Protective cap for charging station side plug	optional UV resistant rubber cap	N/A (pigtail)
Cable specification	Straight (any length) or SPIRAL Premium quality according to EV charging cable standard EN 50620	Straight (any length) or SPIRAL Premium quality according to EV charging cable standard EN 50620
Cable cross section	CC01, CC03xx3 x 2,5mm2 + 2 x 0,5mm2 CC02, CC04xx3 x 6,0mm2 + 2 x 0,5mm2 CC05xx5 x 2,5mm2 + 2 x 0,5mm2 CC06TL5 x 4,0mm2 + 2 x 0,5mm2 CC06xx	CC01,CC03xx3 x 2,5mm2 + 2 x 0,5mm2 CC02,CC04xx3 x 6,0mm2 + 2 x 0,5mm2 CC05xx5 x 2,5mm2 + 2 x 0,5mm2 CC06TL5 x 4,0mm2 + 2 x 0,5mm2 CC06xx5 x 6,0mm2 + 2 x 0,5mm2
IP Rating	IP44 (rain proof)	IP44 (rain proof)
Color	Black or Orange (other colors on request)	Black or Orange (other colors on request)
UV resistance	Yes (all parts)	Yes (all parts)
Operating Ambient Air Temperature Range	from -40°C to +50°C	from -40°C to +50°C
Storage temperature	from -40 °C to +70 °C	from -40 °C to +70 °C
Weight	Depends on cable size and length	Depends on cable size and length

Charging cables CC01, CC02, CC03,

**Charging pigtails for charging** 

The charging cables are IP44 rated, what means that they are waterproof during usage. Nevertheless, please avoid the plugs to get wet and do not use the charging cables if the plugs are wet.



- Never draw more than specified current from the charging cable!
- Do not use if plugs are wet!

## **CLEANING & STORAGE**

Use only a dry or damp cloth for cleaning the unplugged charging cable. Do not use cleaning detergents. Please secure the charging cable while transporting it in your vehicle to avoid damage. Store at a dry place.



- The charging cable must be completely unplugged before cleaning!
- Avoid water getting to contact parts!
- Secure charging cable while transporting!

#### **DISPOSAL**



The symbol "crossed-out trash can" signifies the requirement for separate disposal of electrical and electronic waste. These devices may contain hazardous and environmentally harmful substances. Please take such devices to a designated collection point for the recycling of electrical and electronic equipment and do not dispose of them in regular household waste. You can obtain further information from local waste disposal services or the company from which you purchased the product.

# (F) GREEN PRODUCTION

All our products are produced in a carbon neutral way by using "Sustainable energy cycle" method. The production plant where we make charging cables and portable charging stations is the first fully sustainable production facility for portable EV charging equipment. All energy needed for the heating / cooling of the building, production process, as well as for transportation of goods and employees (except deliveries of heavy materials by trucks) is produced by 2 photovoltaic power plants and stored in 4 storage batteries. Almost all of the raw materials we use (cables, plugs) are produced in EU to shorten supply routes and support local economy. Buying our products helps developing sustainable economy.

## **LIMITED WARRANTY**

METRON warrants its product to the original consumer purchaser that it will repair, or replace, any product that is determined to be defective for the following terms: **Two (2)** years from date of purchase on all components. To be eligible for repair or replacement under this warranty, the product in question must be sent back to METRON within the warranty period and the original consumer purchaser must comply with the following conditions: The product thereof must not have been modified or altered in any way by an unauthorized source; The product thereof must have been used in accordance with the user manual.

This limited warranty does not cover: Damage due to improper use; Accidental or intentional damage; Misuse, abuse, corrosion, or neglect; Product impaired by severe natural conditions, such as excessive hail storms, lightning strikes, tornados, flooding, ice or other natural occurrences; Damage due to improper packaging on return shipment. Any and all labor charges for troubleshooting, removal or replacement of the product are not covered by this warranty and will not be honored by METRON. All shipping costs regarding repair or replacement of the product is to be pre-paid by the original consumer purchaser.