



EVSE COMPONENTS



EVSE
COMPONENTS

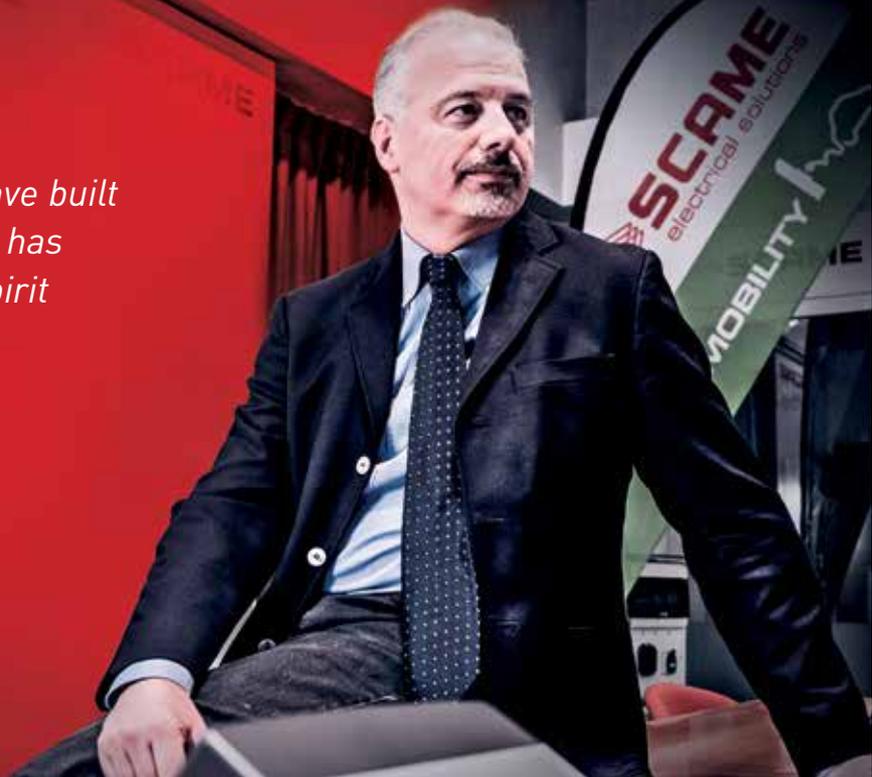


www.scame.com

The company

*“In over **fifty years** we have built an **industrial reality** that has always maintained the spirit of its **origins.**”*

Stefano Scainelli CEO



SCAME PARRE S.p.A., head of the SCAME group, is a manufacturer of components and systems for electrical installations in the civil, services and industrial sector, born and raised in the mountains of the upper Val Seriana, in the Province of Bergamo, Northern Italy. Since 1963, the year of its foundation, in more than half a century of activity, SCAME has never betrayed the spirit of the origins made of attention to the environment and the person, as well as continuous research to provide an innovation that is never an end in itself, but which translates into total quality and real benefits for the user.

Already a pioneer in the field of the solutions dedicated to electric vehicles charging, for which it has created a specific business

division and is today considered an absolute benchmark, the continuous search for new markets has led SCAME to develop also an articulated range of ATEX IECEx products for installation in hazardous areas, without neglecting its traditional offer based on products for domestic and industrial applications, even heavy ones. A catalogue able to meet any installation requirement, a product quality guaranteed by compliance with national and international Standards, a rapid customer service able to support every choice and an high level of service, have enabled SCAME to affirm its presence not only nationally, but also internationally through a network of 17 branches and a consolidated network of distributors in over 80 countries on 5 continents.

Italy Parre (Bergamo)





SCAME PARRE S.P.A.
Italia Parre

SCAME ARGENTINA
Argentina Don Torquato (Buenos Aires)

SCAME BRASIL
Brasil Atibaia (Sao Paulo)

SCAME BULGARIA
Bulgaria Sofia

SCAME CHILE
Chile Santiago

SCAME IBERICA
Spain El Papiol (Barcelona)

SCAME INDIA
India Mumbai

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SCAME POLSKA
Poland Zawierce (Katowice)

SCAME PORTUGAL
Portugal Oporto

SCAME-CZ
Czech Republic Velke Mezirici

SCAME-RO
Romania Timis

SCAME-SK
Slovakia Dolny Kubin

SCAME-TOP
China Beijing

SCAME-UA
Ukraine Kamenets Podolsky

SCAME-UK
United Kingdom Tewkesbury (Gloucestershire)

SCAME-UY
Uruguay Montevideo

SOBEM SCAME
France Sainte Marie Sur Ouche (Dijon)



THE CONCEPT OF QUALITY IS AN INTEGRAL PART
OF OUR CULTURE IN ALL ASPECTS AND
EVERY ACTIVITY OF OUR WORK.



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Reference standards

IEC/EN 61851-1: CHARGING METHODS

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

MODE 1

Connection of the EV to a standard socket-outlet of an AC supply network, no supplementary pilot or auxiliary contacts. Up to 16A single-phase or three-phase, protective earthing conductor is required.



MODE 2

Connection of the EV to a standard socket-outlet of an AC supply network using an EV supply equipment providing CP (control pilot) function and protection against electric shock (ICCB In-Cable Control Box). Up to 32A single-phase or three-phase, protective earthing conductor is required.



MODE 3

Connection of the EV to an AC supply network using an EV supply equipment with specific connectors and providing CP (control pilot) function, protective earthing conductor is required.



MODE 4

Connection of the EV to an AC supply network using an EV supply equipment providing DC charging (off-board battery charger); protective earthing conductor is required.



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

CASE A

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



CASE B

EV connection to the supply network using a detachable cable equipped with plug and connector (charging cable/cable assembly).



CASE C

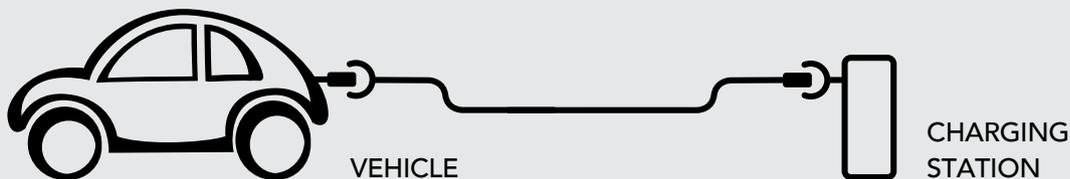
EV connection to the supply network using a cable and connector permanently attached to the charging station.



IEC/EN 62196-1 AND IEC/EN 62196-2: MODE 3 CONNECTORS

The reference standards for Mode 3 connectors are the IEC/EN 62196-1 and 2, and they describe three different types of connection:

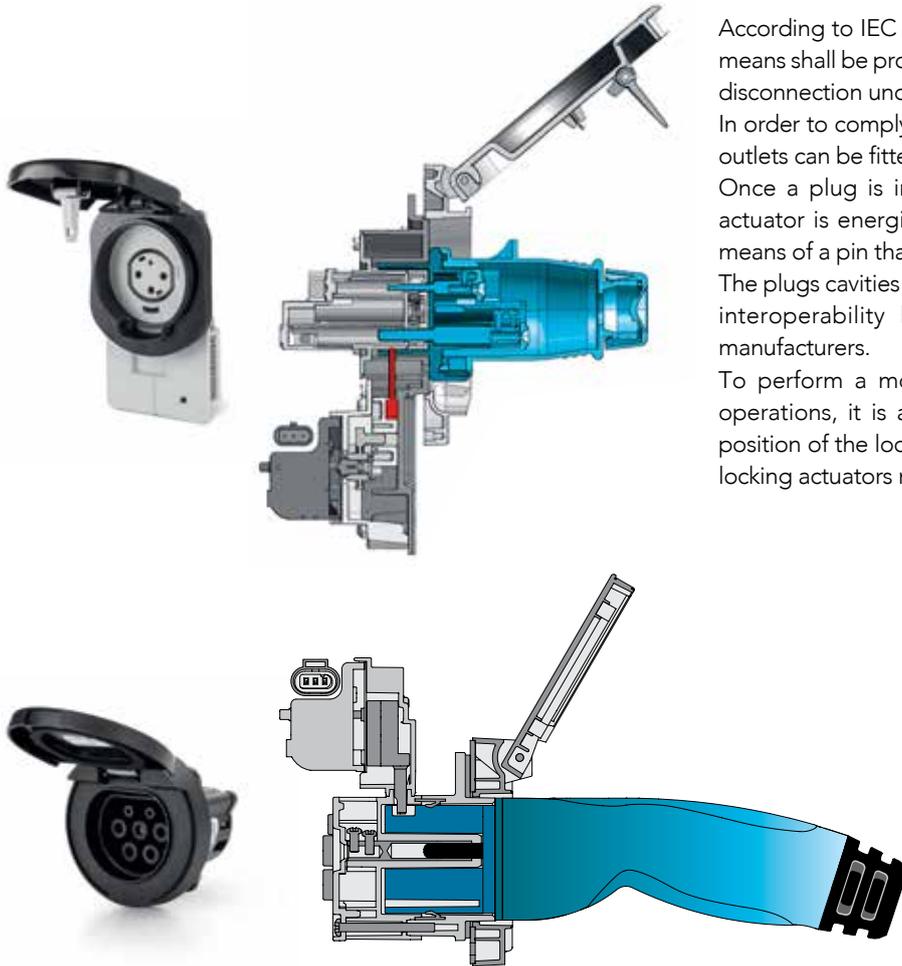
CONNECTIONS



VEHICLE	Type 1	Type 2
Circuit	Single-phase	Single/three-phase
Current	32A	70A (single-phase) 63A (three-phase)
Max. voltage	250V	480V
No. of contacts	5	7
Connector		

STATION	Type 2	Type 3A	Type 3C
Circuit	Single/three-phase	Single-phase	Single/three-phase
Current	70A (single-phase) 63A (three-phase)	16A	63A
Max. voltage	480V	250V	480V
No. of contacts	7	4	7
Connector			

Latching system is mandatory



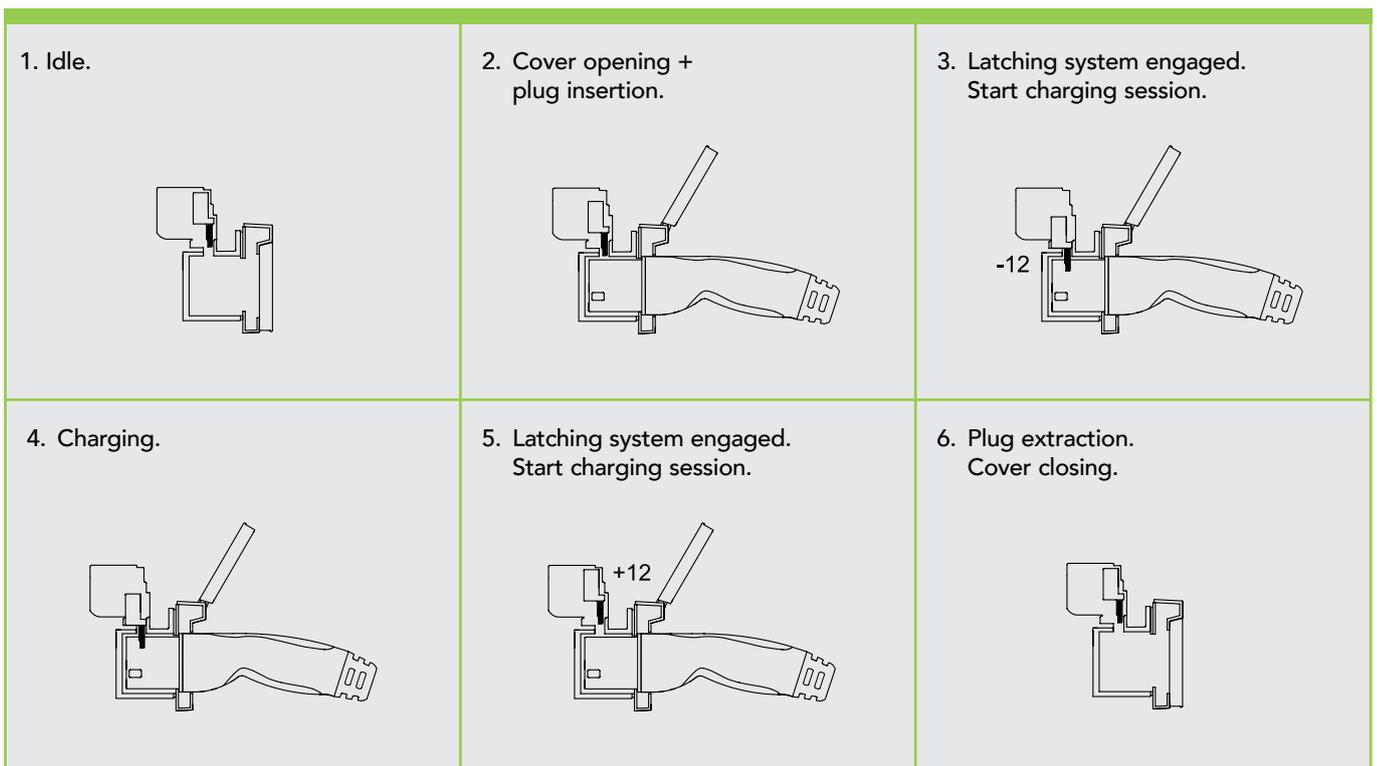
According to IEC 62196-1,2, a mechanical or electromechanical means shall be provided to prevent intentional and unintentional disconnection under load of the plug.

In order to comply with such regulation, Scame range of socket outlets can be fitted with their relevant latching system.

Once a plug is inserted into the socket outlet, the bistable actuator is energised and the locking function is achieved by means of a pin that slides into a cavity of the plug.

The plugs cavities are also standardised, thus allowing complete interoperability between plugs and sockets of different manufacturers.

To perform a more accurate management of the charging operations, it is also possible to retrieve information on the position of the locking pin (inserted/not inserted). To do so, the locking actuators must be fitted with built-in micro-switches.



SOCKET OUTLETS



THE ENTIRE RANGE OF ELECTRIC VEHICLE CHARGING STATIONS' COMPONENTS ARE DESIGNED, MANUFACTURED AND TESTED IN THE ITALIAN HEADQUARTERS OF SCAME PARRE. THE EXCELLENT PRODUCTION AND ORGANISATIONAL CAPABILITIES ACQUIRED OVER THE YEARS ALLOW A HIGH DEGREE OF CUSTOMISATION AND ADDITIONAL SERVICES TO BE OFFERED TO THE MARKET.



Scame Parre has been the first company in the world to have its components certified according to EV-Ready 1.4D, EV37 requirement.



MADE in ITALY

SOCKET OUTLETS

TYPE 2S CONNECTORS WITH SHUTTERS

IP55



According to IEC 61851-1, a charging station must provide a specific degree of protection against access to hazardous live parts. The regulation allows different methods to achieve the required degree of protection.

However, if implemented singularly, some protection methods alone might not be sufficient to meet the national regulations of some specific countries.

One of the most widely accepted protection methods consists of fitting a mechanical protection in the contact tubes to prevent accidental direct contact with potentially live parts.

These mechanical protective parts are known as "SHUTTERS". A standard Type 2 socket outlet only has an IPXXB level of protection. Same Type 2 socket outlet with shutters (T2S) allows to achieve a higher protection level, IPXXD, thus complying with the required safety level of IEC61851-1.

Same T2S is the most compact shuttered solution available on the market and represents today the preferred choice to meet the expectations of the European Commission and the safety requirements of the regulations and laws of most European Union member states.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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:	380Vac-480Vac
Frequency:	50/60Hz
Insulation voltage:	500V
Protection degree:	IP55 (mated)
Live parts protection:	IPXXD
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Glow Wire test:	850°C-960°C
IK degree at 20°C:	IK08
Colour:	Black
Number of poles:	L1-L2-L3-N-PE-CP-PP
Size of conductors:	2,5 to 10mm ²
Saline solution:	Resistant
UV rays:	Resistant

CODE

200.23266S (STANDARD VERSION)

200.23267S (WITH DRAINAGE)

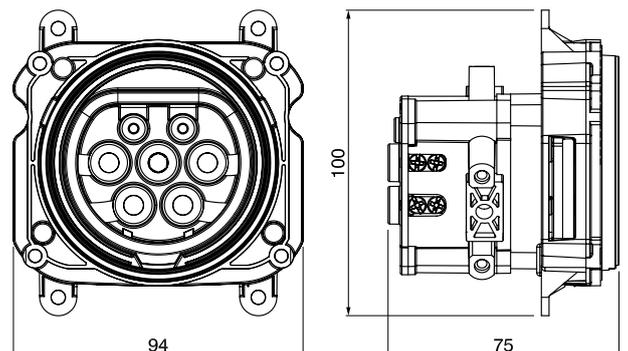


Flush mounting socket outlet with shutters.
IPXXD
IP55 (with plug mated)
IP55 (with closed lid)



With drainage system to direct possible moisture through water pipehouse (not included).

DIMENSIONS



Child safety shutters

Section 8.1 of IEC 61851-1 regulates the degree of protection against access to hazardous-live-parts for the EV socket-outlets intended for Mode 3 use, when not mated. A charging station must provide a specific degree of protection against access to hazardous live parts. The regulation allows different methods to achieve the required degree of protection. However, if implemented singularly, some protections methods alone might not be sufficient to meet the national regulations of some specific countries. One of the most widely accepted protection methods consists of fitting a mechanical protection in the contact tubes to prevent accidental direct contact with potentially live parts.

These mechanical protective parts are known as "SHUTTERS". A standard Type2 socket outlet only has an IPXXB level of protection. A Type 2 socket outlet with shutters (T2S) allows to achieve a higher protection level, IPXXD, thus complying with the required safety level of IEC61851-1. Scame T2S is the most compact shuttered solution available on the market and represents today the preferred choice to meet the expectations of the European Commission and the safety requirements of the regulations and laws of most European Union member states.



IPXXD PROTECTION

IPXXD level of protection means to fulfil the 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 very important for unskilled users to use this kind of connector.

The LIBERA series connectors satisfy this requirement thanks to the adoption of pins and contact-tubes protected by shutters that can be opened only after the plug is inserted into the socket (as in case of home outlets).

SOCKET OUTLETS

TYPE 2 STANDARD

IP55



Type 2 connector has been elected by the European Commission as the standard geometry to be fitted on the infrastructure-side for charging in mode 3.

Due to the heavy-duty operating conditions, special attention was taken in the choice of materials in order to guarantee resistance to heat, chemical agents and mechanical stress, in compliance with the strict parameters set by the automotive industry.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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:	380Vac-480Vac
Frequency:	50/60Hz
Insulation voltage:	500V
Protection degree:	IP55 (mated)
Live parts protection:	IPXXB
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Glow Wire test:	850°C-960°C
IK degree at 20°C:	IK08
Colour:	Black
Number of poles:	L1-L2-L3-N-PE-CP-PP
Size of conductors:	2,5 to 10mm ²
Saline solution:	Resistant
UV rays:	Resistant

CODE

200.23266 (STANDARD VERSION)

200.23267 (WITH DRAINAGE)

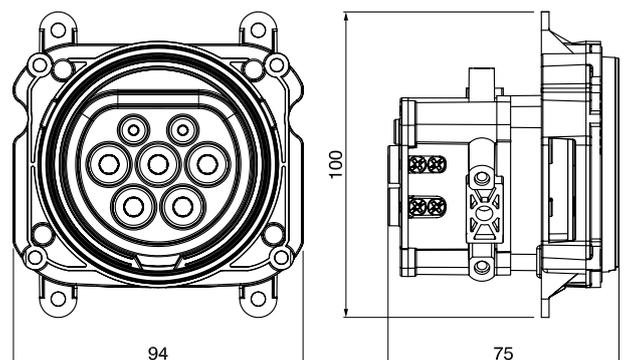


Flush mounting socket outlet without shutters.
IPXXB
IP55 (with plug mated)
IP55 (with closed lid)



With drainage system to direct possible moisture through water pipehouse (not included).

DIMENSIONS



TYPE 2 STANDARD COMPACT

IP55



Type 2 connector has been elected by the European Commission as the standard geometry to be fitted on the infrastructure-side for charging in mode 3.

Due to the heavy-duty operating conditions, special attention was taken in the choice of materials in order to guarantee resistance to heat, chemical agents and mechanical stress, in compliance with the strict parameters set by the automotive industry.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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:	380Vac-480Vac
Frequency:	50/60Hz
Insulation voltage:	500V
Protection degree:	IP55 (mated)
Live parts protection:	IPXXB
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Glow Wire test:	850°C-960°C
IK degree at 20°C:	IK08
Colour:	Black
Number of poles:	L1-L2-L3-N-PE-CP-PP
Size of conductors:	2,5 to 10mm ²
Saline solution:	Resistant
UV rays:	Resistant

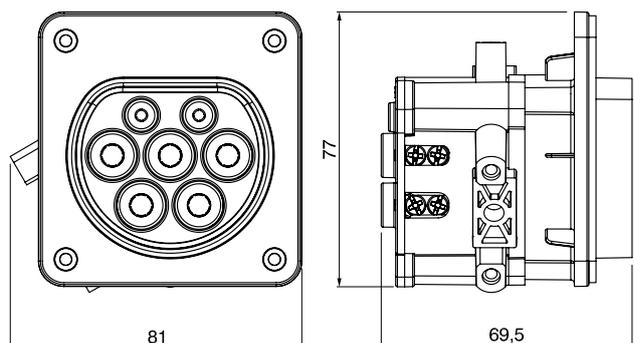
CODE

200.23265



Flush mounting socket outlet without shutters (compact version).
IPXXB
IP55 (with plug mated)
IP55 (with closed lid)

DIMENSIONS



SOCKET OUTLETS

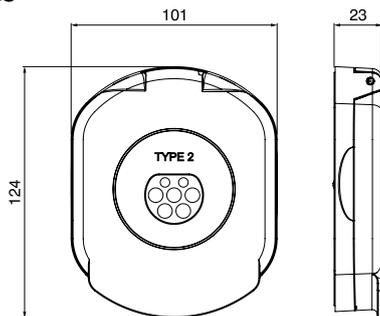
TYPE 2 ACCESSORIES

IP55

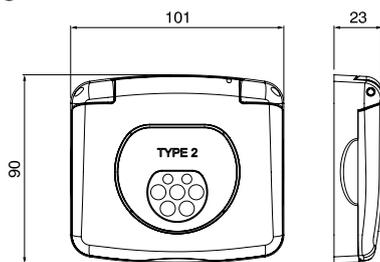


DIMENSIONS

200.23260CS

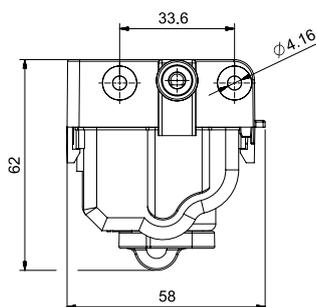


200.23260CC



DIMENSIONS

200.23261BS
200.23261BP
200.23261BL



Same range of Type 2 socket outlets is further enriched with a wide array of accessories.

All of them are designed and manufactured with Quality as a guiding star. And as we've left nothing to chance, we also offer a range of covers designed by acclaimed Italian Trussardi&Belloni Architect and Design Studio. These will surely enhance the premium feeling of any charger they are mounted on.

As always, if a custom solution is what you are after, we are eager to engaging with you and discussing the details.

■ TECHNICAL LID CHARACTERISTICS

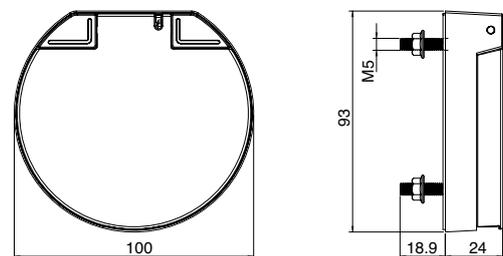
Protection degree:	IP55
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Glow wire test:	850°C
IK degree at 20°C:	IK08
Color:	Black
Salt mist:	Resistant
UV Radiation:	Resistant

■ TECHNICAL LATCHING SYSTEM CHARACTERISTICS

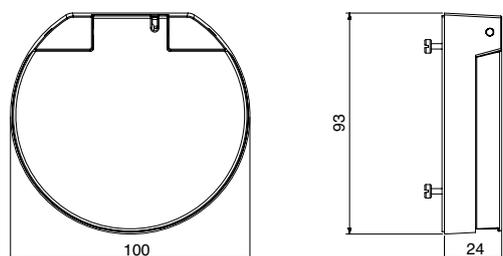
Rated voltage:	12V
Voltage range:	9 V to 15,5 V
Max. current consumption:	1.6A
Idle current:	250mA
Actuating time:	max. 300 ms
Triggering time: max.	1 s
Installation temperature:	-30°C +50°C

DIMENSIONS

200.23260CR - 200.23260CRL



200.23261CR - 200.23261CRL



ACCESSORIES

LID

Code	Description
 200.23260CS 200.23266 - 200.23266S 200.23267 - 200.23267S	Standard lid IP55 for: 200.23266 - 200.23266S 200.23267 - 200.23267S
 200.23260CC 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S	Compact lid IP55 for: 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S
 200.23260CR 200.23261CR(*) 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S	Round lid IP55: 200.23260CR for 200.23265 200.23261CR for 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S
 200.23260CRL 200.23261CRL(*) 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S	Round lid with light IP55: 200.23260CRL for 200.23265 200.23261CRL for 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S

Feedback status led

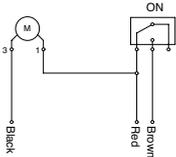
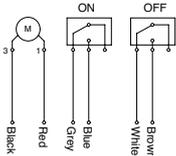


Equipments

12 RGB led 12Vdc: red, green and blue

(*) Cover fixing is independent of socket fixing.

LATCHING SYSTEM

Code	Description
 200.23261BL 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S	 Latching system with rotary actuator without microswitches (no detection of the lock state). Suitable with: 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S
 200.23261BP 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S	 Latching system with rotary actuator and micro to query the lock state (ON position). Suitable with: 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S
 200.23261BS 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S	 Latching system with rotary actuator and 2 microswitches to query the lock state (ON/OFF position). Suitable with: 200.23265 200.23266 - 200.23266S 200.23267 - 200.23267S

SOCKET OUTLETS

TYPE 2 CONNECTORS WITH SHUTTERS AND VANDAL-PROOF PROTECTION AND LED ILLUMINATION

IP55



Scame range of Type 2 socket outlets is also available in a vandal proof design.

In this specific application the cover, which in standard applications is usually open, accessible and subject to damage, has been evolved into flaps that during the opening phase seamlessly slide into into a recessed area.

The opening phase is triggered when plugging in the charging cable.

These flaps may also be latched and made accessible only after user authentication, thus preventing unwanted tampering with the socket outlet.

The Scame original One Hand System is designed to deliver a very friendly and intuitive charging operation and experience. To further improve the user friendliness, the vandal-proof socket outlet is also available in an RGB LED version that clearly communicates the charging station's status.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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

EQUIPMENTS

1 bistable actuator:	12Vdc for 300 ms
3 switches:	lock on/off, cover close
6+6 RGB led 12Vdc:	red, green and blue

TECHNICAL CHARACTERISTICS

Rated current:	32A
Rated voltage:	380Vac-480Vac
Frequency:	50/60Hz
Insulation voltage:	500V
Protection degree:	IP55 (mated)
Live parts protection:	IPXXD
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Glow Wire test:	850°C-960°C
IK degree at 20°C:	IK08
Colour:	Black
Number of poles:	L1-L2-L3-N-PE-CP-PP
Size of conductors:	2,5 to 10mm ²
Saline solution:	Resistant
UV rays:	Resistant

CODE

200.23268SBL (WITH SHUTTERS) IPXXD

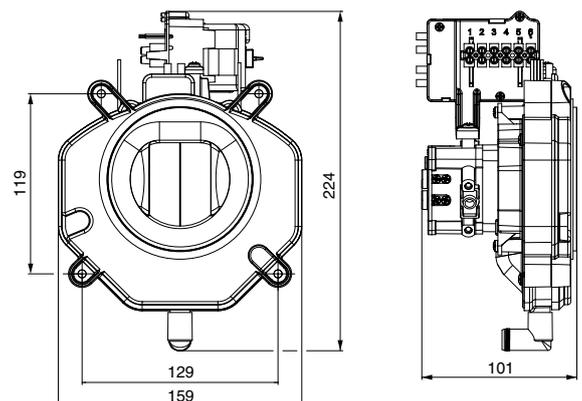


Vandal-proof flange with interlock system (plug and lid).
IP55 (with plug mated)
IP54 (with closed flaps)



With drainage system to direct possible moisture through water pipehouse (not included).

DIMENSIONS



TYPE 2 CONNECTORS WITH SHUTTERS AND VANDAL-PROOF PROTECTION

IP55



Scame range of Type 2 socket outlets is also available in a vandal proof design.

In this specific application the cover, which in standard applications is usually open, accessible and subject to damage, has been evolved into flaps that during the opening phase seamlessly slide into into a recessed area.

The opening phase is triggered when plugging in the charging cable.

These flaps may also be latched and made accessible only after user authentication, thus preventing unwanted tampering with the socket outlet.

The Scame original One Hand System is designed to deliver a very friendly and intuitive charging operation and experience.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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

EQUIPMENTS

1 bistable actuator:	12Vdc for 300 ms
3 switches:	lock on/off, cover close

TECHNICAL CHARACTERISTICS

Rated current:	32A
Rated voltage:	380Vac-480Vac
Frequency:	50/60Hz
Insulation voltage:	500V
Protection degree:	IP55 (mated)
Live parts protection:	IPXXD
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Glow Wire test:	850°C-960°C
IK degree at 20°C:	IK08
Colour:	Black
Number of poles:	L1-L2-L3-N-PE-CP-PP
Size of conductors:	2,5 to 10mm ²
Saline solution:	Resistant
UV rays:	Resistant

CODE

200.23268SB (WITH SHUTTERS) IPXXD
200.23268B (WITHOUT SHUTTERS) IPXXB

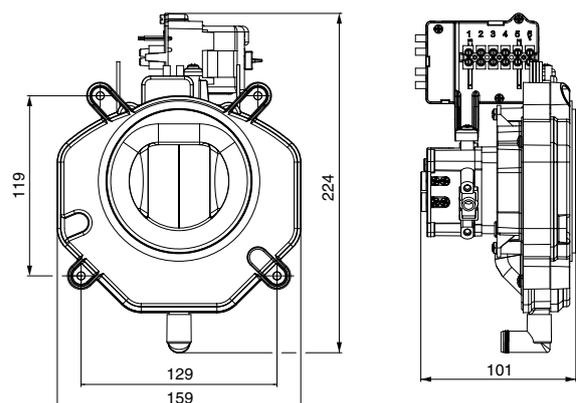


Vandal-proof flange with interlock system (plug and lid).
IP55 (with plug mated)
IP54 (with closed flaps)



With drainage system to direct possible moisture through water pipehouse (not included).

DIMENSIONS



Scame innovative One Hand System

With Scame's innovative ONE HAND SYSTEM, initiating a charging session has never been easier. You are now free to manage all charging operations with simply one hand.



T2 CUSTOM PRE-WIRED SOLUTIONS



Having full control over the production process, at Scame we are available to realizing custom solutions based on the final customers' unique requirements and specifications.

Elements such as cables' type, length, dimensions, or the finishing of the wires' stripping, but also the packaging and many other features can be entirely discussed with Scame professional personnel.

In this way we can define a unique custom built solution that can seamlessly fit into your assembly line.

REFERENCE STANDARDS

EN 62196-1

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

Conductive charging of electric vehicles.

Part 1: General requirements.

EN 62196-2

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:	380Vac-480Vac
Frequency:	50/60Hz
Insulation voltage:	500V
Protection degree:	IP55 (mated)
Live parts protection:	IPXXB – IPXXD
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Glow Wire test:	850°C-960°C
IK degree at 20°C:	IK08
Colour:	Black
Number of poles:	L1-L2-L3-N-PE-CP-PP
Size of conductors:	2,5 to 10mm ²
Saline solution:	Resistant
UV rays:	Resistant

CUSTOMIZED SOLUTIONS



SOCKET OUTLETS

TYPE 3A CONNECTORS - MODE 3

IP54



Type 3A connector was launched in Italy in 2000 as the unique connection system for Mode 3 charging electric vehicles in environments open to third parties.

Featuring a design derived from the SCAME IEC 309 socket-outlets, it adopted the quick snap-on device and it uses an additional CP contact for the control pilot circuit to verify the continuity of the protective conductor, in accordance with standard CEI 69-6.

Given its small size, it is the preferred connector for small vehicles, such as scooters and motorcycles, with charging power lower 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 private garages, in mode 1.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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

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:	200Vac-250Vac
Frequency:	50/60Hz
Insulation voltage:	250V
Protection degree:	IP44, IP54 (sockets with interlock)
Live parts protection:	IPXXD
Installation temperature:	-30°C +50°C
Glow Wire test:	850°C 850°C-960°C (sockets with interlock)
Material:	Thermoplastic
IK degree at 20°C:	IK07 – IK08 (sockets with interlock)
Colour:	Grey
Number of poles:	L-N-PE-CP
Size of conductors:	1 to 4 mm ²
Saline solution:	Resistant
UV rays:	Resistant

CODE

200.01663



Flush mounting socket outlet with flange 70x87mm.
IP44 (with plug mated)
IP44 (with closed lid)

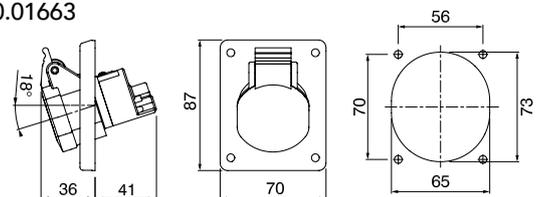
200.01663B



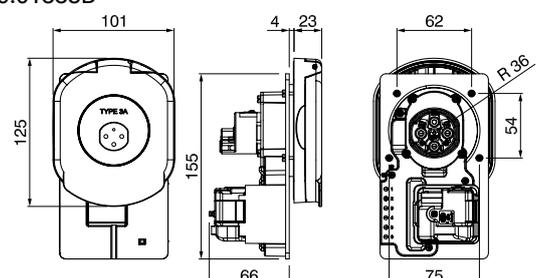
Flush mounting socket outlet with interlock.
IP54 (with plug mated)
IP55 (with closed lid)

DIMENSIONS

200.01663



200.01663B



DOMESTIC CONNECTORS - MODE 1



There are several electric vehicles on the market today that, due to their construction, do not fall within the charging modes covered by standard EN 61851-1 (e.g., scooters/ bike with off-board battery charger) . For these vehicles, SCAME has developed special versions of its domestic connectors that have 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 used in SCAME's charging infrastructure.

N.B.: Please note remember that in some country, domestic connectors are not suited for charging electric vehicles in mode 1 and mode 2 in environments open to third parties.

■ TECHNICAL CHARACTERISTICS

Rated current:	16A
Rated voltage:	200Vac-250Vac
Frequency:	50/60Hz
Insulation voltage:	250V
Protection degree:	IP54 (IPXXD)
Installation temperature:	-25°C +35°C -30°C +50°C (sockets with interlock)
Material:	Thermoplastic
Glow Wire test:	650°C-750°C 850°C-960°C (sockets with interlock)
IK grade at 20°C:	IK08
Colour:	Light blue / Black / Grey
Number of poles:	L-N-PE
Size of conductors:	1 to 4 mm ²
Saline solution:	Resistant
UV rays:	Resistant

■ REFERENCE STANDARDS

EN 60884-1

Plugs and socket-outlets for household and similar purposes.

Part 1: General requirements.

CODE	
200.4007B	<p>GERMAN STANDARD</p> <p>IP54 flush-mounting socket outlet with interlock and plug presence N.O microswitch</p> 
570.4062-SW 570.4091-SW	<p>GERMAN STANDARD FRENCH STANDARD</p> <p>IP54 flush-mounting socket outlet with plug presence N.O microswitch.</p> <p>Also available in black and grey color.</p> 
570.2062-SW 570.2091-SW	<p>GERMAN STANDARD FRENCH STANDARD</p> <p>IP54 flush-mounting socket outlet with plug presence N.O microswitch.</p> <p>Also available in black and grey color.</p> 

DIMENSIONS	
200.4007B	
570.4062-SW 570.4091-SW	
570.2062-SW 570.2091-SW	

Images of the products are purely indicative.

CHARGING CABLES



SCAME'S HISTORICAL EXPERTISE IN MANUFACTURING INDUSTRIAL CONNECTORS LED TO THE DEVELOPMENT OF CONNECTORS SUITABLE TO RECHARGING ELECTRIC VEHICLES. OUR TYPE 2 CONNECTORS ARE THE RESULT OF THIS EXTENSIVE EXPERIENCE AND QUEST FOR TOTAL QUALITY AND SAFETY.

ALL OUR CHARGING CABLES ARE DESIGNED, MANUFACTURED AND TESTED IN OUR HEADQUARTERS IN ITALY. HAVING FULL CONTROL OVER THE ENTIRE PROCESS ALLOWS FOR EXCELLENT PRODUCTION AND ORGANISATIONAL CAPABILITIES AS WELL AS HIGH DEGREE OF CUSTOMISATION.

OUR CHARGING CABLES ARE AVAILABLE BOTH IN FINISHED OR OPEN END VERSION, SUITABLE AS COMPONENTS TO BE WIRED IN CHARGING STATIONS.

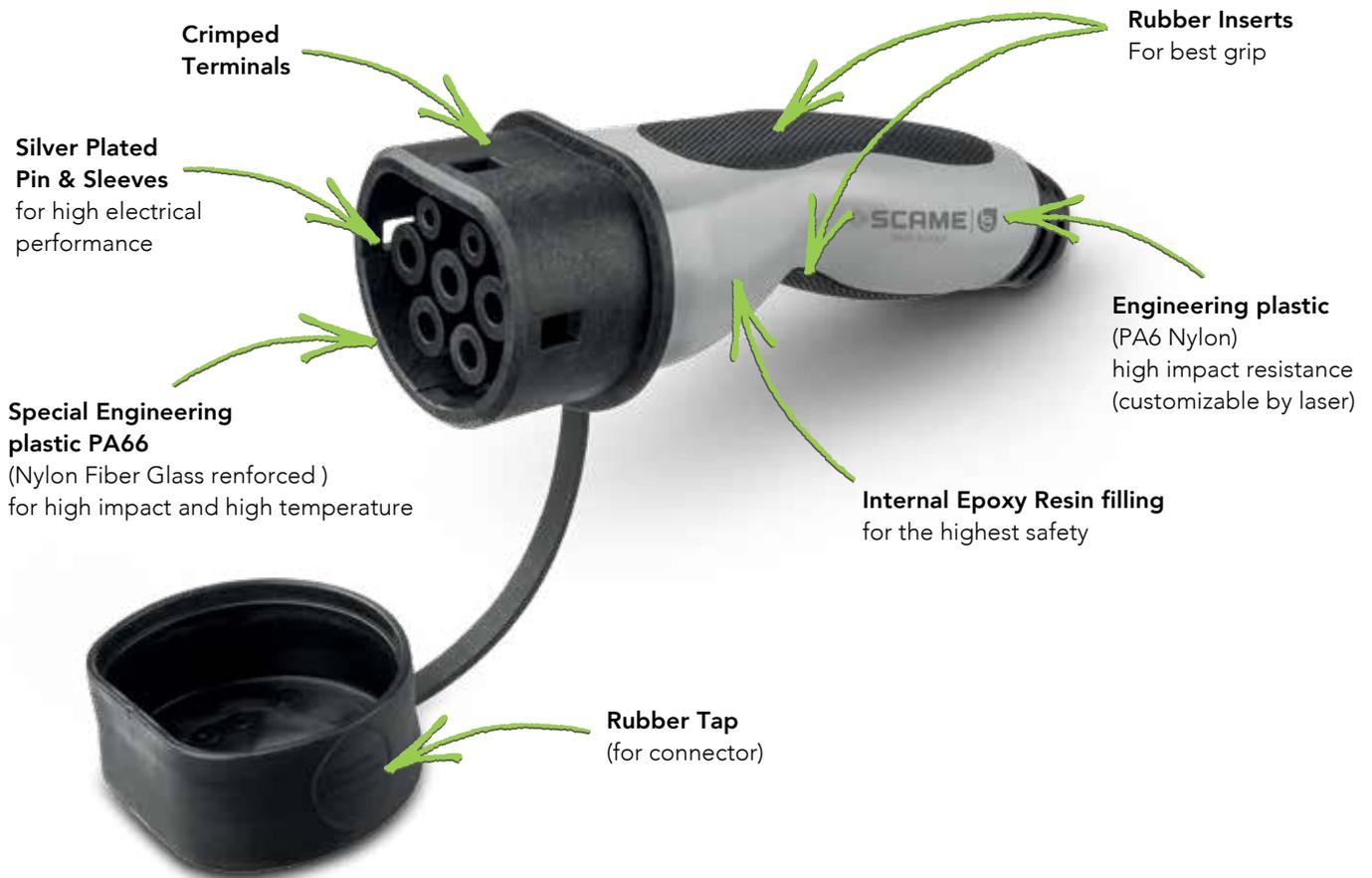
THE AVAILABLE CUSTOMIZATION RANGE FROM LENGTH, TYPE OF CABLE AND WIRING HARNESSSES, DEPENDING ON YOUR NEEDS.

BY GETTING IN TOUCH WITH OUR COMMERCIAL CONTACTS AND SPECIFYING THE TECHNICAL DETAILS OF THE TYPE OF CABLING REQUIRED, WE CAN SUPPLY A HIGHLY PROFESSIONAL SERVICE TAILORED TO YOUR NEEDS.



MADE in ITALY

Scame charging cable technical features



ERGONOMIC DESIGN FOR A BETTER USER EXPERIENCE

Customization

The logo is produced using exclusive laser-based technology. This technology combined with the special material, that

includes high technological capability, allows us to customise the wording on the connector even on minimum lots.

**AVAILABLE IN:
DIFFERENT COLORS
DIFFERENT LOGO
DIFFERENT CABLE
LENGHT**



THE SPECIAL ENGINEERING PLASTIC COULD BE CUSTOMIZED ALSO IN COLOURS



The special technopolymer with a high intrinsic technological capability means the connector colour can also be customised. The standard colours available, which can be produced in minimum lots, when agreed in advance, are as follows.



For other colours, an in-depth analysis must be carried out beforehand to guarantee that the result meets SCAME's high quality levels. For further information, please contact your SCAME sales and marketing representative.

The Italian production facility, in direct contact with the other company departments, also allows a rapid and high degree of customisation in terms of the length of the cord which can be agreed upon beforehand based on customer requirements.

For further information, please contact your SCAME sales and marketing representative.



A charging cable is intended to connect an electric vehicle to a mode 3 charging station.

It consists of a plug, to be mated in the charging station, and a connector, to be plugged into the e-vehicle's inlet.

A mode 3 charging cable is equipped with a CP contact intended to allow PWM communication between the vehicle and the charging station. Additionally, the cables are wired with a PP contact that allows the vehicle not to absorb more power than the charging cable can physically deliver.

All Scame's charging cables are certified according to the relevant standards, and as further proof of the excellent quality and safety built, the Scame charging cables have obtained the prestigious EV-READY quality mark.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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

EN 50620

Electric cables - Charging cables for electric vehicles.

TECHNICAL CHARACTERISTICS

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

CABLE

Rated voltage:	450V-750V
Wire insulation/sheath:	PUR
Maximum temperature:	+90°C

CHARGING CABLES

Power	Cable length	Cable characteristics	Charging station side	Electric vehicle side	Code	
3,7 kW	5 m	3 x 2,5 mm ² + 1 x 0,5 mm ²			201.CS2111-5	
	7,5 m				201.CS2111-8	
	5 m	3 x 2,5 mm ² + 1 x 0,5 mm ²			201.CS2121-5	
	7,5 m				201.CS2121-8	
	5 m	3 x 2,5 mm ² + 1 x 0,5 mm ²			201.CSA111-5	
	7,5 m				201.CSA111-8	
	5 m	3 x 2,5 mm ² + 1 x 0,5 mm ²			201.CSA121-5	
	7,5 m				201.CSA121-8	
	5 m	3 x 2,5 mm ² + 1 x 0,5 mm ²			201.CSA1A1-5	
	7,5 m				201.CSA1A1-8	
	7,4 kW	5 m	3 x 6 mm ² + 1 x 0,5 mm ²			201.CS2313-5
		7,5 m				201.CS2313-8
5 m		3 x 6 mm ² + 1 x 0,5 mm ²			201.CS2323-5	
7,5 m					201.CS2323-8	
11 kW	5 m	5 x 2,5 + 1 x 0,5 mm ²			201.CS2222-5	
	7,5 m				201.CS2222-8	
22 kW	5 m	5 x 6 mm ² + 1 x 0,5 mm ²			201.CS2424-5	
	7,5 m				201.CS2424-8	
	5 m	5 x 6 mm ² + 1 x 0,5 mm ²			201.CSC424-5	
	7,5 m				201.CSC424-8	



Type 1



Type 2



Type 3A



Type 3C

CHARGING CABLES

SPIRAL CHARGING CABLES



Scame's charging cables are also available in the spiral cable version. The spiral version differs from the linear/flat version for the compactness of the cable.

A coiled cable takes up less space and can be easily and neatly stored away in the car's boot.

During connection phase the coils gently ease out keeping your cable suspended mid-air and away from dirt, mud and snow.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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

EN 50620

Electric cables - Charging cables for electric vehicles.

TECHNICAL CHARACTERISTICS

Rated current:	20A-32A
Rated voltage:	200Vac-250Vac / 380Vac-480Vac
Frequency:	50/60Hz
Insulating voltage:	250V-500V
Protection degree:	IP44
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Saline solution:	Resistant
UV rays:	Resistant

CABLE

Rated voltage:	450V-750V
Insulation/Sheath:	PUR
Max. temperature:	+90°C
Max. extension:	4m

SPIRAL CHARGING CABLES

Power	Cable length	Cable characteristics	Charging station side	Electric vehicle side	Code
3,7 kW	4 m (max. extension)	SPIRAL 3x2,5 mm ² + 1x 0,5 mm ²			201.CS2121-4S
7,4 kW	4 m (max. extension)	SPIRAL 3x6 mm ² + 1x 0,5 mm ²			201.CS2323-4S
11 kW	4 m (max. extension)	SPIRAL 5x2,5 mm ² + 1x0,5 mm ²			201.CS2222-4S
22 kW	4 m (max. extension)	SPIRAL 5x6 mm ² + 1x 0,5 mm ²			201.CS2424-4S



Type 2

CHARGING CABLES

OPEN END CHARGING CABLES



The charging cable can also be manufactured in an “open end” version, suitable to be installed/wired as component of a tethered mode 3 charging cable.

Having full control over the production process, Scame is available to customizing the finishing based on your technical specifications.

customizable features are for example the cable length and dimensions, the wire stripping length, but also the wiring finishing with custom ferrules.

All the charging cable are produced with specific cables suitable for EV charging compliant to the reference EN 50620.

REFERENCE STANDARDS

EN 62196-1

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

Conductive charging of electric vehicles.

Part 1: General requirements.

EN 62196-2

Plugs, socket-outlets and vehicle couplers.

Conductive charging of electric vehicles.

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

EN 50620

Electric cables - Charging cables for electric vehicles.

TECHNICAL CHARACTERISTICS

Rated current:	20A-32A
Rated voltage:	200Vac-250Vac / 380Vac-480Vac
Frequency:	50/60Hz
Insulation voltage:	250V-500V
Protection degree:	IP44
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Saline solution:	Resistant
UV rays:	Resistant

CABLE

Rated voltage:	450V-750V
Wire insulation/sheath:	PUR
Maximum temperature:	+90°C

OPEN END CHARGING CABLES

Power	Cable length	Cable characteristics	Charging station side	Electric vehicle side	Code
3,7 kW	5 m	3x2,5 mm ² + 1x 0,5 mm ²	OPEN END		201.CS0021-5
	7,5 m				201.CS0021-8
7,4 kW	5 m	3x6 mm ² + 1x 0,5mm ²	OPEN END		201.CS0023-5
	7,5 m				201.CS0023-8
11 kW	5 m	5x2,5 mm ² + 1x0,5 mm ²	OPEN END		201.CS0022-5
	7,5 m				201.CS0022-8
22 kW	5 m	5x6 mm ² + 1x 0,5 mm ²	OPEN END		201.CS0024-5
	7,5 m				201.CS0024-8

- Customized versions available upon request.



Type 2

CHARGING CABLES

SPIRAL OPEN END CHARGING CABLES



The open end charging cables are also available in the spiral version. The spiral version differs from the linear/flat for the compactness of the cable.

A coiled cable installed on a charging station, when properly stored, will keep the cable away from the ground, preventing pedestrians to trip over it and improving the overall charging experience by offering a neat and tidy cable, thus improving the looks and feel of the entire charging station.

REFERENCE STANDARDS

EN 62196-1

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

EN 62196-2

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

EN 50620

Electric cables - Charging cables for electric vehicles.

TECHNICAL CHARACTERISTICS

Rated current:	20A-32A
Rated voltage:	200Vac-250Vac / 380Vac-480Vac
Frequency:	50/60Hz
Insulating voltage:	250V-500V
Protection degree:	IP44
Installation temperature:	-30°C +50°C
Material:	Thermoplastic
Saline solution:	Resistant
UV rays:	Resistant

CABLE

Rated voltage:	450V-750V
Insulation/Sheath:	PUR
Max. temperature:	+90°C
Max. extension:	4m

SPIRAL OPEN END CHARGING CABLES

Power	Cable length	Cable characteristics	Charging station side	Electric vehicle side	Code
3,7 kW	4 m (max. extension)	SPIRAL 3x2,5 mm ² + 1x 0,5 mm ²	OPEN END		201.CS0021-4S
7,4 kW	4 m (max. extension)	SPIRAL 3x6 mm ² + 1x 0,5mm ²	OPEN END		201.CS0023-4S
11 kW	4 m (max. extension)	SPIRAL 5x2,5 mm ² + 1x 0,5 mm ²	OPEN END		201.CS0022-4S
22 kW	4 m (max. extension)	SPIRAL 5x6 mm ² + 1x 0,5 mm ²	OPEN END		201.CS0024-4S

- Customized versions available upon request



Type 2

Scame charging cable technical features



ERGONOMIC DESIGN FOR A BETTER USER EXPERIENCE

Customization

The logo is produced using exclusive laser-based technology. This technology combined with the special material, that

includes high technological capability, allows us to customise the wording on the connector even on minimum lots.

CUSTOMIZABLE ELEMENTS



Having full control over the entire manufacturing process, Scame is available to analyze any specific customization requirement. An in-depth analysis must be carried out beforehand to verify feasibility of the request and that the customized features meet Scame's high quality standards. Minimum order quantity may apply.

For further information, please contact your SCAME sales representative.

CHARGING CABLES

OPEN END CHARGING CABLES



■ REFERENCE STANDARDS

EN 62196-1

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

EN 62196-3

Plugs, socket-outlets, vehicle connectors and vehicle inlets.
Conductive charging of electric vehicles.
*Part 3: Dimensional compatibility
and interchangeability requirements for d.c.
and a.c./d.c. pin and contact-tube vehicle couplers*

At Scame we know that the connectors are one of the most interactive parts of a charging station that the final users get in contact with.

That is why we've chosen to realize our CCS2 connectors' range together with acclaimed Italian Trussardi&Belloni Architect and Design Studio.

The timeless design is sure to seamlessly integrate the lines of any DC charging station and enhance the premium feeling of it. But we also know that aesthetics are truly such only if they fully achieve what they have been developed for without technical compromises.

And for that reason, our range of CCS type2 charging cables have been developed with the most careful attention to the regulations and the choice of materials, using only those of the highest qualities.

Available in different off the shelf ranges, our experts are at your disposal in case a custom solution is required.

■ TECHNICAL CHARACTERISTICS

Rated current:	80A-150A-200A
Rated voltage:	1000Vdc
Insulation voltage:	1000Vdc
Protection degree:	IP44
Installation temperature:	-30°C +50°C
Material:	Thermoplastic (Halogen free)
Saline solution:	Resistant
UV rays:	Resistant

■ CABLE

Rated voltage:	1500Vdc
Wire insulation/sheath:	PUR
Maximum temperature:	+90°C

OPEN END CHARGING CABLES

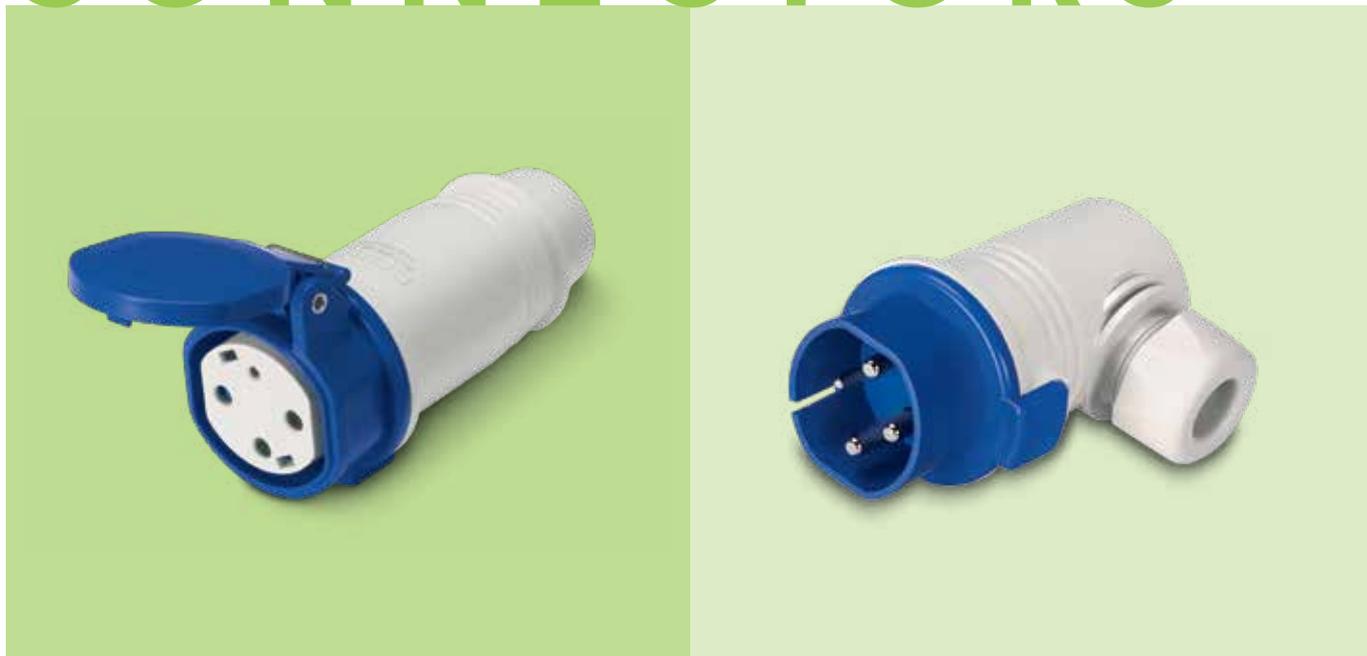
Power	Cable length	Cable characteristics	Charging station side	Electric vehicle side	Code
80 kW	5 m	2x16+1G16+ 1x(6x1) mm ²	OPEN END		201.CCS2A-5
150 kW	5 m	2x35+1G16+ 1x(6x1) mm ²	OPEN END		201.CCS2B-5
200 kW	5 m	2x50+1G25+ 1x(6x1) mm ²	OPEN END		201.CCS2C-5

- Customized versions available upon request



CCS Type 2

CONNECTORS



ALL THE CONNECTORS FOR THE ELECTRIC VEHICLE CHARGING STATIONS ARE DESIGNED, MANUFACTURED AND TESTED IN THE ITALIAN HEADQUARTERS OF SCAME PARRE.

SCAME'S HISTORY IN THE ELECTRIC VEHICLE CONNECTOR SECTOR BEGAN IN 1999 WITH THE DESIGN OF THE 3A CONNECTOR, WHICH IS NOW OFFICIALLY INCLUDED IN THE IEC 62196-1/2 STANDARD AND INDICATED IN OTHER COUNTRIES AS THE IDEAL STANDARD FOR LIGHT VEHICLES.

SCAME WAS ALSO ONE OF THE FIRST MANUFACTURERS OF THE 3C CONNECTOR WHICH IS ALSO INCLUDED IN THE IEC 62196-1/2 STANDARD AND STILL USED IN SOME COUNTRIES.



MADE in ITALY

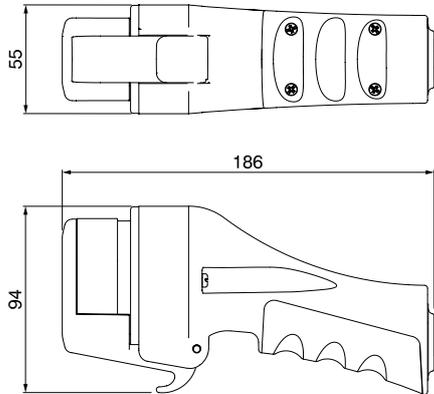
3C TYPE CONNECTORS - SINGLE/THREE-PHASE 16 A - 32 A 400 V~ 3P+N+PE+CP+PP - IP44

	Code	Description
	200.33233	Plug with screw terminals 1.5 to 6 mm ²
	200.33233C2(*)	Plug with crimped terminals 2.5 mm ²
	200.33233C4(*)	Plug with crimped terminals 4 mm ²
	200.33233C6(*)	Plug with crimped terminals 6 mm ²
	200.01633	Plug
	200.01634	Plug (black case)
	200.01633A	Angled plug
	200.01693	Fixed plug with flange 70x87mm
	200.01643	Straight outlet
	200.01644	Straight outlet (black case)
	200.01623	Italian plug adaptor P17
	200.01624	French-German plug adaptor
	200.33263	Flush mounting socket outlet with flange 70x87 mm IPXXD IP44 (with plug mated) IP44 (with closed lid)
	200.33263B	Flush mounting socket outlet with interlock IPXXD IP54 (with plug mated) IP54 (with closed lid)

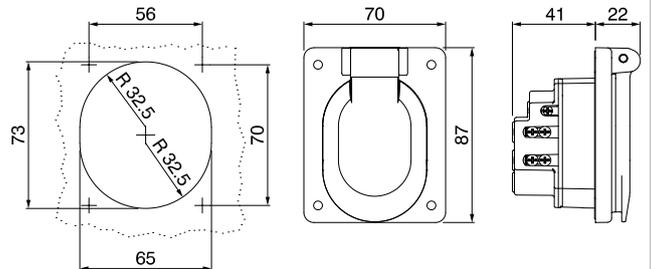
(*) Cable to be defined at the time of the order.

DIMENSIONS

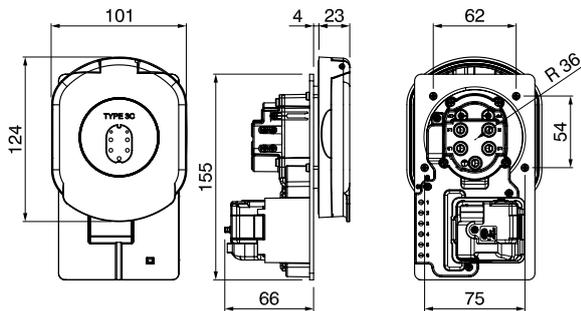
200.33233 - 200.33233C2
200.33233C4 - 200.33233C6



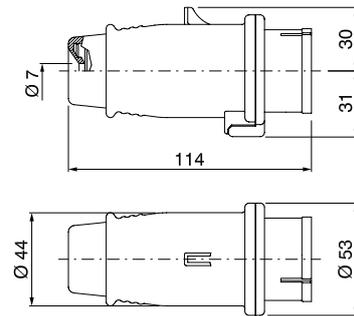
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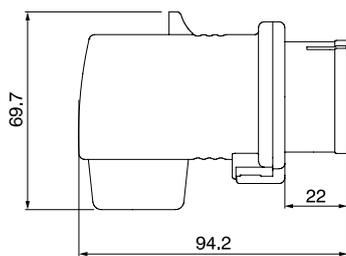
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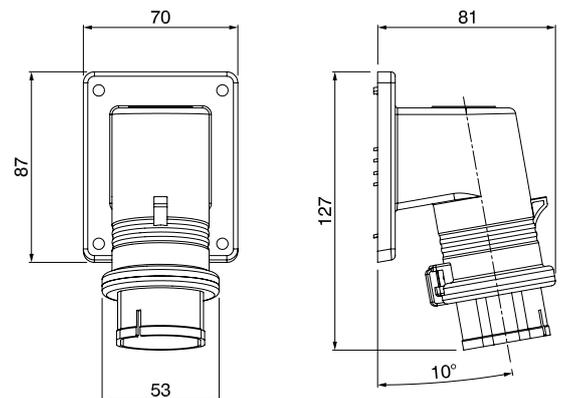
200.01633 - 200.01634



200.01633A

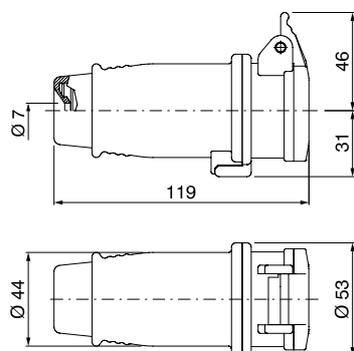


200.01693

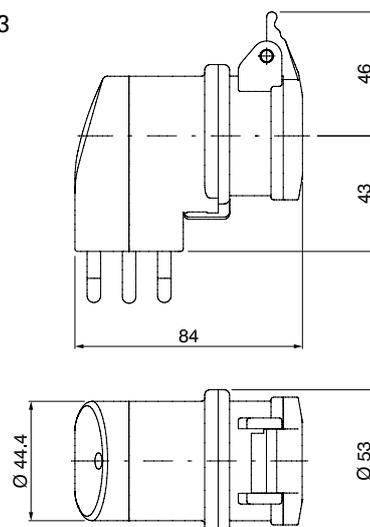


DIMENSIONS

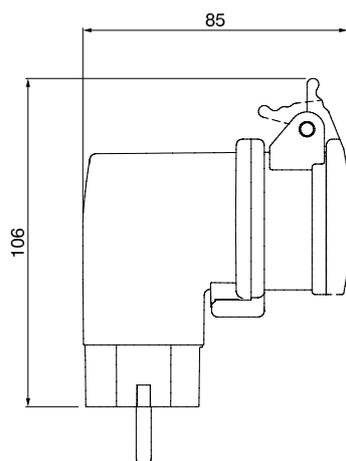
200.01643 - 200.01644



200.01623



200.01624



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