



Charge Amps **Aura**

Installation manual

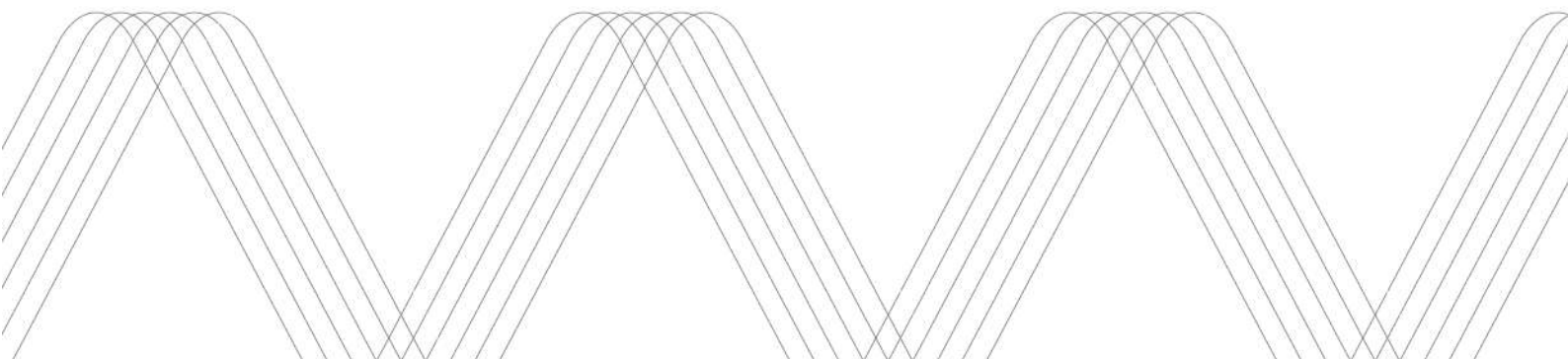


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Aura/Aura LTE

Part number:	101010/101010-LTE*
Charging current:	6–32 A, 1 or 3-phase per socket
Voltage:	230/400 V
Operating temperatures:	-30°C to +45°C
Charging standard:	Mode 3
RCD tripping characteristics:	DC protection and a type A RCD are integrated into the charging station. Together they have the same functionality as and replace the requirement for a type B RCD.
Metering:	3-phase voltage, current and power (equivalent to the Measuring Instruments Directive 2014/32/EU)
IP rating:	IP 55
IK rating:	IK 10
Sockets:	2 x 22 kW type 2
Dimensions (W x D x H):	367 x 159 x 405 mm
Weight:	10 kg

*Specification of Aura version 101010-LTE

RF technology:	GSM, GPRS, EDGE, UMTS/HSPA+, LTE
Max RF output:	32 dBm@GSM, 24 dBm@WCDMA, 23 dBm@LTE
SIM card:	Standard SIM

For the professional installer

This installation manual is intended for qualified Aura installers and describes how to install the product safely and properly.

Installation may only be carried out by a qualified installer who follows:

- Basic safety precautions for safe and correct installation.
- Local, regional and national installation regulations.
- The instructions in this Aura installation manual.

Safety precautions

The installation manual contains important instructions on how to install the product. In addition to the instructions in this manual, basic safety precautions, including all applicable local, regional and national laws and regulations, must be complied with when installing, repairing and maintaining the product.

The installation manual also contains safety instructions (WARNING, CAUTION and NOTE) for how to install the product safely. See the definitions below.



WARNING! – Indicates a potentially dangerous situation that could lead to serious injury or death.



CAUTION! – Indicates a potentially dangerous situation that could lead to minor or moderate injury.



NOTE! – Indicates that you must follow the instructions to avoid damaging the product or other equipment.

About Aura

Aura is made from sustainable recycled aluminium. Swedish industrial design that not only charges your electric car but is also a stylish addition to your property and contributes to a more sustainable world.

Aura is a product developed for public charging environments. With its two charging sockets (2 x 22 kW), Aura is suitable for all conceivable charging points, from large car parks to residential areas and office properties.

Aura is equipped with powerful hardware, an attractive design and smart functions. A world of opportunities for control and statistics is provided through its connection to my.charge.space (Charge Amps cloud service).

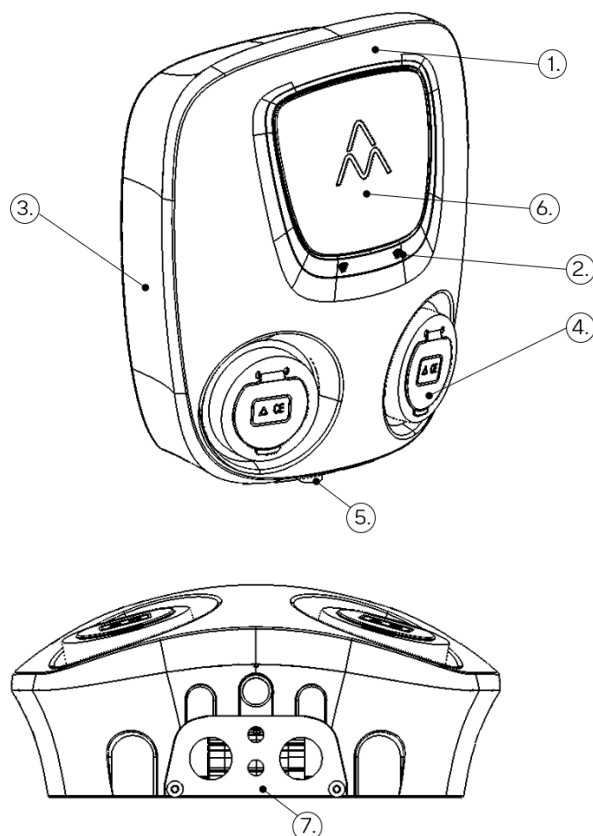
Aura is ISO 15118 ready, which opens up a number of possibilities when the electric cars of tomorrow start to support vehicle-to-grid technology. In the future, cars will not only be a means of transport, but also energy storage systems. When this time comes, you will need a charging station that enables this technology and supports communication from the vehicle.

Contact your supplier for more information about your specific Aura.



The product is intended to be used for the charging of electric vehicles and hybrids.

Model overview



1. Aluminium front assembly (Only to be opened by a qualified installer during installation).
2. Display: symbols for RFID status LED, (if activated).
3. Aluminium backplate: mounted on the wall by the installer.
4. Charging sockets: two charging sockets with LED status ring.
5. Lock cylinder: unlocked for installation.
6. RFID antenna: RFID tag reader.
7. Cable slide: data and power cable in/out. Supplied with cable fittings and plugs for ports that are not used.

Contents of the package

- Aura.
- Configuration document.
- Cable slide with fittings, plugs and screw.
 - Cable fitting for power: 13–17.5 mm and 17–25 mm.
 - Cable fitting for data: 4–8 mm.
- Two keys for the cylinder lock.

Provided by the installer

- Four M8 screws for assembly. The installer selects the type of screws according to the wall material.
- Four suitable washers for the previously selected M8 screws.



The installer also provides the tools required for installation.

Before installation

Make sure that the right conditions and materials are in place before installation. The installation must be done in accordance with the instructions in this installation manual as well as basic safety precautions.

Tools

The following tools are needed for installation:

- Screwdriver, flat electric screwdriver, 3.5 mm.
- Drill for screw/plug for wall mounting.
- Multimeter.
- Laser/spirit level for proper mounting on the wall.
- Wire stripper for cabling.
- Sealant (if necessary) if the wall for mounting is uneven and exposed to an outdoor climate.
- Computer or mobile phone if Aura needs to be configured and (where applicable) connected to a cloud service. Contact the supplier for more information.

Cabling

Check the following before installing Aura:

- The power is switched off.
- The incoming cabling is dimensioned to be able to connect Aura.
- Make sure to use MCB 16 A Curve C/ MCB 32 A Curve B.
Let through energy (I^2t) shall be less than or equal to 75 000 A²s.

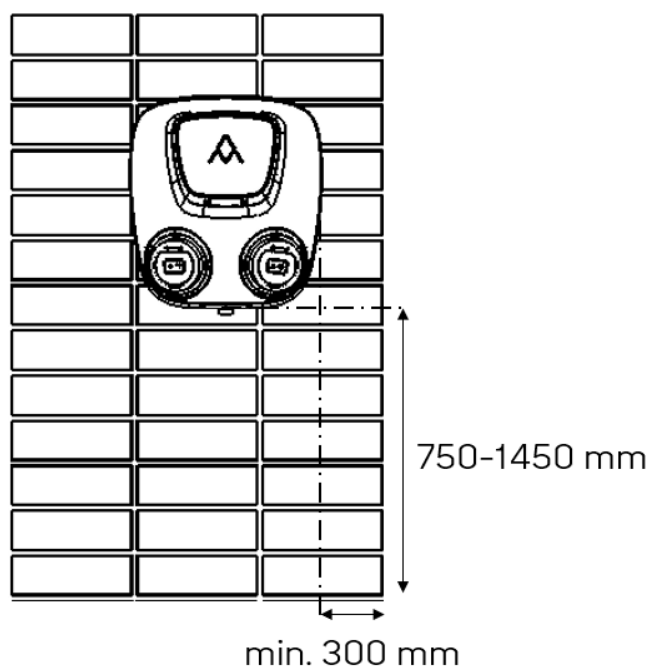
Mounting

Check the following conditions for mounting:

- That the wall is suitable for mounting. The wall must be able to handle a weight of 10 kg and also the tractive force from the inserted cabling.
- That the installation screws and plugs (if required) are suitable for the wall material.

- Aura must be mounted upright as illustrated below.

i If possible, do not mount Aura in direct sunlight. The charging current is decreased if the temperature inside the charging station goes up, and can even be switched off completely if Aura gets too hot. This is a safety feature to ensure a long service life. See the Aura technical specifications for operating temperatures.



Connection

An internet connection is required to make full use of Aura's potential. Check the following connection:

- **Wi-Fi**
WiFi access point with good coverage available for connection¹.
- **LAN**
Network cable, Cat5 or better, must be available.
It is possible to connect up to four Aura in series. Use a router or an Aura4G as an access point.
- **4G (LTE) Option**
Connection via 4G requires an Aura, part number 101010-LTE, in order to operate. Does not apply to standard Aura with part number 101010, which can only be connected via WiFi and fixed LAN.

¹ Note: A wireless connection is deactivated if one of the LAN ports is actively connected. Since the 101010-LTE Aura 2 x 22kW w Mobile Gateway is supplied with its gateway connected to the LAN port, this connection must be deleted in order to connect the unit via WiFi.

How to use Aura

Aura is designed to enable you to easily charge your vehicle, whether you have an electric car or a hybrid.

When you park within the correct cable length between your vehicle and Aura, charging can be initiated after you have connected the cable to one of the charging sockets (see item 4 in the model overview). The charging socket is equipped with a cover that you need to open in order to connect to Aura. When the LED ring around the socket is illuminated in blue, this indicates that charging has started.

Aura is equipped with an RFID reader for user identification. In order to charge your vehicle using RFID, the user needs to use their RFID identification (type A 13.56 MHz).

Charging without RFID

1. Connect the charging cable to the car, lift the socket cover and connect the charging cable to the charging station.
When the car is charging the socket light is blue.
When car charging is complete the socket light turns yellow.
2. Disconnect the charging cable from the car and from the charging station.

Charging using RFID

1. Connect the charging cable to the car, lift the socket cover and connect the charging cable to the charging station. The socket light turns yellow and the RFID light flashes blue.

NB! If the other socket is not already in use, it will turn dark and be unavailable for use during the 5 minutes RFID verification time window.

If no RFID has been verified during the 5 minutes time window, charging needs to be initiated remotely.

To reactivate the socket after a time out, unplug and reconnect the charging cable.



2. Start charging by briefly holding the RFID tag just below the Charge Amps logo.
When the car is charging the socket light is blue.
When car charging is complete the socket light turns yellow.
3. Disconnect the charging cable from the car and from the charging station.

Status Indications

Status	Socket Light	RFID Light
Ready for charging	Green	
Charging	Blue	Green
Waiting for load balancing	Flashing blue	
Waiting for RFID verification	Yellow	Flashing blue
Charging complete	Yellow	
RFID tag not approved*	Yellow	Red
RFID verification timeout	Yellow	Red
Error	Red	Red
Charger socket not available for use	No light	

*Auto return to *Waiting for RFID verification*

Product support and servicing for Aura

Charge Amps offers support for all of its products. If you have any concerns or problems, proceed as follows:

1. Look through the user and installation manuals to find information that can answer your queries.
2. Go to our support section on the website and look through the FAQs.
3. If you cannot find the answer to your question in the manual or FAQ, email Charge Amps support: support@charge-amps.com

If you need a service, please contact the reseller from whom you purchased your Aura.



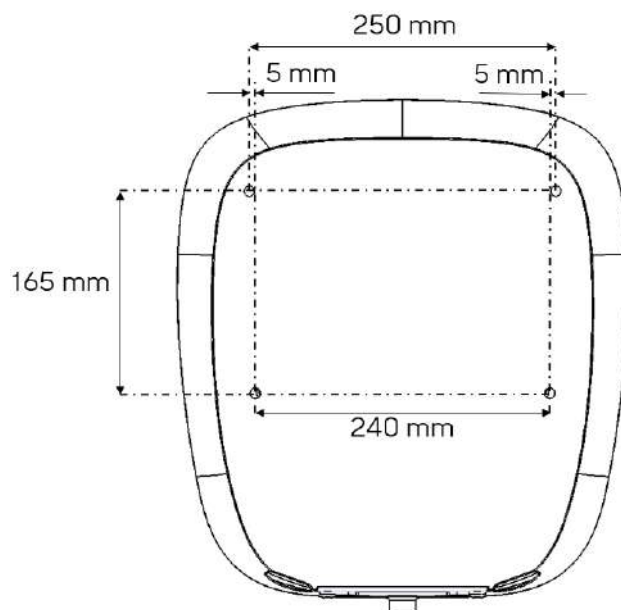
Warranty terms

Go to: charge-amps.com/warranty-policy/

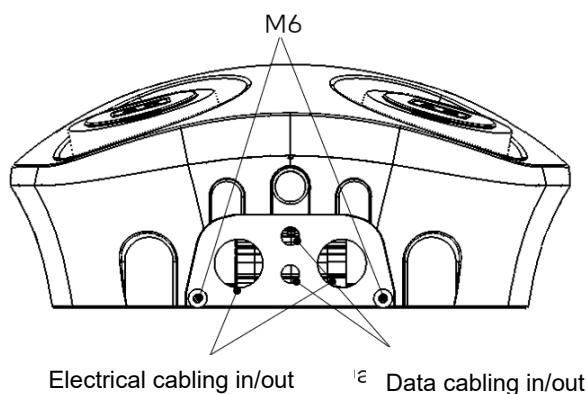
Installing Aura

Install and mount Aura as follows:

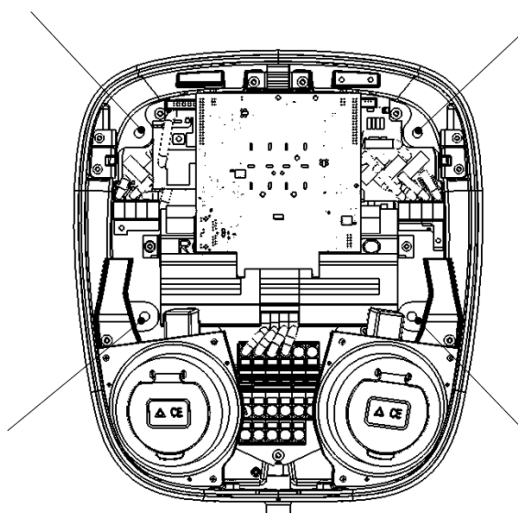
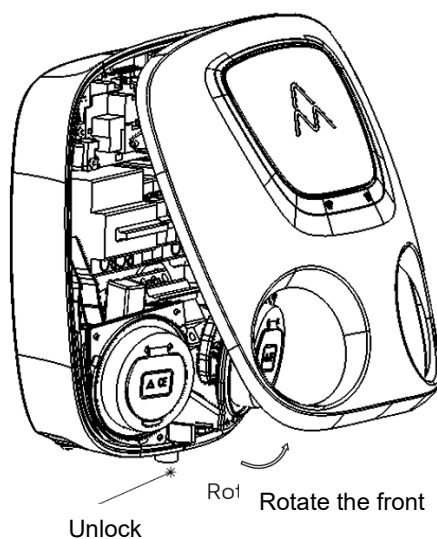
1. Read the installation instructions in this document thoroughly.
2. Make sure that the feed cable is isolated and switch off the power at the main switch.
3. Unpack Aura from the box. Check that the product is in good condition and that all cables are properly seated.
4. Mark the mounting holes on the wall. Also use a laser or spirit level. For a suitable height, see "Mounting" above.



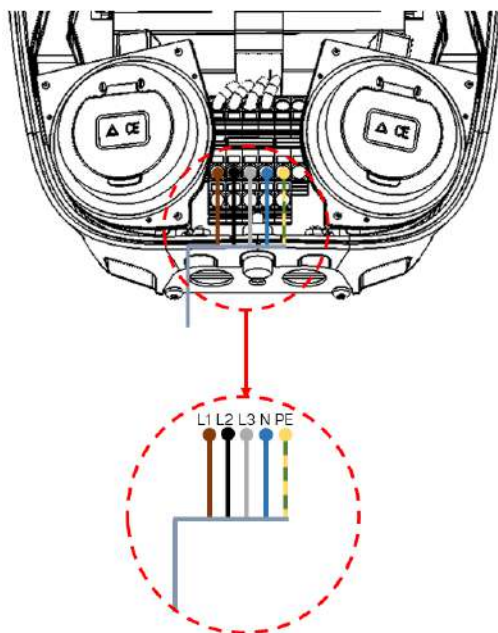
- Interface for data and electrics: The electric and data cabling is inserted from the underside of Aura. The cabling is threaded through the cable slide. The packaging kit includes cable fittings for holes that are in use and plugs for those holes that are not in use. The slide is fixed with the M6 screws supplied. The hole for the electric lead-through is designed for M32 and the hole for the data lead-through is designed for M12. The cable slide is adjusted to the lead-throughs and plugs before being assembled on Aura.



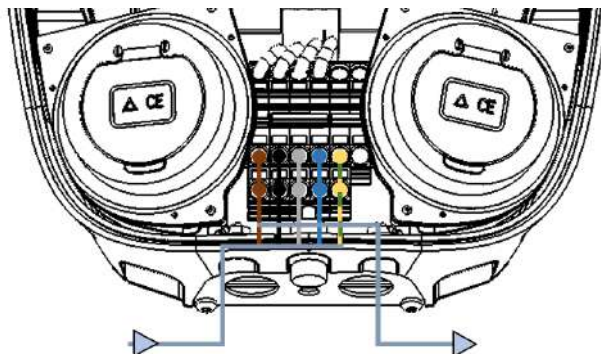
- Mount Aura on the wall: Use the key supplied to unlock the cylinder lock underneath Aura. Rotate up and suspend the front. Align Aura on the wall according to the specified hole pattern. Make sure that the mounting has fixed Aura in place.



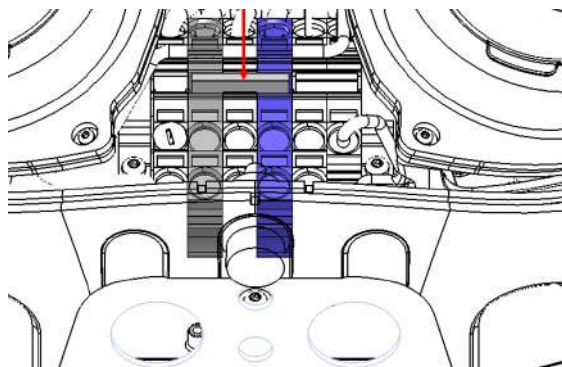
7. Connecting the electrics: Pull the power cable through the cable slide approx. 80 mm. Use a cable stripper to strip approx. 20 mm off the end of the conductors. Connect the conductors (L1-L3, N and PE) to the terminals.



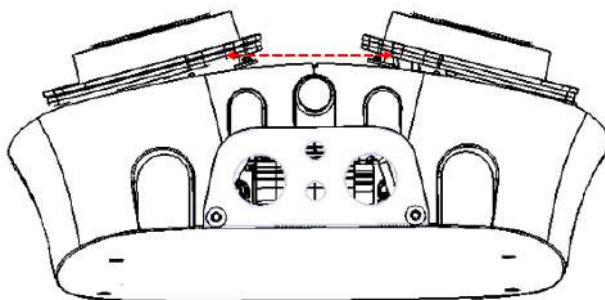
i Note that if the power is to be routed onwards, connect the cable to be routed onwards to the other input on the terminals.



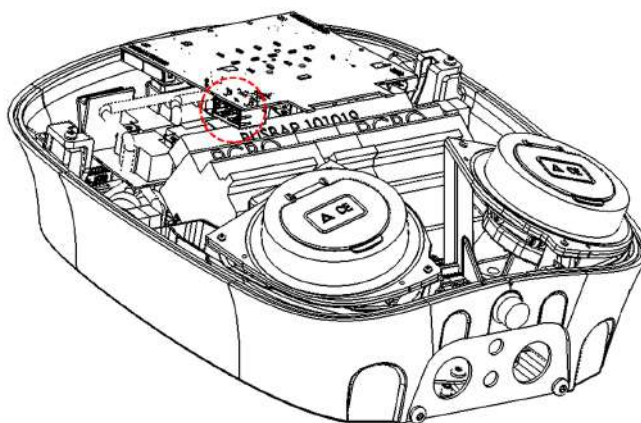
8. If you are installing Aura in an IT network, connect phase cables L1 and L3, and use 1–3 terminal blocks, which are included in the kit, as illustrated below. L2 and N will be connected together.



9. When the incoming cabling is installed, make sure that it does not arch over the dotted red line as illustrated below.



10. Connecting Aura: If a fixed cable is used, connect the ethernet cable to the RJ45 port on the control card.



11. When the cabling is installed, make sure that the RCDs and the MCB are switched on.
12. Testing Aura: Close the front again and lock if you have not done this. Switch on the power in the electrical distribution box. On start-up, Aura's logo is illuminated and the unit will carry out self-tests. If the unit is connected, it will download any available software. When start-up is finished, Aura will play a sound. It is now possible to charge your vehicle.

Configuring electrical parameters for Aura

After Aura has been installed electrically and on the network, it is time for it to be configured. The aim of configuration is to connect the unit to Charge Amps' portal and cloud solution.

How to register and commission your Aura in the cloud solution:

1. Go to: <http://my.charge.space>
2. Click the "Sign Up" link above "login form"
3. Fill in all the fields and press "GO".
4. You will be sent an email with a verification link within a few minutes.
5. Follow the link and log in.
6. Fill in the serial number and PIN code as indicated in the configuration document.
7. Click "GO" and then you are finished.

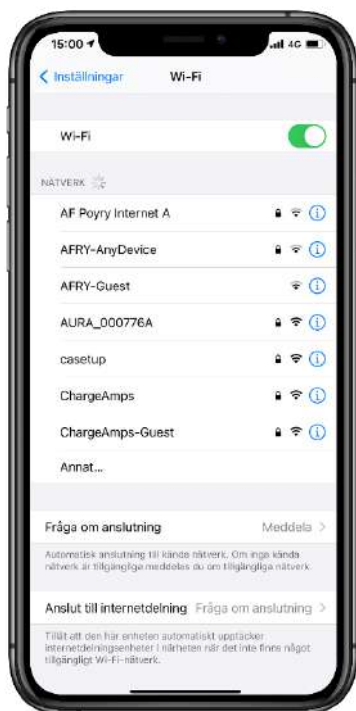
How to configure Aura with a wireless internet network (WiFi):

1. Switch on your Aura
2. Use a smartphone, open "Wireless settings" and scan for a wireless network.



On the mobile, go to Settings > WiFi

3. Find the AURA_***** network, where ***** are the last six characters of the serial number.



Select the network called AURA_*****A (last characters of the product's serial number).

4. When you are asked for the network key, enter the PIN code.



Enter the password, which you will find on the configuration sheet supplied in the box, and connect.



5. Open the browser. In your browser's address field, enter 192.168.250.1
6. You should now see a field with the SSID (name of the WiFi network) and the password. Note that the field is case-sensitive.



Click the WiFi network that Aura should connect to from the list and enter its password.



7. Wait for connection. (The mobile's own 3G/4G may disrupt this. In that case, switch off mobile data).
8. Enter the details of your wireless network and click update.



Connected to means that Aura is now connected.



You can now go to my.charge.space and sign up Aura to access all the functions in the cloud solution.

Supported WiFi standards:

- 802.11 b/g/n
- 2.4 GHz

Product data

Electrical information

- Output: Up to 63 A, 400 V, 3-phase, 50 Hz
- Charging current: 6–32 A per socket
- Cable connection: L1–L3, N, PE. The WAGO terminals are designed for a cable area of 2.5 to 16 mm².
- Fuses: Internal RCBO (RCD) type A + 6 mA DC protection (corresponding to type B RCD)
- 32 A RCBO per socket
- 6 A MCB for electronics

Mechanical information

- Weight: 10 kg
- Product dimensions: Height 405 mm, width 367 mm, depth 159 mm
- Product materials: Aluminium chassis and plastic display surface.
- Rating: IP 55 and IK 10
- Operating temperature: -25°C to +40°C
- Lock: Cylinder lock with two accompanying keys.

Charging information

- Charging sockets: two type 2 sockets.
- LED rings: two LED rings around the sockets.
- ISO15118: prepared. Instructions included in ISO15118 solution.
- Metering
- RFID

Standards

- IEC: EN 61851-1:2011, EN 61851-22:2002 (through 61851-1), EN 62196-2:2012 + A11 + A12/AC
- CE

Safety information

- Earth fault detection: Internal RCBO type A + 6 mA DC protection (corresponding to type B RCD)

Maintenance of Aura

For maintenance, carry out the following steps

1. The RCDs and the MCB must be operated twice a year according to the manufacturer. If you chose single phase installation, the test function on the RCDs will not work. In order to operate the RCDs, you need to apply an external earth fault to them.

2. Check the sealing gasket on the chassis and around the sockets. Wipe off if dirty or replace. Contact Charge Amps for spare parts.
3. Check the power cable into Aura.
4. Check cable fittings.

Product recycling

Recycling Aura is a matter of course. Aura consists of aluminium, plastic and electronics, and should be recycled as specified for these materials.

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