



ECOMOBILITY GENERAL CATALOGUE





ECOMOBILITY
GENERAL
CATALOGUE
2014-2015

www.scame.com

Scame: a growing group

IN LESS THAN FIFTY YEARS

WE HAVE BUILT AN

INDUSTRIAL BUSINESS THAT

HAS ALWAYS PRESERVED

THE SPIRIT OF ITS ORIGINS

Scame was founded amidst the enthusiasm of the Italian economic boom of the 60's and has always pursued its *raison d'être* in thriving by improving. Today it is an international industrial group of about 800 people employed in 18 subsidiary and associated companies operating under the parent company headquartered in Parre (Bergamo) in Alta Valle Seriana. Scame has a capillary presence throughout Italy with its own sales agencies and operates worldwide with branches and loyal distributors.





Italy
Parre (Bergamo)

 **SCAME**_{ARGENTINA}
Argentina

 **SCAME-SEE**
Bosnia Herzegovina

 **SCAME**_{BRASIL}
Brazil

 **SCAME**_{CHILE}
Chile

 **SCAME-TOP**
China

 **SCAME-HR**
Croatia

 **SCAME-CZ**
Czech Republic

SOBEM  **SCAME**
France

 **SCAME**_{INDIA}
India



 **SCAME**_{POLSKA}
Poland

 **SCAME**_{PORTUGAL}
Portugal

 **SCAME**_{RO}
Romania

 **SCAME**_{SK}
Slovakia

 **SCAME**_{IBERICA}
Spain

 **SCAME**_{MIDDLE EAST}
U.A.E.

 **SCAME**_{UK}
United Kingdom

 **SCAME**_{UY}
Uruguay

 **SCAME**_{UA}
Ukraine

SEND AN E-MAIL TO THE
ADDRESS infotech@scame.com
AND YOU'LL RECEIVE THE
ANSWERS TO ALL YOUR
QUESTIONS ABOUT TECHNICAL
ASPECTS, INSTALLATION
AND CONFORMITY WITH THE
STANDARDS.

The Scame technical information centre is able to promptly provide clear and complete answers to all your questions regarding the Scame products. The leading distributors of electrical material, with the support of our sales agencies and technical promoters, represent an additional capillary reference network. Information and updates can be found in the Info-point section of the internet site and in the newsletter sent periodically to the registered users.

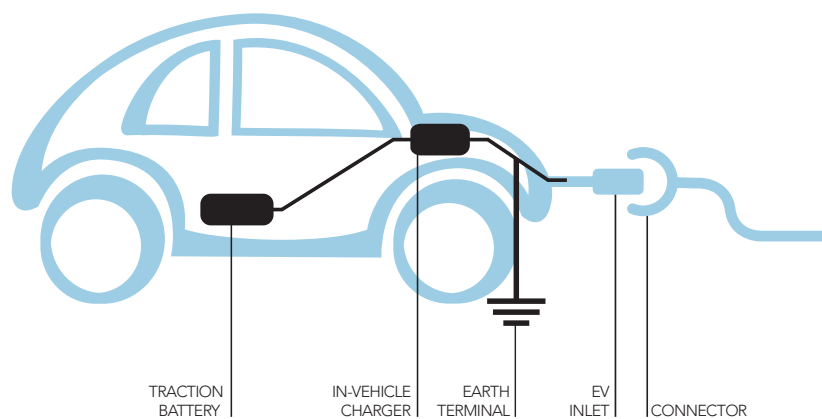


infotech@scame.com

■ Connectors



■ Wall box

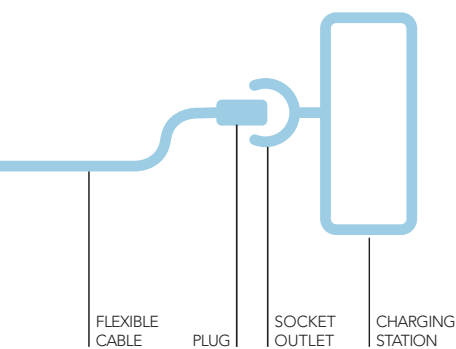




■ Cord set



■ Domino



■ Charging stations



There is a great effort behind this project.

The world changes. It is inevitable. It is often a steady evolution, but at times sudden changes occur that lead to new scenarios in just a short time. The introduction of electric vehicles on the market entails the creation of new habits, new structures, and new needs. In such an evolving context, it is important to establish points of reference that guide the change; in this case, the more qualified, and thus credible, figure becomes the main player. SCAME did not hesitate for a second to offer a tangible and functional contribution in order to achieve sustainable choices from a technological, economic and environmental standpoint.

A considerable commitment, which SCAME has gladly been devoted to for many years, with the aim of providing tomorrow's drivers with practical and safe instruments.



We have founded the Alliance to build on good ideas.



In Europe, there are many technicians with experience and skills, but in order to make the most of this wealth it was necessary to find a way to coordinate the work being carried out, channel choices and share objectives. SCAME, in conjunction with Legrand and Schneider Electric, founded EV Plug Alliance, an association that aims to ensure compliance of connections used to supply electrical vehicles with CEI standards. The association's efforts are geared towards setting up a European standard capable of guaranteeing the highest levels of safety.



We set only one possible
choice for ourselves:



total safety!

European standards define possible cases for electric vehicle connection to the source of power, Within the standardization activities coordinated EV Plug Alliance, SCAME has elected to develop its products by presenting original and ground-breaking solutions on the

topic of safety, solutions that have been appreciated and considered as reference standards at the European level. SCAME thus received proper recognition for the valuable expertise gained while developing its range of products with innovative spirit and designing ability.

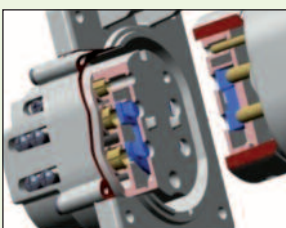


IPXXD PROTECTION

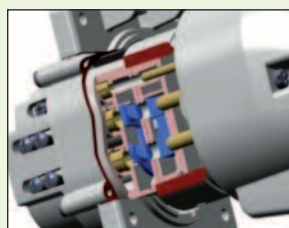
Paragraph 11.3.2 of standard IEC/EN 61851-1 requires IPXXD protection (entry test of wire with 1-mm diameter) against accidental contact for connected and unconnected plugs in case of two-way energy transfer.

This requirement is especially important as it prevents users not trained in the use of these connectors from coming in contact with potentially live parts; moreover, it is required by most European countries.

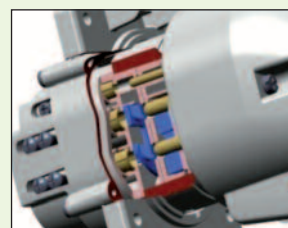
The LIBERA Series connectors satisfy this requirement thanks to the adoption of terminals and spinotti protected by shutters that can be opened only after the plug is inserted into the socket, as it has been for years now for domestic connectors. As the Shutters satisfy the IPXXD degree of protection, the LIBERA Series connectors do not require additional sectioning devices in order to achieve an equivalent degree of protection.



Closed shutters.



Plug shutter opening.



Socket shutter opening.



Complete insertion.

Our solution is simple. And efficient.

IEC/EN 61851-1: RECHARGING METHODS

The reference standard for EV charging stations is the IEC/EN 61851-1, which envisages four charging modes:

MODE 1

Connection of the EV to the a.c. mains using domestic connectors up to 16A, class A 30mA differential protection upstream.



MODE 2

Connection of the EV to the a.c. mains using domestic or industrial connectors up to 32A, class A 30mA differential protection, control device on the cable.



MODE 3

Connection of the EV to the a.c. mains with dedicated connectors, class A 30mA differential protection, control device in the charging station.



MODE 4

Connection of the EV to the a.c. mains with outboard battery charger.



Moreover, depending on the type of cable connection type, there are three different possible cases:

CASE A

EV connection to the a.c. mains using a supply cable and plug permanently attached to the EV.



CASE B

EV connection to an a.c. mains using a detachable cable equipped with plug and socket.



CASE C

EV connection to the a.c. mains using cable and plug permanently attached to the charging station.



IEC 62196-1 (FDIS) AND 62196-2 (FDIS): MODE 3 CONNECTORS

The reference standards for Mode 3 connectors are the IEC 62196-1 and 2, and they envisage three different types of system:

CONNECTIONS



VEHICLE	Type 1	Type 2
Circuit	Monophase	Mono/triphas
Current	32A	70A (monophase) 63A (triphas)
Max. voltage	250V	480V
N° of pin	5	7
Connector		

STATION	Type 2	Type 3A	Tipo 3C
Circuit	Mono/triphas	Monophase	Mono/triphas
Current	70A (monophase) 63A (triphas)	16A	63A
Max. voltage	480V	250V	480V
N° of pin	7	4	7
Connector			

CONNECTORS FOR ELECTRIC VEHICLES

TYPE 3A CONNECTORS

MODE **3**



Type 3A connectors were launched in Italy in 2000 as a unique connection system for charging electric vehicles in environments open to third parties in mode 3.

Featuring a design derived from the SCAME IEC309 sockets, from which it inherited the quick snap-on device, it is equipped with an additional CP contact for the pilot circuit used to verify the continuity of the protective conductor, in accordance with standard CEI 69-6.

Given the small size, it is the preferred connector for small-size vehicles, such as scooters and motorcycles, with charging power of less than 3 kW. Thanks to the adaptors, it is also possible to use 3A plugs to charge in environments closed to third parties, such as garages, in mode 1.

N.B.: The IPXXD degree of protection, and consequently the shutters, are not necessary for type 3A plugs as the vehicles for which they are designed are not equipped them.

REFERENCE STANDARDS

EN 62196-1 (2012)

Plugs, socket-outlets, vehicle couplers and vehicle inlets.
Conductive charging of electric vehicles.
Part 1: General requirements.

EN 62196-2 (2012)

Plugs, socket-outlets and vehicle couplers.
Conductive charging of electric vehicles.
Part 2: Dimensional interchangeability requirements for a.c. pin and contact-tube accessories.

CEI 69-6 (2001)

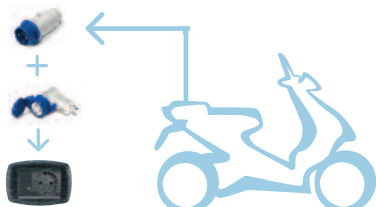
Standardization sheet of plug and socket-outlet for the connection of electric road vehicles to the supply network.

TECHNICAL CHARACTERISTICS

Rated current:	16A
Rated voltage:	200-250VAC
Frequency:	50-60Hz
Insulation voltage:	250V
Protection degree:	IP44 - IP54 (sockets with lock) IPXXD (sockets)
Operational temperature:	-30°C +50°C
Glow Wire test / UL94:	850°C/V1 850°C-960°C/V1-V0 (sockets with lock)
Material:	Technopolymer
IK Grade at 20°C:	IK07 - IK08 (sockets with lock)
Colour:	Grey
Number of poles:	L1-N-E-CP
Connection capacity:	1-2,5mm ² (plugs and connectors) 1-4mm ² (flush-mounting sockets)
Saline solution:	Resistant
UV rays:	Resistant

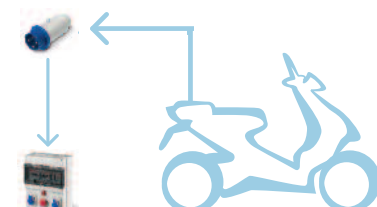
MODE 1 – CHARGING OF EV WITHOUT PWM IN ENVIRONMENTS CLOSED TO THIRD PARTIES

Vehicle connection to the AC mains using normalized connectors up to 16A.



SIMPLIFIED MODE 3 – CHARGING OF EV WITHOUT PWM IN ENVIRONMENTS OPEN TO THIRD PARTIES

Vehicle connection to the AC mains using specific connectors, pilot circuit control.



MODE 3 CHARGING OF EV WITH PWM IN ENVIRONMENTS OPEN TO THIRD PARTIES

Vehicle connection to the AC mains using specific connectors, pilot circuit control.





Type 3C connectors are designed for electric vehicles with charging power greater than 3 kW, such as cars, promoted by the EV Plug Alliance, founded by SCAME - Schneider - Legrand, as a single European solution, infrastructure-side. Derived from type 3A connectors, they keep the same protection characteristics against indirect contact as well as the additional pole used to check continuity of the protective conductor. The evolution consisting in the possibility to have both single-phase and three-phase wiring, higher rated current, introduction of the shutters on the plug side (a necessary requirement in the case of "Smart Grid") and the additional PP pole for cable size identification. Given the heavy-duty operating conditions, particular attention was taken in the choice of materials in order to guarantee proper resistance to heat, chemical agents and mechanical stress, in compliance with the strict parameters set by the automotive industry.

REFERENCE STANDARDS

EN 62196-1 (2012)

Plugs, socket-outlets, vehicle couplers and vehicle inlets.
Conductive charging of electric vehicles.
Part 1: General requirements.

EN 62196-2 (2012)

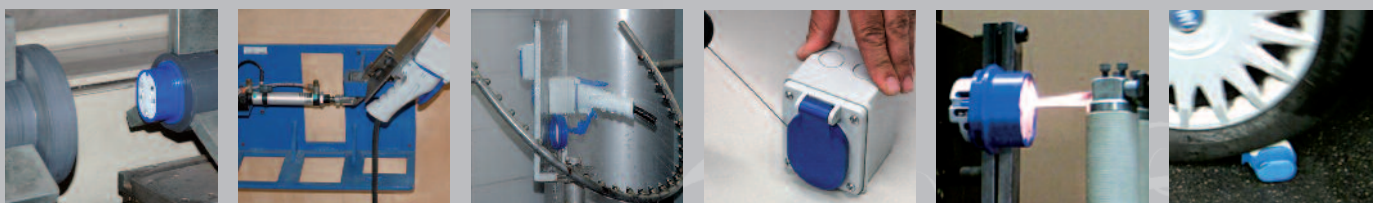
Plugs, socket-outlets and vehicle couplers.
Conductive charging of electric vehicles.
Part 2: Dimensional interchangeability requirements for a.c. pin and contact-tube accessories.

TECHNICAL CHARACTERISTICS

Rated current:	32A
Rated voltage:	380-480VAC
Frequency:	50-60Hz
Insulation voltage:	500V
Protection degree:	IP44 - IP54 (sockets with lock) (IPXXD)
Operational temperature:	-30°C +50°C
Materials:	Technopolymer
Glow Wire test / UL94:	850°C/V1 850°C-960°C/V1-V0 (flush-mounting sockets)
IK degree at 20°C:	IK08
Colour:	Grey
Number of poles:	L1-L2-L3-N-E-CP-PP
Connection capacity:	1.5-6mm ² (plugs with screw terminals) 2.5-4mm ² (plugs with crimped terminals) 1.5-10mm ² (flush-mounting sockets)
Saline solution:	Resistant
UV rays:	Resistant

LABORATORY TESTING

RESISTANCE TESTS



RESISTANCE TO CHEMICAL AGENTS

Saline solution	Acids		Base		Solvents				Mineral oil	UV rays
	(Strong) Concentrated	(Weak) Diluted	(Strong) Concentrated	(Weak) Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited resistance	Resistant	Limited resistance	Resistant	Not resistant	Not resistant	Not resistant	Limited resistance	Resistant	Resistant

TYPE 2 CONNECTORS

MODE 3



Type 2 connectors are designed for electric vehicles with charging power of more than 3kW, such as cars. It was adopted by German manufacturers and proposed by the European Commission as a standard solution on the infrastructure-side. As the 3C-type connector can be wired in both single-phase and three-phase, it has an additional CP contact for pilot circuit and PP for cable size identification.

Since the type 2 connector cannot be disconnected under load, the SCAME type 2 socket already includes the socket that also provides for closing the lid under rest conditions (socket not engaged).

The latching device is operated by a single 2-position actuator.

REFERENCE STANDARDS

EN 62196-1 (2012)

Plugs, socket-outlets, vehicle couplers and vehicle inlets.

Conductive charging of electric vehicles.

Part 1: General requirements.

EN 62196-2 (2012)

Plugs, socket-outlets and vehicle couplers.

Conductive charging of electric vehicles.

Part 2: Dimensional interchangeability requirements for a.c. pin and contact-tube accessories.

TECHNICAL CHARACTERISTICS

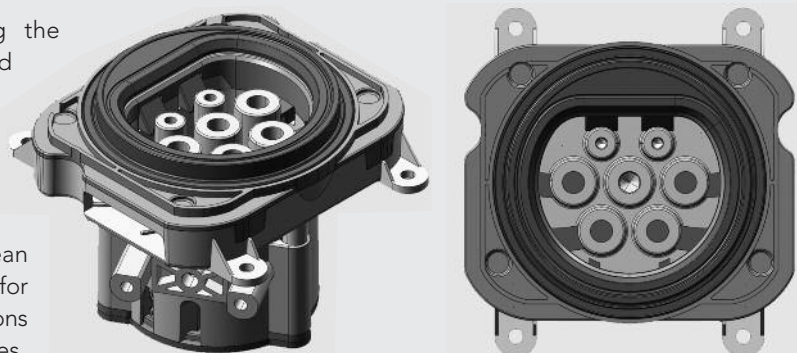
Rated current:	32A
Rated voltage:	380-480VAC
Frequency:	50-60Hz
Insulation voltage:	500V
Protection degree:	IP54 (IPXXB)
Operational temperature:	-30°C +50°C
Materials:	Technopolymer
Glow Wire test / UL94:	850°C-960°C/V1-V0
IK Grade at 20°C:	IK08
Colour:	Grey
Number of poles:	L1-L2-L3-N-E-CP-PP
Connection capacity:	1,5-10mm ²
Saline solution:	Resistant
UV rays:	Resistant

PREVIEW OF TYPE 2 WITH SHUTTERS

The current standard type 2 connector provides a IPXXB degree of protection for socket outlets installed on charging stations. Since this degree of protection is insufficient for the type of application, type 2 must be paired with a device upstream that ensures complete isolation.

The SCAME solution consists in applying the shutters, as already done for the type 3A, 3C and domestic connectors, so as to upgrade the degree of protection to IPXXD, ensuring protection against direct contact with potentially live parts.

The type 2 connectors with shutters, apart from meeting the expectations of the European Commission, also fulfils the safety requirements for domestic environments required by the regulations and laws of most European Union member states.





The cord-set is used to connect the vehicle to the charging station. It consists of a plug for infrastructure-side connection, a socket movable outlet for the vehicle side, a cable with adequate cross-section and polarity suited to mobile use, particularly resistant to conditions of use.

Compared to case A (cord-set fixed to the vehicle) and case C (cord-set fixed to the charging station), case B is the more versatile one thanks to the compatibility that can be achieved between the various standards in use today in the international scenario of connections.

TECHNICAL CHARACTERISTICS

Rated current:	16A / 20A / 32A
Rated voltage:	200-250VAC / 380-480VAC
Frequency:	50-60Hz
Insulation voltage:	250V/500V
Protection degree:	IP44
Operating temperature:	-30°C +50°C
Materials :	Technopolymer
Saline solution:	Resistant
UV rays:	Resistant

REFERENCE STANDARDS

EN 62196-1 (2012)

Plugs, socket-outlets, vehicle couplers and vehicle inlets.
Conductive charging of electric vehicles.

Part 1: General requirements.

EN 62196-2 (2012)

Plugs, socket-outlets and vehicle couplers.
Plugs, socket-outlets and vehicle couplers.

Part 2: Dimensional interchangeability requirements for a.c. pin and contact-tube accessories.

CEI 69-6 (2001)

Standardization sheet of plug and socket-outlet for the connection of electric road vehicles to the supply network.

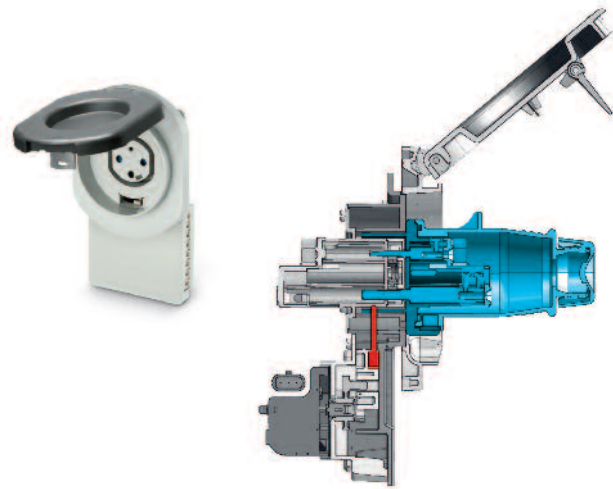
SAE J1772 (2012)

Electric vehicle and plug in hybrid electric vehicles
conductive charge coupler.

CABLE

Rated voltage:	300/500V
Isolating/sheath:	TPE / TPE
Maximum temperature:	+105°C

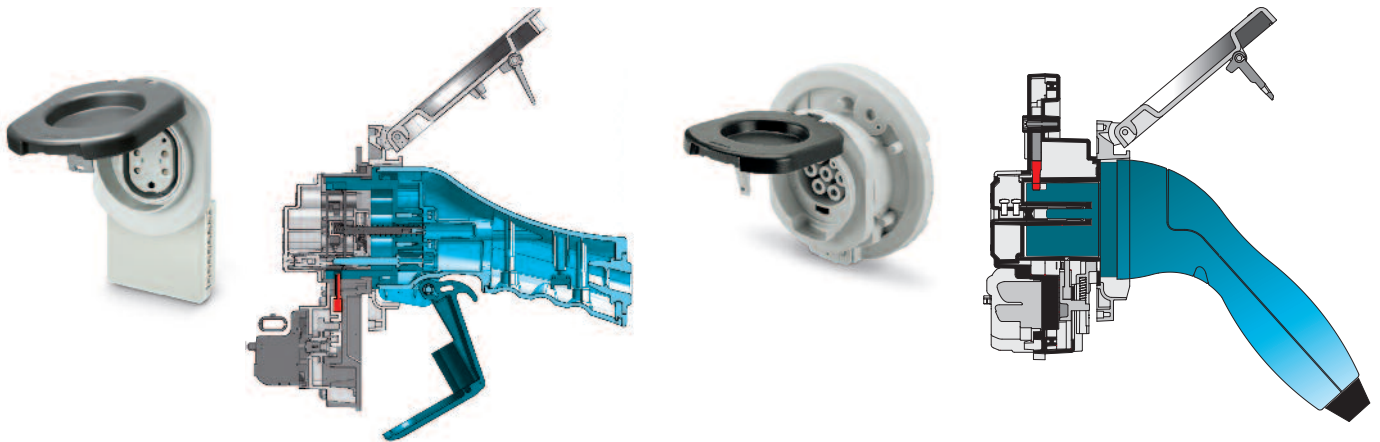
LATCHING SYSTEM

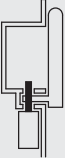
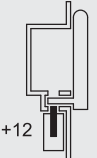
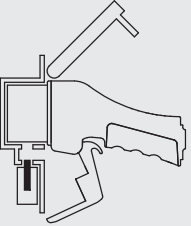
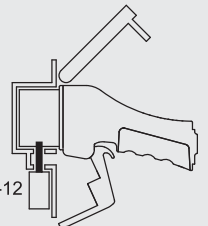
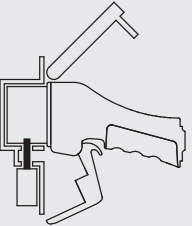
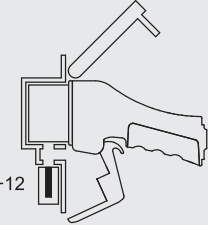
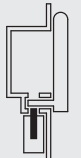


The flush-mounting sockets of the LIBERA Series are also available in the optional version with built-in latching system in order to avoid accidental or intentional extraction of the plug in recharging stations located in unsupervised places, such as squares and roads. The block is achieved by means of a pin, operated by a bi-stable actuator that also blocks the opening of the cover during the pause phase.

For proper system management, the socket also provides the position status of the block (inserted/not inserted) and of the cover (closed) by means of 3 built-in micro switches. All plugs included in the LIBERA Series are also equipped with a hole in the bottom part of the frusto in which the pin is housed.

Sockets with the block are supplied with no actuator piloting systems, consequently the operating principle shown in the figure at the side presupposes coupling to an external control system supplied by ScaME in the case of assembled systems.



1. Inactive. 	2. User recognition (RFID). Block opening. 	3. Cover opening. Plug insertion. 	4. User recognition (RFID). Block closing. 	5. Charging. 
6. User recognition (RFID). Block opening. 	7. Cover closing. Plug removed. 	8. Block closing. 	9. Inactive. 	

The legislative scenario is complex



While contributing to defining the new standards, SCAME put technology at the service of common sense, with the aim of pursuing practical and intelligent design choices. Indeed, the choices made when defining connection methods and designing the relevant equipment have led to the offer of simple and safe products. This means that the utilization methods are perfectly suited to the user, that production costs are low and that safety is ensured.

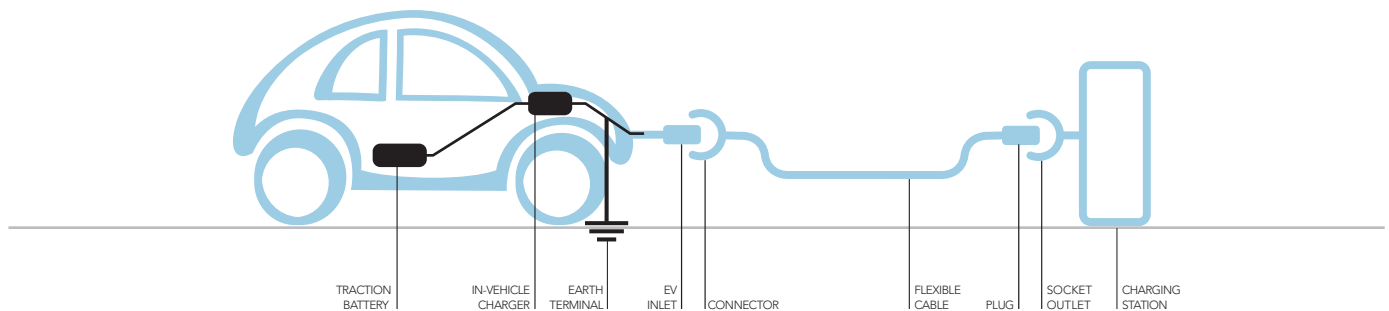
The connection developed by Scame

CHARGING MODE 3

SCAME's charging stations use charging mode 3, in accordance with IEC / EN 61851-1.

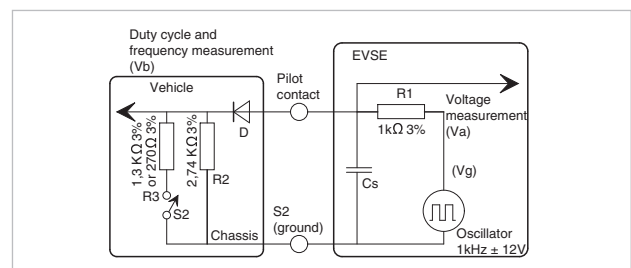
Charging mode 3 consists in connecting the vehicle to the AC mains using specific connectors and with a pilot control circuit inside the charging station to verify continuity of the protective conductor between vehicle and grid during the charging phase.

This check is necessary to ensure proper operation of protections against indirect contacts, hence to prevent any dangerous voltage from being discharged through accidental contact with unaware individuals; it is usually mandatory for vehicles with power above 3 kW, and, in Italy, for public or private environments open to third parties (see table). The control circuit also arranges for communication between charging station and vehicle (PWM Circuit) and for cable size identification (Resistor Coding).



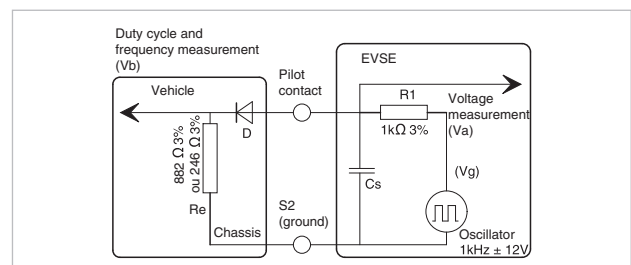
MODE 3 PWM CIRCUIT (PULSE WIDTH MODIFICATION)

PWM circuit operation is described in Annex A of standard IEC/EN 61851-1. This circuit arranges for communication between charging station and electric vehicle: the station communicates network availability to the vehicle through a frequency-modulated, the vehicle adjusts the load returning its status through a voltage value.



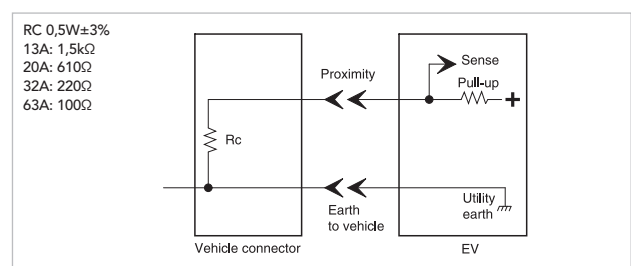
"SIMPLIFIED" MODE 3

In the case of vehicles without PWM, the circuit operates in "simplified mode", measuring the earth resistance value only and limiting the charging current to 16A (10A in the future).



RESISTOR CODING

Resistor Coding operation is described in Annex B.5 of standard IEC / EN 61851-1 and it is mandatory in the case of 3C type connectors, type 1 and type 2, when it is possible to wire the plug using cables with different cross-sections and capacity. Depending on the capacity, a resistance is positioned between the PP contact and the earth, with a value that identifies cable size. The PWM circuit then checks that the charging current does not exceed the maximum drawable current.



CHARGING STATIONS

WALL BOX

MODE 3



The Wall Box is a wall-mounted charging station with the same features as the UB versions, yet featuring a less "industrial" design that makes it suitable for installation in domestic or similar environments.

TECHNICAL CHARACTERISTICS

Rated current:	16A
rated voltage:	230VAC
Frequency:	50-60Hz
Insulation voltage:	50-60Hz
Protection degree:	IP54
Operating temperature:	-25°C +40°C
Materials:	Technopolymer
Glow Wire test:	650°C
IK grade at 20°C:	IK07
Colour:	Grey
Assembly:	Wall
Saline solution:	Resistant
UV rays:	Resistant

REFERENCE STANDARDS

EN 61851-1 (2011)

Electric vehicle conductive charging system.

Part 1: General requirements.

EN 61439-1 (2011)

Low-voltage switchgear and control gear assemblies.

Part 1: General requirement.

FUNCTIONS

- Mode 3 charging with PWM pilot circuit
- Identification of connected cable size
- Protection against overloads and indirect contacts (R)
- Measurement of power output and power absorbed
- Control of proper contactor opening
- Identification of users authorized to the charging (R)
- Management of plug anti-extraction lock
- Operation in free stand-alone or personal mode (R)
- Pre-set for serial communication (R)

APPLICATION EXAMPLES



UB CONSUMER UNITS

MODE 3



UB switchboards are wall-mounted charging stations made by taking advantage of the modular composition possibilities offered by the SCAME Domino Series switchboards.

TECHNICAL CHARACTERISTICS

Rated current:	16A/32A
Rated voltage:	230VAC / 400VAC
Frequency:	50-60Hz
Insulation voltage:	250V/500 V
Protection degree:	IP44 - IP54
Operating temperature:	-25°C +40°C
Materials:	Technopolymer
Glow Wire test:	650°C
IK grade at 20°C:	IK07
Colour:	Grey
Assembly:	Wall mounted
Saline solution:	Resistant
UV rays:	Resistant

REFERENCE STANDARDS

EN 61851-1 (2011)

Electric vehicle conductive charging system.
Part 1: General requirements.

EN 61439-1 (2011)

Low-voltage switchgear and control gear assemblies.
Part 1: General requirement.

FUNCTIONS

- Mode 3 charging with PWM pilot circuit
- Identification of the connected cable size
- Protection against overloads and indirect contacts (R and B)
- Measurement of power output and power absorbed
- Control of proper contactor opening
- Identification of users authorized to the charging (R and B)
- Management of cover lock and plug anti-extraction (B)
- Management of charging in case of no voltage (optional) (R and B)
- Operation in free stand-alone or personal mode (R and B)
- Pre-set for serial communication (R and B)

APPLICATION EXAMPLES





REFERENCE STANDARDS

EN 61851-1 (2011)

Electric vehicle conductive charging system.

Part 1: General requirements.

EN 61439-1 (2011)

Low-voltage switchgear and control gear assemblies.

Part 1: General requirement.

The CA charging column is a free-standing, two-sided charging station made of painted sheet that can be equipped with an incorporated anti-extraction lock type 2, 3A, 3C and domestic, and with portable outlets with permanently connected cable. Suited for private or public open areas, these columns feature removable front panels in Plexiglas that allow quick and easy customization.

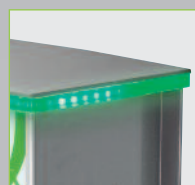
TECHNICAL CHARACTERISTICS

Rated current:	16A-32A-50A-63A
Rated voltage :	230VAC / 400VAC
Frequency:	50-60Hz
Insulating voltage:	250V / 500V
Protection degree:	IP54
Operating temperature:	-25°C +40°C
Materials:	Steel sheet
Glow Wire test:	-
IK grade at 20°C:	IK10
Colour:	Grey
Assembly:	Free-standing
Saline solution:	Resistant
UV rays:	Resistant

FUNCTIONS

- Mode 3 charging with PWM pilot circuit
- Identification of the connected cable
- Protection against overloads and indirect contacts
- Measurement of power output and power absorbed
- Control of proper contactor opening
- Identification of user authorized to the charging
- Management of cover lock and plug anti-extraction (B)
- Management of charging in case of no voltage
- Operation in free stand-alone or personal mode
- Pre-set for serial communication

APPLICATION EXAMPLES



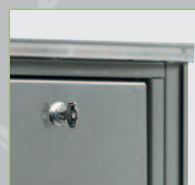
Head with LED indications



LED display with incorporated RFID reader



Customizable front panel



Compartment protected by door with lock



Separating plate for cable entry



Free-standing base with separating chamber

CB CHARGING STATION

MODE 3



The CB charging column is a free-standing, two-sided charging station with the same features as the CA column but made of stainless steel sheet instead and with a more personal design. Suited for private and public open areas and for environments requiring greater corrosion resistance

TECHNICAL CHARACTERISTICS

Rated current:	16A – 32A
Rated voltage:	400VAC
Frequency:	50-60Hz
Insulation voltage:	500V
Protection degree:	IP54
Operating temperature:	-25°C +40°C
Materials:	Steel Aisi 304
Glow Wire test:	-
IK grade at 20°C:	IK10
Colour:	Satin-finish
Assembly:	Free standing
Saline solution:	Resistant
UV rays:	Resistant

REFERENCE STANDARDS

EN 61851-1 (2011)

Electric vehicle conductive charging system.

Part 1: General requirement..

EN 61439-1 (2011)

Low-voltage switchgear and control gear assemblies.

Part 1: General requirement.

FUNCTIONS

- Mode 3 charging with PWM pilot circuit
- Identification of the connected cable size
- Protection against overloads and indirect contacts
- Measurement of power output and power absorbed
- Control of proper contactor opening
- Identification of user authorized to the charging
- Management of cover lock and plug anti-extraction (B)
- Management of charging in case of no voltage
- Operation in free stand-alone or personal mode
- Pre-set for serial communication

APPLICATION EXAMPLES



Head with LED indications



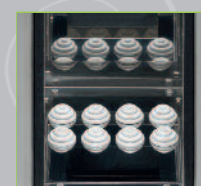
LED display with incorporated RFID reader



Flush-mounting outlet with door



Compartment protected by door with lock



Separating plate



Free-standing with separating chamber



RES(ource) is more than just a device used to charge electric vehicles. RES(ource) is also a source of energy, communication and services. A successful blend of design and functionality, it expresses through its shape and colours the vocation to fit in historical, architectural and valuable landscapes, typical of the Italian scenery.

TECHNICAL CHARACTERISTICS

Rated current:	32A
rated voltage:	400VAC
Frequency:	50-60Hz
Insulation voltage:	500V
Protection degree:	IP54
Operating temperature:	-25°C +40°C
Materials:	Corten steel
Glow Wire test:	-
IK grade at 20°C:	IK10
Colour:	Oxidized
Assembly	Free-standing
Saline solution:	Resistant
UV rays:	Resistant

FUNCTIONS

- Mode 3 charging with PWM pilot circuit
- Identification of the connected cable size
- Protection against overloads and indirect contacts
- Measurement of power output and power absorbed
- Control of proper opening
- Management of service based on the available credit
- Management of cover lock and plug anti-extraction
- Management of charging in case of no voltage
- Operation in free stand-alone or personal mode
- Pre-set for serial communication

REFERENCE STANDARDS

EN 61851-1 (2011)

Electric vehicle conductive charging system.

Part 1: General requirements.

EN 61439-1 (2011)

Low-voltage switchgear and control gear assemblies.

Part 1: General requirement.

APPLICATION EXAMPLES



Z.E. READY

SN: 000000000



ZER-13-12046-SCA-PROV

ZE READY CERTIFICATION PROCEDURE

Potential partner

- Acceptance of the collaboration contract
- Participation in the technical course at SCAME covering the following topics:
 - Reference standards
- Installation, configuration and use of SCAME charging stations
 - Additional ZE READY requirements
- Installation of products according to:
 - Current standards
 - Technical manual
 - ZE READY requirements
- Filling in of the installation report
- Affixing the brand

ZE READY is a quality brand owned by Renault that guarantees full compatibility of the charging infrastructure with ZE Renault vehicles.

When affixed, it ensures that the charging stations and their installation, are carried out in compliance with specific requirements established by the members of the ZE Ready workshop, which anticipate upcoming rules and regulations concerning the charging of electric vehicles in order to ensure their safety and performance.

ZE READY is a trademark granted by Renault to accredited partners. The right to use the trademark is only given to companies that have control over the product and its installation. SCAME stations have been tested and accredited in conformity with ZE READY 1.2 requirements, so any installer that wishes to certify compliance can become SCAME's partner. For more information about SCAME products, the certification process and how to become a partner, please contact SCAME at info@scame.com.



For the software we

A truly complete project cannot be limited to defining the technical characteristics of the equipment. In such a complex scenario such as the one that is evolving in this sector, it is crucial to provide for advanced utilization modes of the power supply system, taking advantage of plant management technologies that allow an optimization of equipment use.

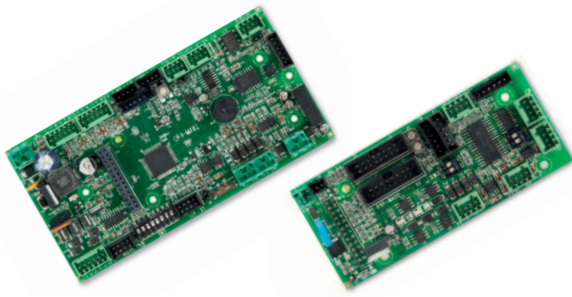
SCAME has provided for the interaction with sophisticated control and management tools, also developing an advanced software system that makes the SCAME world compatible with the most depending market requirements.



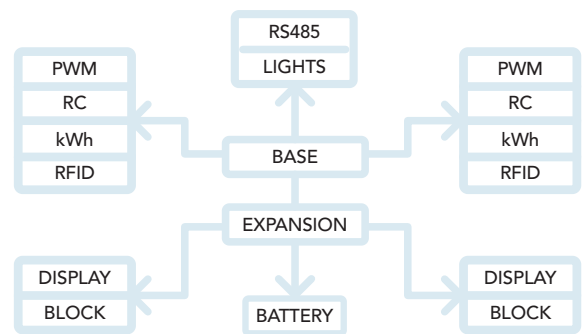
component have worked hard

CONTROL CARD

Scame's charging stations are equipped with a control card that was developed in cooperation with our partner, GENERALE SISTEMI, which supplies basic functions such as the PWM circuit, the resistor coding, energy measurement, RFID user recognition, indicator lights and RS485 serial communication.



Depending on the versions, additional functions such as emergency power supply, display management, anti-extraction blocks and lights command are provided by a special expansion module.



USER INTERFACE

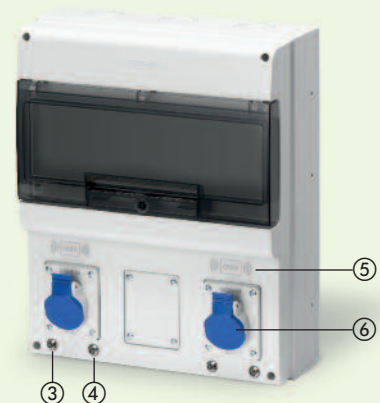
204.CAXXX



204.CBXXX



204.UBXX



- ① GENERAL INTERFACE: blue, during charging; green, when it is not charging, red when there is a failure.
- ② LCD DISPLAY: provides the user with instructions on how to charge and displays information regarding the charging process.
- ③ WHITE OPERATING LED: lit It indicates normal operation; flashing indicates that the control or programming is in progress
- ④ BLUE OPERATING LED lit indicates that charging is in progress; flashing that charging is suspended.
- ⑤ RFID READER to enable the charging or open the outlet cover, the User Card must be placed over this area.
- ⑥ STOP CHARGE BUTTION (free mode)
- ⑦ POWER PLUG depending on the version, can be type 1, type 2, type 3A, 3C or domestic, with or without anti-extraction block, complies with IEC 62196-1 and 2.

The three configurations for charging stations

STAND-ALONE

The stations are not connected to each other and operate independently. The station administrator can leave them in free charging mode (FREE) or limited to authorized users (PERSONAL). Through the card programmer, the administrator can nevertheless control the charging depending on a specific time interval and the number of accesses.

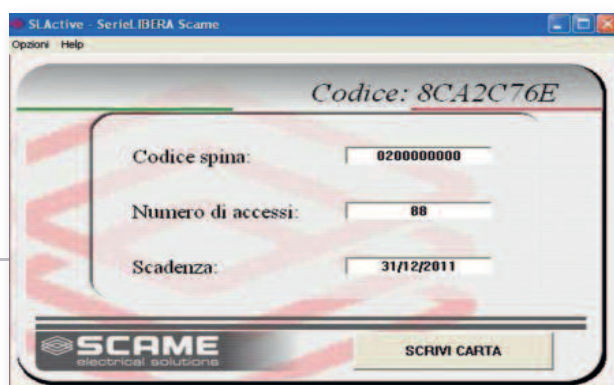


Programmer and User Card in HF technology

ACTIVE CARD

Each User Card can be programmed by assigning it an expiry date and/or a limited number of accesses through the 208.PROG programmer, to be connected to one's PC, and the supplied SLActive software.

SLActive software



PC

PROG

WEB

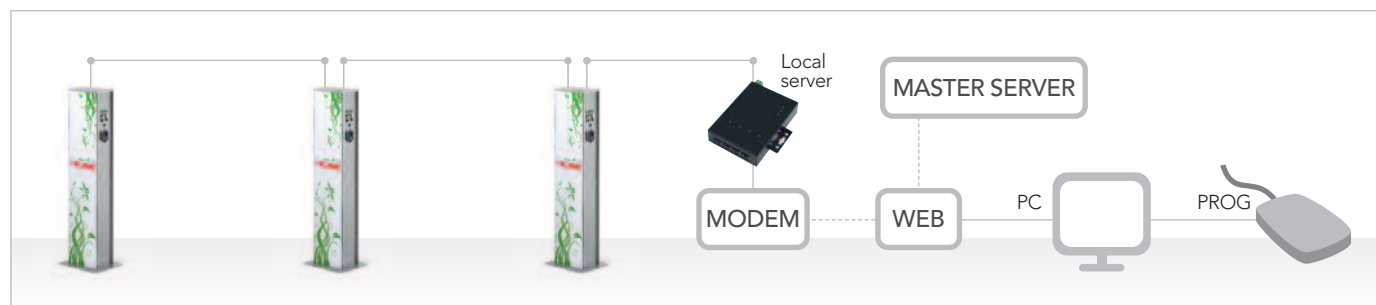
The stations are connected to a GPRS modem that transfers data to the web server.

The station administrator accesses the web server from which it is possible to manage users, monitor and configure the stations, calculate consumption, etc. Access to the web server is also possible by users; said access is limited to a user's own account. The development of systems that take advantage of station connection to a web server is entrusted to our partner, GENERALE SISTEMI, which operates the service.

WEB SERVICES

The services via the Internet developed by SCAME in collaboration with GS SISTEMI offer the following solutions:

- real-time display of system status (column free, busy, charging, etc.);
- recording of consumption;
- calculation of statistics on column use and availability.



rations ations

NET

The charging stations are connected to each other and to a local server, which can only be accessed by the station administrator. In addition to serving as a data concentrator, the server contains the standard software developed in collaboration with our partner, GENERALE SISTEMI, through which it is possible to manage users, monitor and configure the charging stations, record consumptions, etc. Through the card programmer, the administrator can nevertheless control the charging depending on a specific time interval and the number of accesses.

The services are managed through a local server located nearby the columns.

The system used to manage SCAME's charging stations does not require the installation of software in order to work, as the program is already installed on the server.

The operating status of the outlets of the connected stations is reported in real time on the web page shown here below.



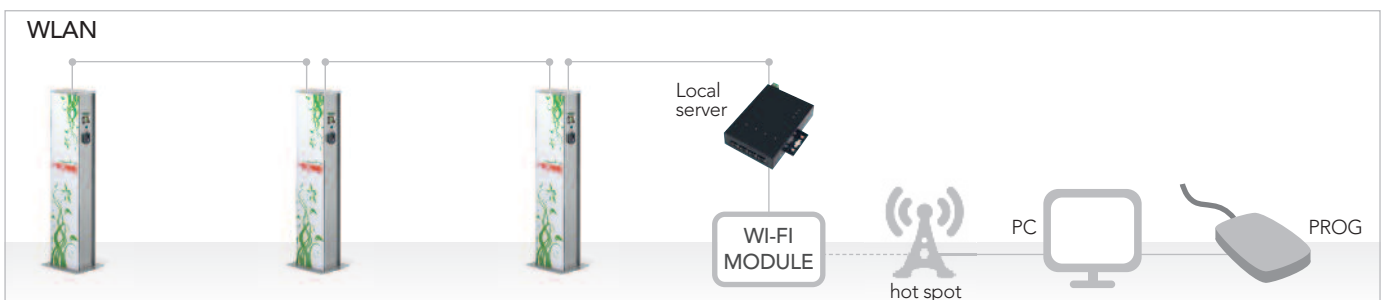
Local server with standard management software

stazione	presa	stato	inizio	data	consumo	corrente
S01 S01	P1: Libera	-	-	-	-	-
	P2: In carica Card	-	12/09/2011 12:22	05-0m-31s	0.00 kWh	15A
S02 S02	P1: Libera	-	-	-	-	-
	P2: Libera	-	-	-	-	-
S03 S03	P1: Libera	-	-	-	-	-
	P2: Libera	-	-	-	-	-

LAN



WLAN





TECHNICAL CHARACTERISTICS

Input voltage:	400VAC
Input current:	32A-80A
Frequency:	50-60Hz
Output voltage:	50-600VDC
Output current:	125A Max.
Efficiency:	> 32A%
Power factor:	0.35
Protection degree:	IP54
Operating temperature:	-25°C +40°C
Materials:	Steel sheet
Glow Wire test:	-
IK grade at 20°C:	IK10
Colour:	Grey
Assembly:	Free-standing
Saline solution:	Resistant
UV rays:	Resistant

To complete its product range, SCAME offers the Fast Charge quick charging stations in Mode 4, compatible with standard CHAdEMO.

N.B:

- The term "fast charge" means the ability of a battery to charge up to 80% in 10/15 minutes.
- CheDeMo is the name of the Japanese association that promotes this charging mode, which requires the use of dedicated connectors, pre-setting the vehicle for this charging mode, and digital communication between vehicle and charging station defined by a proprietary protocol.

FUNCTIONS

- Mode 4 charging according to standard CHAdEMO
- Electronic protection against polarity reversal, short circuits, anti-arc, over-temperature
- Management of charging in case of no voltage
- Incorporated datalogger (200 cycles)
- Operation in stand-alone free mode
- Pre-set for serial communication

REFERENCE STANDARDS

EN 61851-1 (2011)

Electric vehicle conductive charging system.
Part 1: General requirements.

IEC 61439-1 (2011)

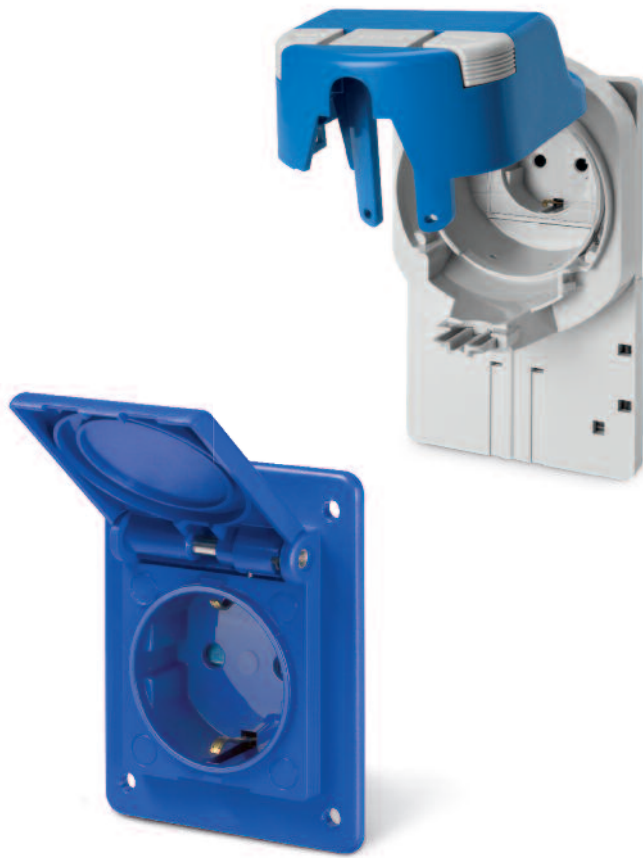
Low-voltage switchgear and control gear assemblies.
Part 1: General requirement.

APPLICATION EXAMPLES



DOMESTIC CONNECTORS

MODE 1



REFERENCE STANDARDS

EN 60884-1

Plugs and socket-outlets for household and similar purposes.
 Part 1: General requirements.

There are several electric vehicles on the market today that, due to their construction, do not fall within the charging modes covered by standard EN61851 - 1 (e.g., scooters/ bike with off-board battery charger) .

For these vehicles, SCAME has developed special versions of its domestic connectors that allow the same technical features of mode 3 connectors to be 'exploited' (such as inserted plug detection and anti-extraction lock system), so that they can be incorporated in SCAME's charging infrastructure.

N.B.: Please note remember that in Italy, domestic connectors are not suited for charging electric vehicles in mode 1 in environments open to third parties.

TECHNICAL CHARACTERISTICS

Rated current:	16A
Rated voltage:	200-250VAC
Frequency:	50-60Hz
Insulation voltage:	250V
Protection degree:	IP54 (IPXXD)
Operating temperature:	-25°C +35°C -30°C +50°C (socket with lock)
Materials:	Technopolymer
Glow Wire test/UL94:	650°C-750°C 850 -960 /VO-V1 (socket with lock)
IK grade at 20°C:	IK08
Colour:	Grey / Light blue
Number of poles:	L1-N-E-CP
Connection capacity:	1-4mm ²
Saline solution:	Resistant
UV rays:	Resistant

UNEL OUTLET WITH LOCK

The flush-mounting socket outlets of the LIBERA series are also available in the UNEL version with built-in anti-extraction lock for a charging system in mode 1 having the same features as the socket outlets with lock in mode 3.

In this case, however, the anti-extraction function is obtained by blocking the lid opening even when the plug is inserted.

The use of this outlet is allowed only in areas where mode 3 is not mandatory. The outlet is supplied without the piloting system.

Operation is guaranteed only with the UNEL plug.





FUNCTIONS

- Charging in DC standard EvoBike mode
- Protection against overloads and indirect contacts
- Identification of users authorized to the charging
- Management of cover lock and plug anti-extraction
- Operation in free stand-alone or personal mode

TECHNICAL CHARACTERISTICS

Rated current:	32A
Rated voltage:	230VAC
Frequency:	50-60Hz
Insulation voltage:	250V
Protection degree:	IP44
Operating temperature:	-25°C +40°C
Material:	Steel sheet
Glow Wire test:	-
IK grade at 20°C:	IK10
Colour:	Anthracite
Assembly:	Wall mounted
Saline solution:	Resistant
UV rays:	Resistant

To complete its product range, SCAME also offers charging stations in DC for vehicles that are equipped with an external battery charger and are therefore not covered by current legislation.

This is a bar structure that can be easily incorporated in a shelf structure that contains the control and identification electronics and is roomy enough to house the battery charger best suited for the vehicle to be charged (not included).

The system also includes a standard owner connection which the vehicle must already have.

REFERENCE STANDARDS

EN 61851-1 (2011)

Electric vehicle conductive charging system.
Part 1: General requirements.

EN 61439-1 (2011)

Low-voltage switchgear and control gear assemblies.
Part 1: General requirement.

APPLICATION EXAMPLES





ECOMOBILITY
GENERAL
CATALOGUE
2014-2015
PRODUCTS

3A TYPE CONNECTORS - SINGLE-PHASE 16A 230V~ 2P+T+CP - IP44

	DESCRIPTION	PACK.	CODE		DESCRIPTION	PACK.	CODE
	Straight plug	10/100	200.01633		Flush-mounting outlet with flange 70x87mm	10/60	200.01663
	Angled plug	10/100	200.01633A		Flush-mounting outlet with anti-extraction lock IP54	1/20	200.01663B
	Fixed plug with flange 70x87mm	10/40	200.01693		Italian plug adapter P17	10/100	200.01623
	Straight outlet	10/100	200.01643		French-German plug adaptor	10/100	200.01624

DOMESTIC CONNECTORS - SINGLE-PHASE 16A 230V~ 2P+T - MODE 1

	DESCRIPTION	PACK.	CODE		DESCRIPTION	PACK.	CODE
	UNEL IP54 flush-mounting outlet with flange 70x87 (with switch)	10/100	570.4062-SW		UNEL IP54 flush-mounting outlet with anti-extraction lock	1/10	200.4007B

OMNIAPLUS Series

For domestic use
IP56 with inserted plug
with lock device



For additional information, please refer to our general catalogue

3C TYPE CONNECTORS - SINGLE/THREE-PHASE 16-32A 400V~ 3P+N+T+CP+PP - IP44

DESCRIPTION	PACK.	CODE	DESCRIPTION	PACK.	CODE
Mobile plug with screw terminals 1,5÷6mm ²	10/40	200.33233	Crimped pin kit 2,5mm ²	10/100	200.332KITC2
 Mobile plug with crimped terminals 2,5mm ²	10/40	200.33233C2(*)	 Crimped pin kit 4mm ²	10/100	200.332KITC4
Mobile plug with crimped terminals 4mm ²	10/40	200.33233C4(*)	Crimped pin kit 6mm ²	10/100	200.332KITC6
Mobile plug with crimped terminals 6mm ²	10/40	200.33233C6(*)	 Flush-mounting plug with flange 70x87mm	10/60	200.33263
 Mobile plug 3C crimped terminals 2,5mm ²	1	200.33234C2(*)	 Flush-mounting plug with anti-extraction lock IP54	1/20	200.33263B
Mobile plug 3C crimped terminals 4mm ²	1	200.33234C4(*)			

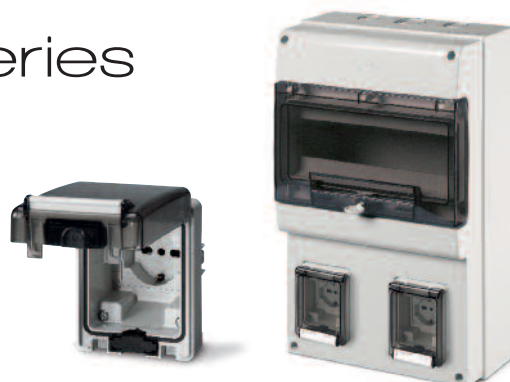
(*) Cable to be defined at the time of the order.

TYPE 2 CONNECTORS - SINGLE/THREE-PHASE 16-32A 400V~ 3P+N+T+CP+PP

DESCRIPTION	PACK.	CODE
 Recessed plug with anti-extraction lock anti-extraction IP54	1/10	200.23264B

DOMOPLUS Series

For domestic use
IP66 with inserted plug



For addition information, please refer to the general catalogue.

CORD SET (*)

	PLUG	CABLE	CONNECTOR	PACK.	CODE
	3A 16A type 1P	3x2,5+1x0,5 5m	1 20° type 1P	1/5	200.CS3A1T11
	3A 16A type 1P	3x2,5+1x0,5 5m	3A 16A type 1P	1/5	200.CS3A13A1
	3A 16A type 1P	3x2,5+1x0,5 5m	2 20° type 1P	1/5	200.CS3A1T21
	3C 32A type 3P	3x2,5+1x0,5 5m	1 20° type 1P	1/5	200.CS3C1T11
	3C 32A type 3P	3x6+1x0,5 5m	1 32° type 1P	1/5	200.CS3C1T12
	3C 32A type 3P	5x2,5+1x0,5 5m	2 20° type 3P	1/5	200.CS3C1T22
	3C 32A type 3P	3C 32A type 3P	2 32A type 3P	1/5	200.CS3C1T24
	2 20A type 1P	3x2,5+1x0,5 5m	1 20A type 1P	1/5	200.CST21T11
	2 32A type 1P	3x6+1x0,5 5m	1 32A type 1P	1/5	200.CST23T12
	2 20A type 1P	3x2,5+1x0,5 5m	2 20A type 1P	1/5	200.CST21T21
	2 32A type 1P	3x6+1x0,5 5m	2 32A type 1P	1/5	200.CST23T23
	2 32A type 3P	5x6+1+0,5 5m	2 32A type 3P	1/5	200.CST24T24

(*) Special version available on request

ACCESSORIES (*)

DESCRIPTION	PACK.	CODE
 Tubular support in galvanized steel	1/1	654.0650
 Fixing plate in galvanized steel	UB21R 1/4 654.0651 UB11L-UB11R 1/4 654.0655 UB11B-UB13B-UB21B 1/4 654.0656	
 Single-face hollow structure in painted steel sheet	UB11B-UB13B 1/1	204.DA5010

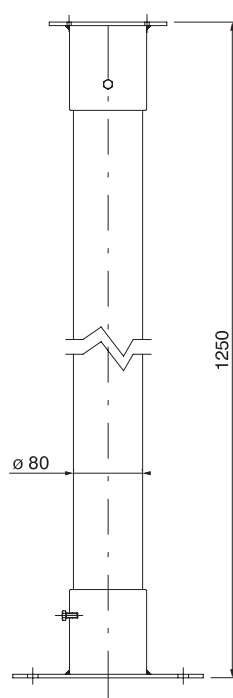
(*) For Domino Series distribution assemblies

APPLICATION EXAMPLES

204.UB21R-3C3A +
654.0650 + 654.0651



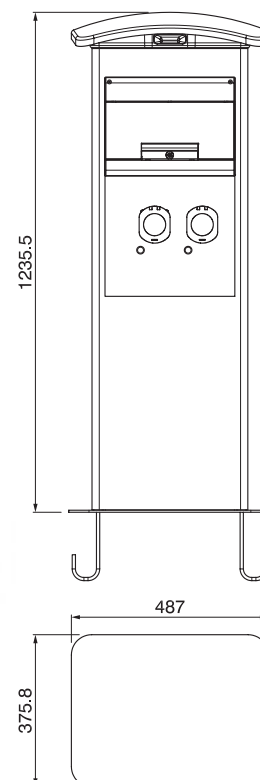
654.0650



204.UB21B-3C3A +



204.DA5010



- Head with twilight-sensor LED light.
- Pre-assembled versions available upon request.

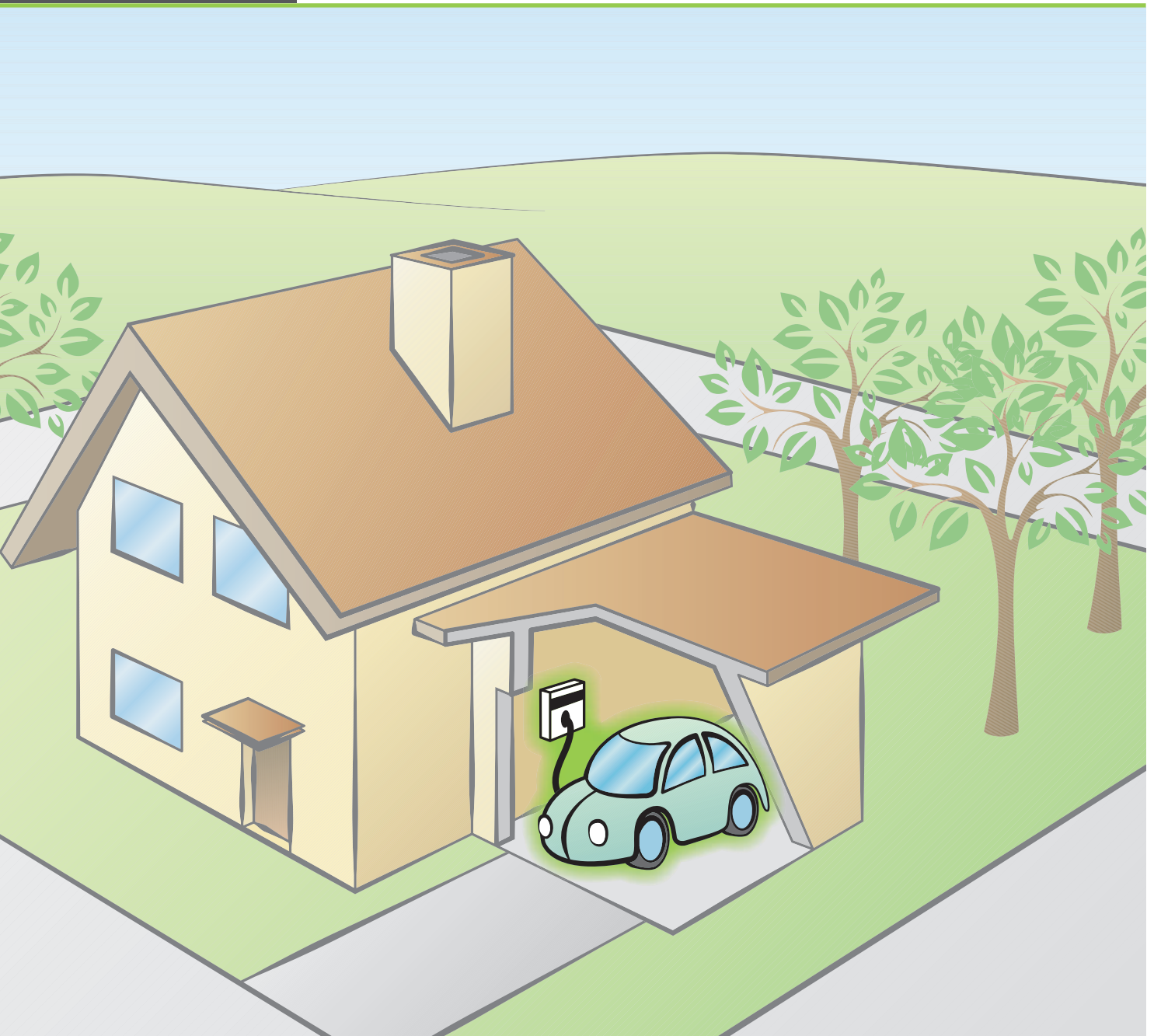
Scame Solutions for charging systems:

1. single-family home

CHARGING CIRCUIT POWER SUPPLY:

- from the distribution board in the flat;
- from an electrical board inside the garage;
- from a meter specifically used to power the charging unit (AEEG resolution 56/10);

IN A PRIVATE GARAGE



UB-L (*) SWITCHBOARDS WITHOUT RFID AND PROTECTIONS

NEW	SUPPLY	PACK.	CODE
	No. 1 outlet Type 3C – 3.5 kW	1/1	204.UB11L-3C
	No. 1 outlet Type 3A - 3.5 kW	1/1	204.UB11L-3A

WB-L WALL BOX WITHOUT RFID AND PROTECTIONS

NEW	SUPPLY	PACK.	CODE
	No. 1 outlet Type 3C – 3.5 kW	1/1	204.WB11L-3C
	No. 1 outlet Type 2 – 3.5 kW	1/1	204.WB11L-T2
	No. 1 outlet Type 3A – 3.5 kW	1/1	204.WB11L-3A

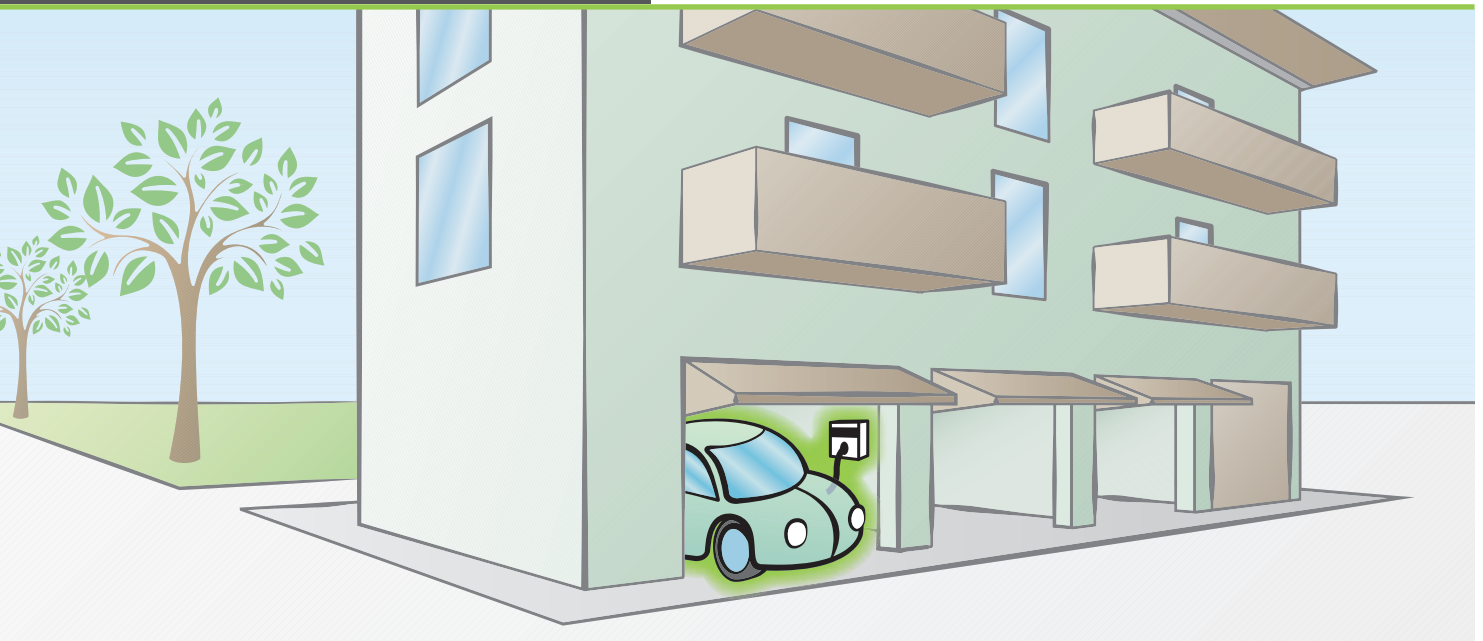
(*) Special versions available on request.

2. Condominiums and condominium parking lots

POWER SUPPLY OF CHARGING STATIONS:

- connection to existing electrical system for communal areas;
- connection to individual electrical system;
- connection to an energy meter dedicated to EV charging (AEEG Resolution 56/10);
- possibility to use an RFID badge;
- possibility to lock the outlet cover;

IN THE PRIVATE GARAGE OF A CONDOMINIUM



IN A CONDOMINIUM PARKING LOT



UB-R SWITCHBOARDS WITH RFID AND PROTECTIONS (*)

NEW	SUPPLY	PACK.	CODE
	No. 1 outlet with type 3C RFID – 3.5 kW	1/1	204.UB11R-3C
	No. 1 outlet with type 3C RFID – 3.5 kW	1/1	204.UB11R-3A
	No. 2 outlets with type 3C RFID – 3.5 kW	1/1	204.UB21R-3C3C
	No. 1 outlet with Type 3A RFID - 3.5 kW No. 1 outlet with Type 3C RFID - 3.5 kW	1/1	204.UB21R-3C3A
	No. 1 outlet with rfid Type 3C - 3,5 kW No. 1 outlet with rfid UNEL - 3,5 kW	1/1	204.UB21R-3CUN
	No. 2 outlet with Type 3A RFID – 3.5 kW	1/1	204.UB21R-3A3A
	No. 2 outlet with rfid UNEL - 3,5 kW	1/1	204.UB21R-UNUN

UB-R SWITCHBOARDS WITH RFID AND PROTECTIONS NOT SUITED FOR CHARGING IN MODE 1 AND 2 IN ENVIRONMENTS OPEN TO THIRD PARTIES (*)

NEW	SUPPLY	PACK.	CODE
	No. 1 outlet with UNEL type RFID – 3.5 kW	1/1	204.UB11R-UN
	No. 2 outlets with UNEL type RFID – 3.5 kW	1/1	204.UB21R-UNUN

WB-R WALL BOX WITH RFID AND PROTECTIONS (*)

	SUPPLY	PACK.	CODE
	No. 1 outlet with Type 3C RFID – 3.5 kW	1/1	204.WB11R-3C
	No. 1 outlet with Type 2 RFID – 3.5 kW	1/1	204.WB11R-T2
	No. 1 outlet with Type 3A RFID – 3.5 kW	1/1	204.WB11R-3A

(*) Special versions upon request.

3. Parking lots in public

Shopping centres, hotels, companies and public parking lots

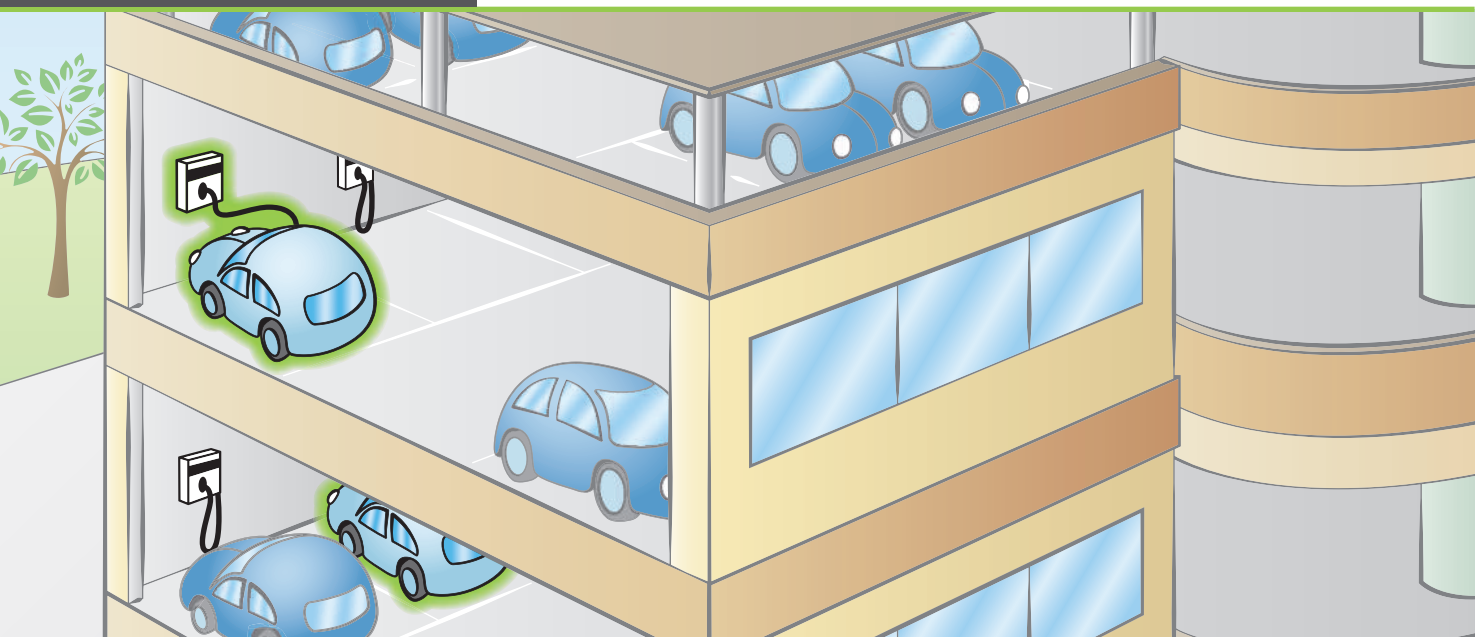
POWER SUPPLY OF CHARGING STATIONS:

- power supply from a main distribution board at the premises;
- connection to an energy metre dedicated to EV charging;
(AEEG Resolution 56/10);
- possibility to use an RFID badge;
- possibility to block the outlet cover;
- possibility to install a column management system via LAN network
or WEB SERVER.

IN A COMPANY PARKING LOT



IN A PUBLIC PARKING GARAGE



UB-R SWITCHBOARDS WITH RFID, LOCKS AND PROTECTIONS (*)

NEW	SUPPLY	PACK.	CODE
	No. 1 outlet with Type 3C lock - 3.5 kW	1/1	204.UB11B-3C
	No. 1 outlet with Type 3C lock - 7 kW type	1/1	204.UB11B-3C32
	No. 1 outlet with Type 2 lock - 3.5 kW	1/1	204.UB11B-T2
	No. 1 outlet with Type 2 lock - 7 kW	1/1	204.UB11B-T232
	No. 1 outlet with Type 3A lock - 3.5 kW	1/1	204.UB11B-3A
	No. 1 outlet with Type 3C lock - 22 kW	1/1	204.UB13B-3C
	No. 1 outlet with Type 2 lock - 22 kW	1/1	204.UB13B-T2
	No. 2 outlets with Type 3C lock - 3.5 kW	1/1	204.UB21B-3C3C
	No. 1 outlet with Type 3C lock - 3.5 kW No. 1 outlet with Type 3A lock - 3.5 kW	1/1	204.UB21B-3C3A
	No. 2 outlets with type 3A lock - 3.5 kW	1/1	204.UB21B-3A3A
	No. 1 outlet with Type 3C lock - 3,5 kW No. 1 outlet with UNEL lock - 3,5 kW	1/1	204.UB21B-3CUN
	No. 1 outlet with Type 3A lock - 3,5 kW No. 1 outlet with UNEL lock - 3,5 kW	1/1	204.UB21B-3AUN

UB-R SWITCHBOARDS WITH RFID, LOCKS AND PROTECTIONS NOT SUITED FOR CHARGING IN MODE 1 AND 2, IN ENVIRONMENT OPEN TO THIRD PARTIES (*)

NEW	SUPPLY	PACK.	CODE
	1 outlet with UNEL - 3.5 kW block	1/1	204.UB11B-UN
	2 outlets with UNEL - 3.5 kW block	1/1	204.UB21B-UNUN

CHARGING COLUMN IN STEEL - CB WITH RFID, LOCKS AND PROTECTIONS (*)

	SUPPLY	PACK.	CODE
	No. 2 outlets with Type 3C lock - 7 kW	1/1	204.CB21B-3C3C
	No. 1 outlet with Type 3C lock - 7 kW No. 1 outlet with Type 2 lock - 7 kW type	1/1	204.CB21B-3CT2
	No. 2 outlets with Type 2 lock - 7 kW	1/1	204.CB21B-T2T2
	No. 1 outlet with Type 3C lock - 7 kW No. 1 outlet with Type 3A lock - 3.5 kW	1/1	204.CB21B-3C3A
	No. 1 outlet with Type 2 lock - 7 kW No. 1 outlet with Type 3A lock - 3.5 kW	1/1	204.CB21B-T23A
	No. 2 outlets with Type 3A lock - 3.5 kW	1/1	204.CB21B-3A3A

CHARGING COLUMN IN COR-TEN - CR WITH RFID, LOCKS AND PROTECTIONS (*)

	SUPPLY	PACK.	CODE
	No. 1 outlet with Type 3C lock - 7 kW No. 1 outlet with Type 2 lock - 7 kW No. 2 outlets with Type 3A - 3.5 kW	1/1	204.CR41B-001

(*) Special versions available on request.

CHARGING COLUMN IN METAL SHEET - CA WITH RFID, LOCKS AND PROTECTIONS

DESCRIPTION	PACK.	CODE
No. 1 outlet with Type 3C lock - 7 kW	1/1	204.CA11B-3C
No. 1 outlet with Type 2 lock - 7 kW	1/1	204.CA11B-T2
No. 1 outlet with Type 3A lock - 3.5 kW	1/1	204.CA11B-3A
No. 1 outlet with Type 3C lock - 22 kW	1/1	204.CA13B-3C
No. 1 outlet with Type 2 lock - 22 kW	1/1	204.CA13B-T2
No. 1 mobile outlet Type 2 - 44 kW	1/1	204.CA13R-T26
No. 2 outlets with Type 3C lock - 7 kW	1/1	204.CA21B-3C3C
No. 1 outlet with Type 3C lock - 7 kW No. 1 outlet with Type 2 lock - 7 kW	1/1	204.CA21B-3CT2
No. 2 outlets with Type 2 lock - 7 kW	1/1	204.CA21B-T2T2
No. 1 outlet with Type 3C lock - 7 kW No. 1 outlet with Type 3A lock - 3.5 kW	1/1	204.CA21B-3C3A
No. 1 outlet with Type 3C lock - 7 kW No. 1 outlet with UNEL lock - 3,5 kW	1/1	204.CA21B-3CUN
No. 1 outlet with Type 2 lock - 7 kW No. 1 outlet with Type 3A lock - 3.5 kW	1/1	204.CA21B-T23A
No. 1 outlet with Type 2 lock - 7 kW No. 1 outlet with UNEL lock - 3,5 kW	1/1	204.CA21B-T2UN
No. 2 outlets with Type 3A lock - 3.5 kW	1/1	204.CA21B-3A3A
No. 1 outlet with Type 3A lock - 3,5 kW No. 1 outlet with UNEL lock - 3,5 kW	1/1	204.CA21B-3AUN
No. 2 mobile outlets Type 1- 3.5 kW	1/1	204.CA21R-T11T11
No. 2 mobile outlets Type 2- 3.5 kW	1/1	204.CA21R-T21T21
No. 1 outlet with Type 3C lock - 22 kW No. 1 outlet with Type 3A lock - 3.5 kW	1/1	204.CA22B-3C3A
No. 1 outlet with Type 3C lock - 22 kW No. 1 outlet with UNEL lock - 3,5 kW	1/1	204.CA22B-3CUN
No. 1 outlet with Type 2 lock - 22 kW No. 1 outlet with Type 3A lock - 3.5 kW k	1/1	204.CA22B-T23A
No. 1 outlet with Type 2 lock - 22 kW No. 1 outlet with UNEL lock - 3,5 kW	1/1	204.CA22B-T2UN
No. 2 outlets with Type 3C - 22 kW	1/1	204.CA23B-3C3C
No. 1 outlet with Type 3C lock - 22 kW No. 1 outlet with Type 2 lock -22 kW	1/1	204.CA23B-3CT2
No. 2 outlets with Type 2 lock - 22 kW	1/1	204.CA23B-T2T2
No. 1 outlet with Type 3C lock - 7 kW No. 1 outlet with Type 2 lock -7 kW No. 2 outlets with type 3A lock - 3.5 kW	1/1	204.CA41B-001



**CHARGING COLUMN IN SHEET METAL – CA WITH RFID, LOCKS AND PROTECTIONS
 NOT SUITED FOR CHARGING IN MODE 1 AND 2 MODE IN AREAS OPEN TO THIRD PARTIES**

	DESCRIPTION	PACK.	CODE
	No. 1 outlet with UNEL lock – 3.5 kW	1/1	204.CA11B-UN
	No. 2 outlets with UNEL lock – 3.5 kW	1/1	204.CA21B-UNUN

SYSTEM COMPONENTS

	DESCRIPTION	PACK.	CODE
	Local server with standard management software	1/1	208.SERV
	User card programmer with HF technology	1/1	208.PROG
	User card with HF technology	1/10	208.CARD

OTHER SOLUTIONS

CHARGING COLUMN IN SHEET METAL CHADEMO-CH

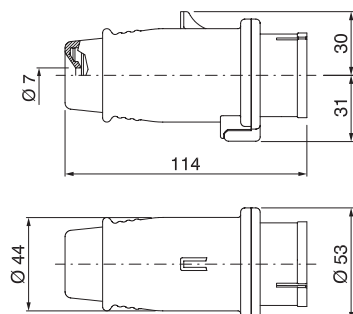
	DESCRIPTION	PACK.	CODE
	No. 1 CHAdeMO charging station - 20kW	1/1	204.CH13L-20
	No. 1 CHAdeMO charging station - 50kW	1/1	204.CH13L-50

EVOBIKE

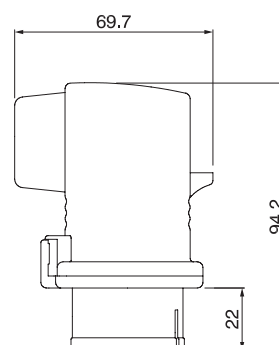
	DESCRIPTION	PACK.	CODE
	Bar to charge bicycles with 4 outlets	1/1	204.EB41B-001
	Pair of brackets for fixing to wall	1/1	204.EB-ST
	Side column for fixing to ground	1/1	204.EB-CL
	Central column for fixing to ground	1/1	204.EB-CC
	Cable kit and bike recharge	1/1	204.EB-SP

DIMENSIONS

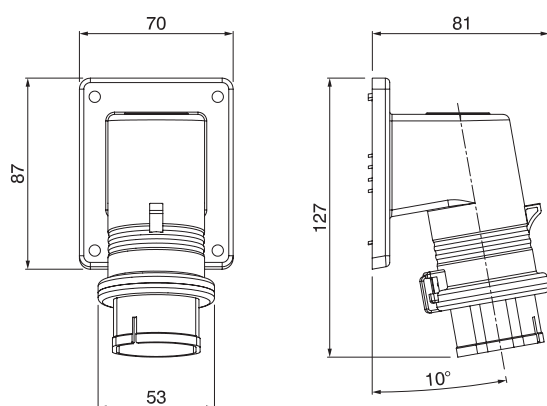
200.01633



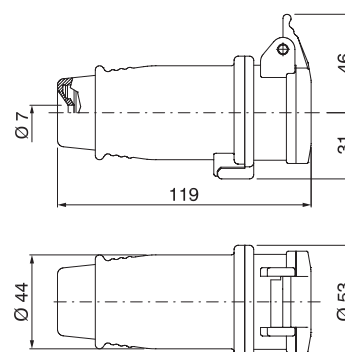
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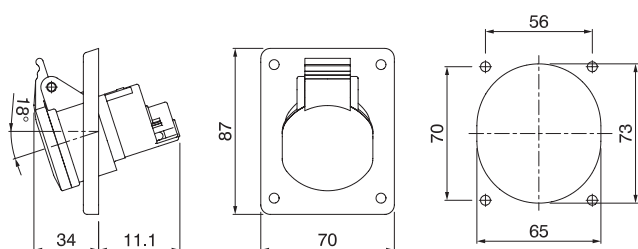
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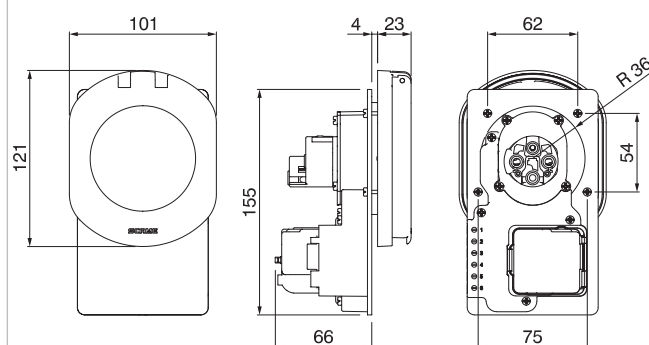
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200.01663



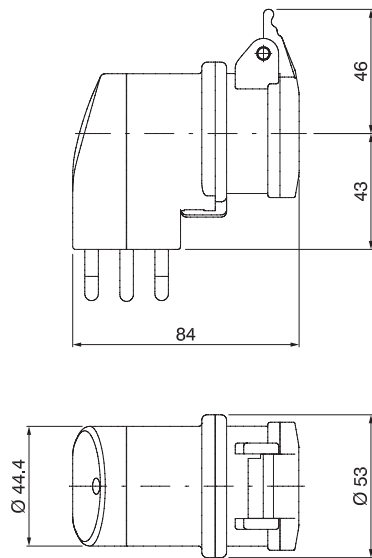
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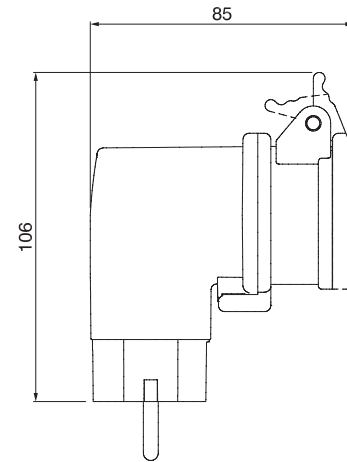
Dimensions in mm

DIMENSIONS

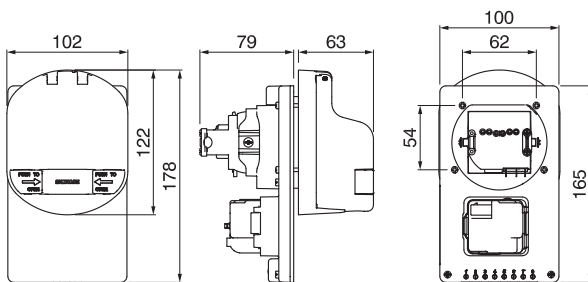
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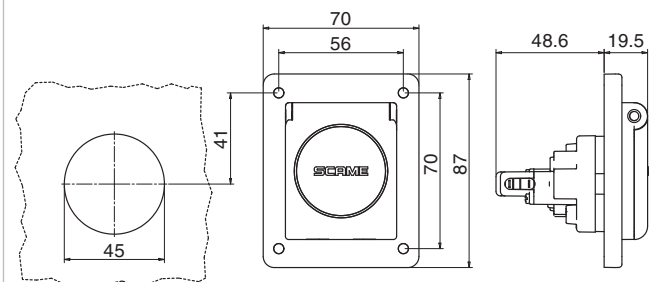
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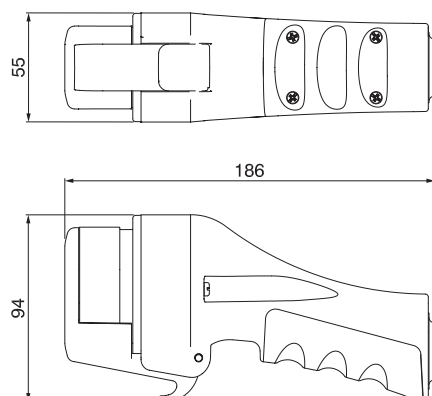
200.4007B



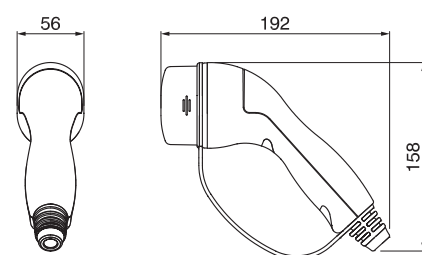
570.4062-SW



200.33233
 200.33233C2
 200.33233C4
 200.33233C6

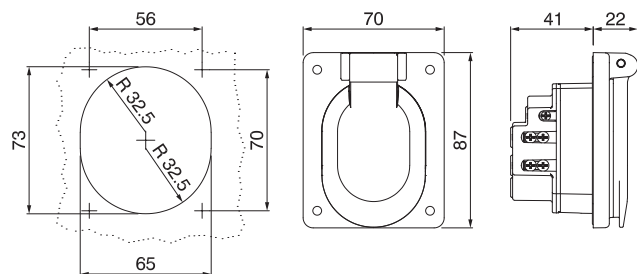


200.33234C2
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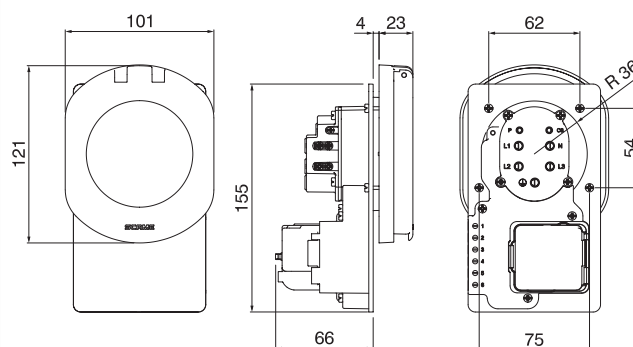


DIMENSIONS

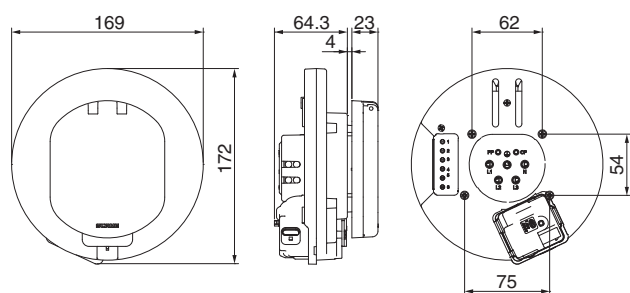
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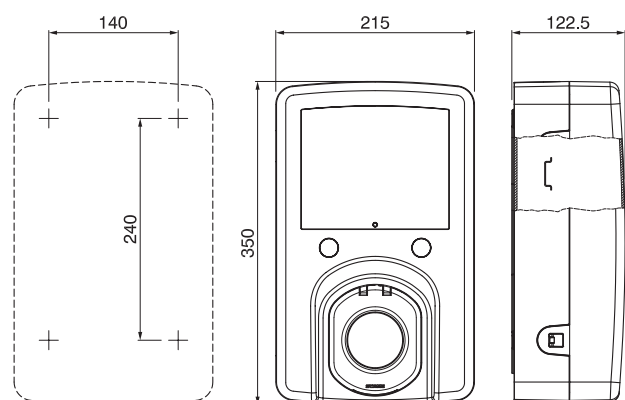
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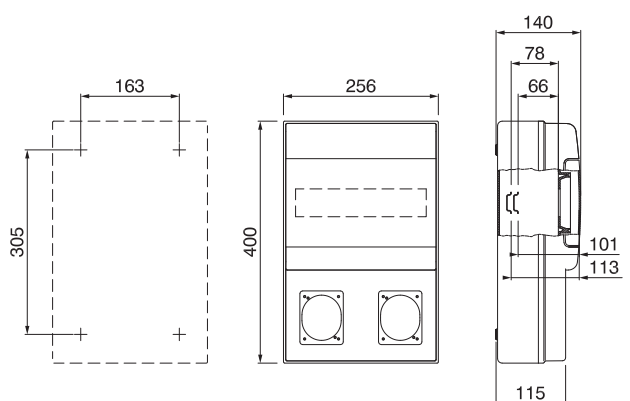
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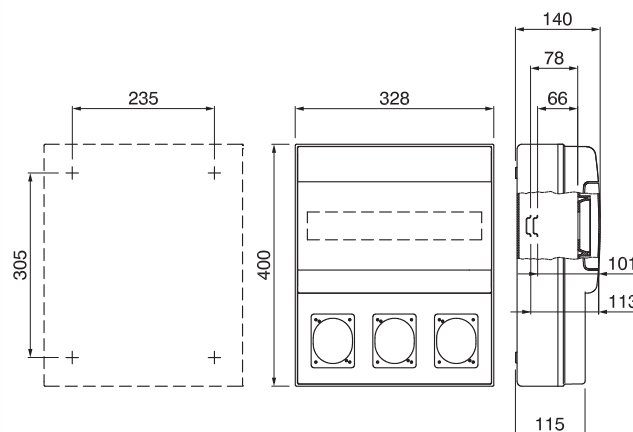
204.WB11L
204.WB11R



204.UB11L
204.UB11R



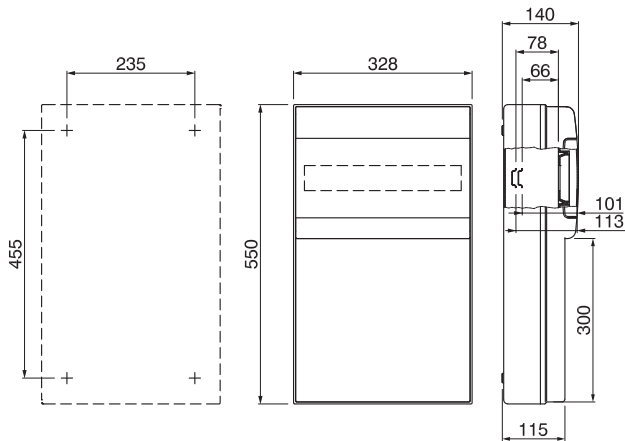
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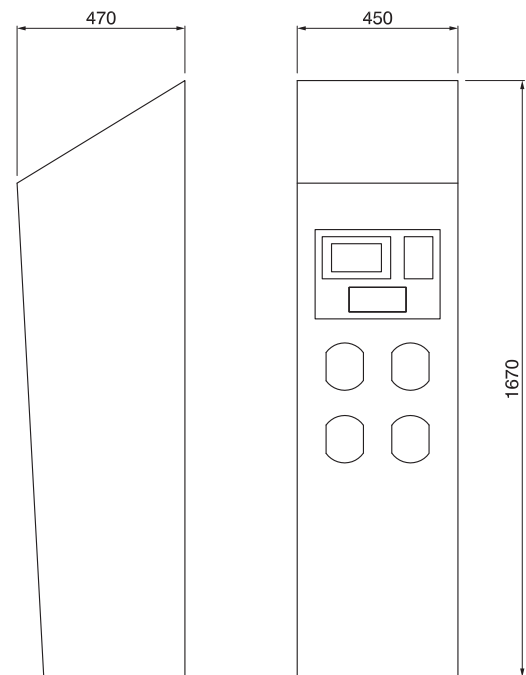
Dimensions in mm

DIMENSIONS

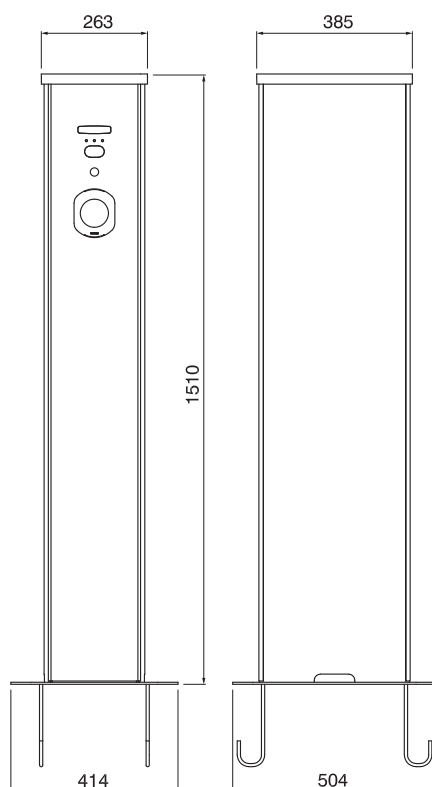
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 204.UB13B
 204.UB21B



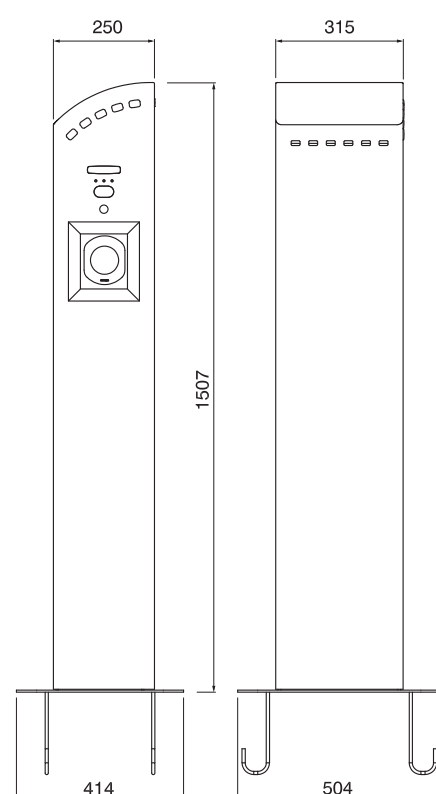
204.CR41B-001



204.CA

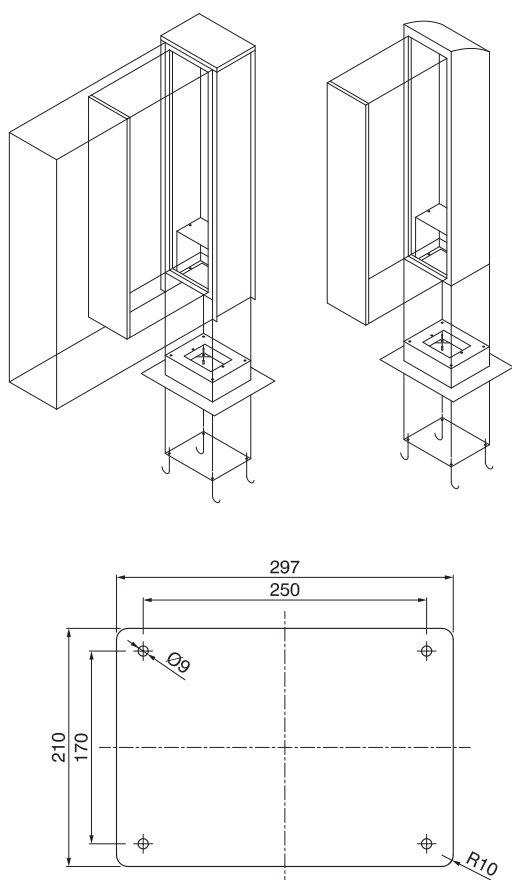


204.CB

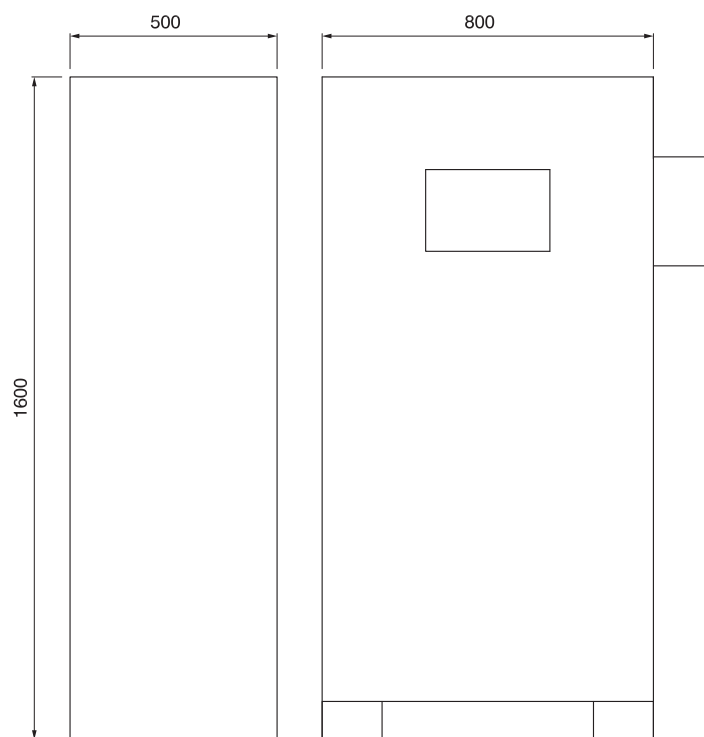


DIMENSIONS

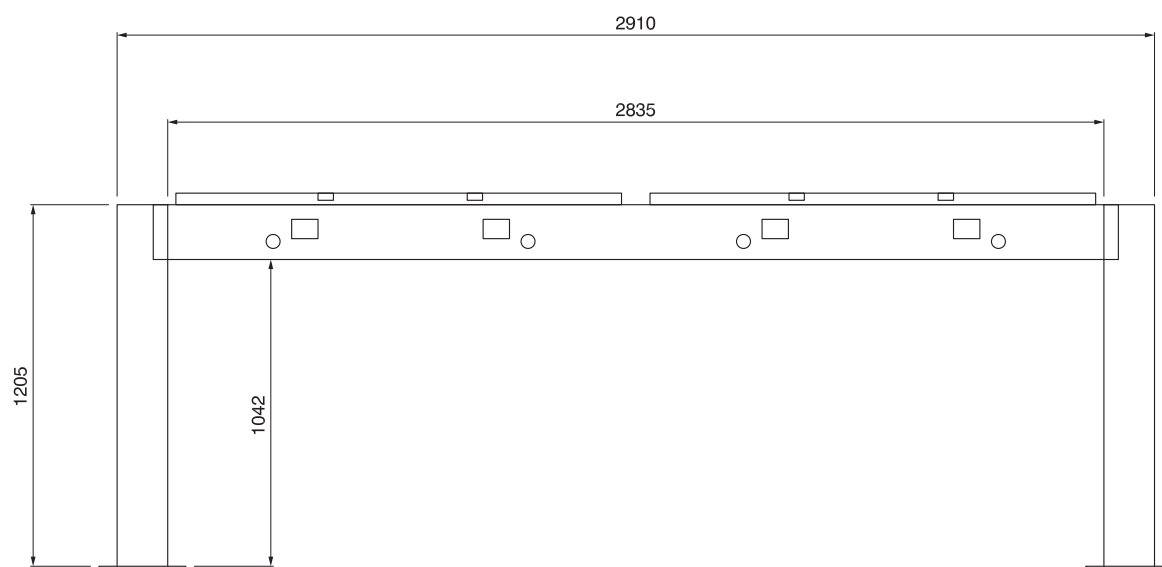
RECHARGE COLUMNS ASSEMBLY AC/DC



204.CH



204.EB



Dimensions in mm

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