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PC01Z, PC03Z, PC03ZT, PC01ZG, PC03ZG, PC03ZGT, PC01ZJ, PC03ZJ, PC03ZJT

Portable EV Chargers

USER MANUAL





INTRODUCTION

METRON "Z" series portable EV chargers are extremely compact & light weight and designed to charge electric vehicles from standard household sockets (e.g. Schuko) with maximum user safety features.

The design is truly unique as there is no bulky in-cable control box present like on all regular portable chargers what ensures easier usage and saves space/weight.

ALL models have built-in temperature sensors closely to both power pins (L-phase & N-neutral) and the temperature is constantly monitored. If the household socket is weak/bad/old the temperature will rise too much during charging and the protection system will terminate charging to prevent melting or fire of household socket and portable charger plug. When it cools down the charging will restart automatically.

Any other use is not allowed and is regarded as improper use.
Before using the portable EV charger, 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.

IMPROPER USE

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

- modify/manipulate the portable EV chargers!
- drive over the portable EV chargers!
- draw more than maximum specified charging current from the portable EV chargers!
- connect unsuitable plugs and cables!
- use the portable EV charger if damaged!

GENERAL SAFETY INSTRUCTIONS



- **Carefully read this security instructions before using the product!**
- **Never draw more than maximum specified charging current from the portable EV charger!**
- **Children are not allowed to use the portable EV charger.**
- **Keep animals away while using the portable EV charger.**
- **Avoid liquids entering the portable EV charger. Never use the portable EV charger if the socket or plug are wet.**
- **Only connect undamaged, designated and labelled plugs & cables to the portable EV charger.**

SYMBOLS USED

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

	This symbol indicates a danger with a risk of coursing serious injury or death or damage if not avoided.
CE	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.

	Please read the manual before using the portable EV charger.
	Risk of electric shock due to dangerous voltage when used incorrectly.
Tamb	Do not use and store the portable EV charger below or above the specified temperature.

SETTING THE DESIRED CHARGING CURRENT / POWER

METRON portable EV chargers allow users to set desired charging current/power before being plugged in the electric vehicle charging socket. Procedure is simple:

- Press and hold the push button: STATUS LED switches off immediately.
- After 5 seconds STATUS LED starts blinking slowly.
- Releasing the push button after a certain number of blinks determines charging current/power as follows:

PC01Z, PC03Z, PC03ZT

Number of LED blinks	Charging current / power
1	6 A / 1,4 kW
2	8 A / 1,8 kW
3	10 A / 2,3 kW
4	13 A / 3,0 kW
5	16 A / 3,7 kW

PC01ZG, PC03ZG, PC03ZGT

Number of LED blinks	Charging current / power
1	6 A / 1,4 kW
2	8 A / 1,8 kW
3	10 A / 2,3 kW
4	13 A / 3,0 kW

PC01ZJ, PC03ZJ, PC03ZJT

Number of LED blinks	Charging current / power
1	6 A / 1,4 kW
2	8 A / 1,8 kW
3	10 A / 2,3 kW



New charging current/power setting is stored in the memory and it stays the same (even after the power supply is not present anymore) until the next setting change is performed.

STATUS NOTIFICATION BY LED BLINKS

STATUS LED state	NOTIFICATION
Slow blinking when power supply is applied	Indicating previous saved current setting
Constantly on when not plugged in	Stand-by/Ready to charge
Slow blinking when plugged in	Charging
Constantly on when plugged in	Electric vehicle fully charged
Slow blinking 2 times when plugged in	Electric vehicle requests room ventilation (no charging)
Slow blinking 5 times (plugged in or not plugged in)	Wall plug overheated (no charging); restarts charging automatically when it cools down; applies only to special versions with wall plug integrated over-temperature protection
Slow blinking 6 times (plugged in or not plugged in)	Leakage current detected by built-in RCD (charging stopped); unplug to reset
Slow blinking 7 times (plugged in or not plugged in)	RCD self test failed (charging not allowed), portable charger fault
Slow blinking 8 times (plugged in or not plugged in)	One or more power contact welded (charging not allowed), portable charger fault
Rapid blinking (plugged in or not plugged in)	Portable charger or vehicle fault

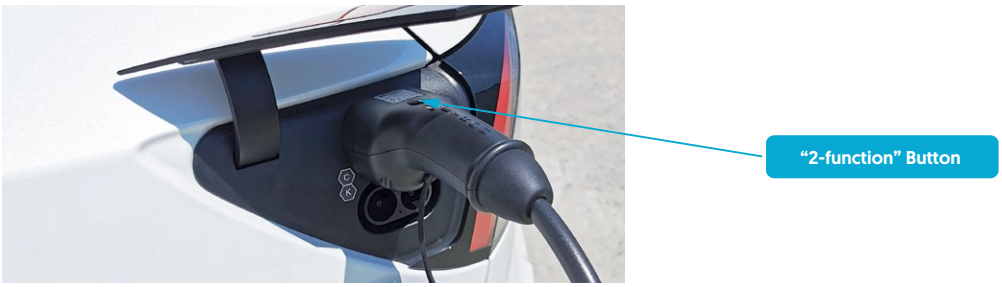
GET STARTED

- Check the portable EV charger before use. Do not use the portable EV charger if damaged!
- Socket will provide a high voltage (230 V)!
- Never draw more than maximum specified charging current from the portable EV charger!
- Do not use the portable EV charger if the socket and plug are wet.
- Only connect undamaged, designated and labelled plugs & cables to the portable EV charger.
- Avoid using multiple adapter/power strips as they can lead to overload.
- Don't unplug during charging process.
- Always operate in the specified order of steps.

First plug the portable EV charger in the wall outlet. Immediately STATUS LED starts blinking: number of blinks tells you what is the saved charging power/speed setting (see the next page). Afterwards status LED glows constantly till AC power is present indicating standby/ready status. When you plug it into the vehicle Type 1/2 socket the STATUS LED starts blinking slowly what means the vehicle is charging. When your electric vehicle is fully charged the LED glows constantly again.

REMOTE CHARGE PORT OPEN & PLUG UNLOCK for TESLA electric vehicles

When PC03ZT, PC03ZGT or PC03ZJT is plugged into the wall outlet/socket (power applied), pressing a "2-function" button on the vehicle Type 2 plug sends a remote-control signal to your TESLA vehicle charge port which then opens. Signal range is usually between 3 and 15 meters. This feature eliminates user "touching" the smart phone or Tesla central screen in order to open the charge port. Remote-control signal also wakes-up the Tesla vehicle from sleep - sometimes the button needs to be pressed several times to wake-up the vehicle.
To unplug the PC03ZT/PC03ZGT/PC03ZJT while still charging or when charging completed press and hold the "2-function" button for a second. The car will unlock the vehicle plug (only if car is unlocked/owner nearby!) and then you can unplug it. Plug unlock function works even if the PC03ZT/PC03ZGT/PC03ZJT is not connected to power source. This feature once again eliminates the need for user "touching" the smart phone or Tesla central screen in order to unlock the PC03ZT/PC03ZGT/PC03ZJT plug from Tesla charge port.



TECHNICAL SPECIFICATIONS

	PC01Z, PC01ZG, PC01ZJ	PC03Z, PZ03ZG, PC03ZJ, PC03ZT, PC03ZGT, PC03ZJT
EV Side Socket Type	Type 1 (SAE J1772) Female	Type 2 (IEC 62196) Female
Wall socket/grid side Standard Plug Types	Schuko – type F/E --> PC01Z type G (UK) --> PC01ZG type J (Swiss) --> PC01ZJ	Schuko – type F/E --> PC03Z, PC03ZT type G (UK) --> PC03ZG, PC03ZGT type J (Swiss) --> PC03ZJ, PC03ZJT
Max. Charging Current	16 A - Schuko – type F/E --> PC01Z 13 A - type G (UK) --> PC01ZG 10 A - type J (Swiss) --> PC01ZJ	16 A - Schuko – type F/E --> PC03Z, PC03ZT 13 A - type G (UK) --> PC03ZG, PC03ZGT 10 A - type J (Swiss) --> PC03ZJ, PC03ZJT)
Possible charging current settings	6/8/10/13/16 A - Schuko – type F/E --> PC01Z 6/8/10/13 A - type G (UK) --> PC01ZG 6/8/10 A - type J (Swiss) --> PC01ZJ	6/8/10/13/16 A - Schuko – type F/E --> PC03Z, PC03ZT 6/8/10/13 A - type G (UK) --> PC03ZG, PC03ZGT 6/8/10 A - type J (Swiss) --> PC03ZJ, PC03ZJT
Max. Charging Power	3,7 kW - Schuko – type F/E --> PC01Z 3,0 kW - type G (UK) --> PC01ZG 2,3 kW - type J (Swiss) --> PC01ZJ	3,7 kW - Schuko – type F/E --> PC03Z, PC03ZT 3,0 kW - type G (UK) --> PC03ZG, PC03ZGT 2,3 kW - type J (Swiss) --> PC03ZJ, PC03ZJT
Rated Voltage	230 Vac (1-phase)	230 Vac (1-phase)
Operating voltage/frequency range	from 90 V to 270 V (50/60 Hz)	from 90 V to 270 V (50/60 Hz)
TESLA remote CHARGE PORT OPENER & PLUG UNLOCKER	N/A	PC03ZT, PC03ZGT, PC03ZJT only
Wall plug integrated OVER-TEMPERATURE PROTECTION	yes	yes
Internal self-resetable overtemperature protection	yes	yes
Integrated ground fault protection device (RCD)	30 mA AC + 6 mA DC	30 mA AC + 6 mA DC
Automatic RCD self-test	yes	yes
Power contactor weld detection (although very unlikely to occur due to special contact weld protection system)	yes	yes
UV resistance	yes (all parts)	yes (all parts)
Operating Ambient Air Temperature Range	from -30°C to +50°C	from -30°C to +50°C
Drive-over proofness	yes	yes
IP Rating	IP67 wall plug / IP44 EV plug	IP67 wall plug / IP44 EV plug
IK Rating	IK10 (impact/shock proof)	IK10 (impact/shock proof)
Weight	1,5 kg (5 m cable) + 0.16 kg per each additional meter of cable	1,5 kg (5 m cable) + 0.16 kg per each additional meter of cable

Portable EV chargers models PC01Z, PC01ZG, PC01ZJ, PC03Z, PC03ZG, PC03ZJ, PC03ZT, PC03ZGT and PC03ZJT can have some additional designation next to the number such as PC03Zxyz, where “x” and “y” and “z” may be any alphanumeric character or blank, representing a color or wall plug type, or lower than standard charging current limit or factory version, or any possible future product differentiations, which do not have an impact on general technical specifications.

⚠ **It is only allowed to use Metron original charging adaptors in combination with “Z” series portable EV chargers.**

WHAT IS RCD AND HOW DOES IT WORK?

RCD is an acronym for Residual Current Device - sometimes it can be called also Earth Leakage Circuit Breaker or Safety Switch. Its purpose is to prevent you from getting a fatal electric shock if you touch live part, such as a bare copper wire under high voltage. RCDs offer a level of personal protection that ordinary fuses/circuit-breakers cannot provide. RCD constantly monitors the electric current flowing through one or more circuits which it protects. If it detects electricity flowing down an unintended path, such as through a person who has touched a live part, the RCD will switch the circuit off very quickly, significantly reducing the risk of death or serious injury. Every portable charging station has integrated Type A 30mA AC + 6mA DC RCD what ensures maximum possible level of personal protection as it protects users from AC, pulsating DC and pure DC leakage currents.

CLEANING & STORAGE

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

⚠
- **Portable EV charger must be completely unplugged before cleaning!**
- **Avoid water getting to contact parts!**
- **Secure portable EV charger 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.

GREEN PRODUCTION

All our products are produced in a carbon neutral way by using "Sustainable energy cycle" method. Production plant where we make charging cables and portable chargers is the first fully sustainable production facility for EV charging cables. All energy needed for the heating and cooling of the building, production process and 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.