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Discover safe, rapid charging with the CP500A.

No surprises - it's Siemens.

Answers for mobility.

Convenient, safe, fast dual vehicle charging.



Why Siemens?

Siemens is all about confidence. The confidence of drivers around the world that are kept informed, safe and moving. The confidence of traffic management, town planners and safety officers in our experience and professionalism, in our ecologically sound, reliable, quality solutions and products. A typical example is the CP500A - a product developed by us in consultation with our customers to maximise the uptake of electric vehicles whilst reducing costs and CO₂ emissions.

Electric vehicles and Siemens

Quiet, emission-free electric vehicles are ideal for personal mobility in urban areas. However, the introduction of electric vehicles will create new challenges for the management of company fleets, local supply networks and electric vehicle infrastructure.

Going electric demands a holistic approach and confidence in a complete solution from a global partner. One that understands energy in transport and is a leader in sustainable city solutions.

Siemens offers scalable, flexible customer-oriented solutions and services for fleet, commercial, and private drivers as well as managing the complex interactions with charging and payment infrastructures.

Our integrated technology platform delivers operational solutions for every scenario, from stand-alone business and fleet systems to national integrated programmes.

Introducing the CP500A

With the compact CP500A AC charging point, you double your charging outlets and maximise space. Each CP500A can charge two vehicles at the same time, reducing installation and maintenance costs. It can be easily tailored to your charging requirements, and it offers key advantages with its high safety standards and modular design. It allows the integration of calibrated meters for the exact billing of charged energy and/or feed-in meters for the exact offsetting of energy input with electricity providers.

Future-proof technology for complete safety and investment protection

Modular and flexible charging Each unit can provide both single and three-phase charging, enabling customers to charge a wide variety of electric vehicles. The three phase 32 amp charging facility is used for fast charging to increase vehicle availability and maximize customer investment.

Fully accredited and certified technology

Manufactured and tested according to all currently relevant UK and European standards for charging systems.

Authorised access

The unit ensures that only authorized users with RFID cards have access to the outlet.

Charging outlets

Installed on both sides of every unit, allowing easy access for charging and avoiding untidy cables at the front of the unit. Each outlet is available with a Mennekes Type 2 fully shuttered connector with electromagnetic lock reducing the likelihood of vandalism. During charging the plug is locked in place.

The CP500A features proven technologies and is intelligent, safe, compact and modular. With the ability to charge two vehicles simultaneously, it is also extremely economical.

Industry leading safety features

Built-in Energy Distribution class hardware protection and low voltage switch gear, removing the need to rely on software protection and ensuring improved safety for end users and service engineers. The safety features include; built-in residual-current protective device for high degree of personnel protection, auxiliary contactors according to IEC EN60947-4-1 and an additional safety circuit.

■ Stable, weather-resistant housing

The robust stainless steel housing is ideal for outdoor use and has vandalism protection according to IK10, reducing the likelihood of damage and being out of service for repairs. The unit is also designed to withstand a salt-laden environment and can safely be installed in coastal regions.

Temperature monitoring

Sensors measure the internal temperature of the charging point and at the outlets. When the upper temperature limit is reached, the charging process is paused. The charging process can be terminated for safety reasons. A fault indication is sent to the control centre in order to initiate maintenance and restore availability quickly.

Integrated service panel

A service panel has been designed and installed in all units to meet the new IET Code of Practice for Electrical Vehicle Installations 2012 and existing BS 7671, NJUG standards.

Safe, service-friendly maintenance

For safety during maintenance, opening the service door immediately shuts off the charging current. In the event of a fault, an alarm is sent to the control centre so suitable measures can be initiated. All electrical connections within the housing are securely covered to prevent electrocution.

Remote maintenance of the residualcurrent circuit-breaker

The residual-current circuit-breakers can be maintained and re-set directly from the control centre, saving service calls.

Modular design and customer-friendly applications

Modern and ergonomic design The unit has an aesthetic design which demonstrates the Siemens core product values of simplicity, durability and safety. The unit has been styled with simple lines and form that help the charger blend in with most environments and landscapes.

Integrated lighting for status indication Each unit includes a customer friendly

exterior lighting scheme for each outgoing charging circuit to indicate its status (free or in use). This lighting scheme can be changed to meet specific customer requirements.

Load management capabilities

Each unit integrates with Siemens load management software enabling customers to manage available power supply across multiple units. Available supply can be programmed to be evenly distributed across or prioritised to specific units. Multiple vehicles can be charged in the most optimum way to increase availability according to specific fleet requirements.

■ Improved communications

An Ethernet interface or an optional GSM/GPRS modem allows communication with the control centre and smart grid network control.

MID compliant Energy Metering Calibrated meters allow for the precise billing of the charged energy. A meter plate also allows the installation of a feed-in meter for settlement between the electricity provider and operator.

Additional customer-specific adaptations

Other RFID standards are available in addition to the Standard MiFare Classic.

The colour can be changed or logos applied according customer specific branding or scheme requirements.

In addition to the default language, there is an option to choose up to three further languages The charging process with the CP500A could not be simpler. No matter where you use the system, the charging point allows safe and easy charging of electric vehicles.

Step 1: User identification Hold the RFID-card provided by your electricity company or service provider up to the designated area. After successful identification, the available outlets can be used.



Step 2: Plugging in and charging Plug the charging plug firmly into the outlet. The charging point automatically checks the electrical compatibility of the charging point, cable, and vehicle. If the check is passed, the charging process starts.



Step 3: Completing the charge To complete the charging process, identify yourself with your RFIDcard. After charging you can read the power consumption for monitoring purposes. Then the plug is unlocked and you can remove the charging cable.



Technical Specifications:

Mechanical data

Housing

• Stainless ste

Exterior finish

- Standard: two colors (signal white RAL9003, anthracite grey RAL7016), other RAL colors on request
- Anti-graffiti coating
- Optional

Dimensions

- Measurements W x H x D (without base • 490 x 1650 x 280 mm
- Weight

Operating and display elements

- IdentificationRFID (Mifare Classic; options on request)
- Display elements • LCD 7" color display (with four lines)
- User-interface language
- National language (opt. language switching 1+3)
- Status indicator
- LED status rings optional (half ring for each charging outlet)

Communications

- Ethernet
- res
- Integrated GSM/GPRS modem (quad-band)
 Optional
- Integrated UMTS moderr • Yes
- RFID (13.56 MHz) • Optional
- On reques
- Power line communication • On request

Electrical specifications

- Rated input voltage/frequency • 400 VAC/50 Hz
- Rated input curren[.] • 80 A
- Max. permissible cable cross-section • 5 x 50 mm²
- Residual-current protection

 Residual-current protective device 30 m.
 class A (class B. optional)
- Temperature monitoringPer socket interior
- Energy metering
- Optional: Calibrated meter per socket and feed-in meter panel

Three-phase charging

Rated output voltage/frequency • 400 VAC/50Hz

- Outlet type • Type 2 per IEC 62196, opt. type 3
- Charging mode • Mode 3 per IEC 61851
- Types of electric vehicle connection • Case A (cable permanently attached to vehicle) and B (cable fitting)
- Charging current/output capacity • 3 x 32 A/22 kW
- Line protection • 3 x 32 A

Single-phase charging

- Rated output voltage/frequency • 230 VAC/50 Hz
- Outlet type
- Household outlet (types A, D, E, F, G, H I, and L)
- Modes 1 and 2
- Types of electric vehicle connection • Case A (cable permanently attached to vehicle) and B (cable fitting)
- Charging current/output capacity • 16 A/3.7 kW
- Line protection • 1 x 16 A

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