

## > CONNECTORS FOR ELECTRIC VEHICLES



## > VERSIONS

	Plugs
	Connectors
	Flush mounting sockets
	Appliance inlets
	Adaptors for domestic applications

## > REFERENCE STANDARDS

**CEI 69-6**  
Standardization sheet of plug and socket-outlet for the connection of electric road vehicles to the supply network.

**EN 60309-1**  
Plugs socket outlets and couples for industrial purposes.  
*Part 1: general requirements*

## > QUALITY MARKS



## > TECHNICAL CHARACTERISTICS

Rated current:	<b>16A - 32A</b>
Rated voltage:	<b>230V~</b>
Frequency:	<b>50Hz</b>
Insulating voltage:	<b>230V~</b>
Protection degree:	<b>IP40 (IP20 for adaptors)</b>
Operating temperature according to the reference standard:	<b>-25°C+40°C</b>
Max. operating temperature:	<b>60°C</b>
Glow Wire test:	<b>650°C/850°C</b>
Material:	<b>Engineering plastic</b>
IK degree at 20°C:	<b>IK07</b>
Cable inlets:	<b>Cable sleeve IP44 Cable gland IP67</b>

## > BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited Resistance	Resistant	Limited Resistance	Resistant	Not Resistant	Not Resistant	Not Resistant	Limited Resistance	Resistant	Resistant

## > WIRING AND INSTALLATION

Wiring capacity of the terminals (mm<sup>2</sup>)

Rated voltage	Rated current (A)	Plugs, connectors and appliance inlets		Socket outlets	
		Min	Max	Min	Max
over 50V	16A	1	2,5	1,5	4
	32A	2,5	6	2,5	10



## > APPLICATION EXAMPLES



> THE “SAFE-IN” SAFETY DEVICE

The “SAFE-IN” device works like the protection installed on household sockets, i.e., by means of an appropriate shutter, it closes the input of the socket contact tubes and prevents accidental and voluntary contact of live parts of the socket with slim objects, such as screwdrivers or wires. This protection offers an additional safety guarantee, in addition to that already provided by the spring-loaded cover assembled on the mobile sockets.

> PILOT

The indispensable safety during the conductive recharge of the electric road vehicles is assured by the use of plug and socket outlet provided of back up terminal (pilot) in addition to the active and protection poles.

The back up terminal allow to make a control pilot circuit with the following functions:

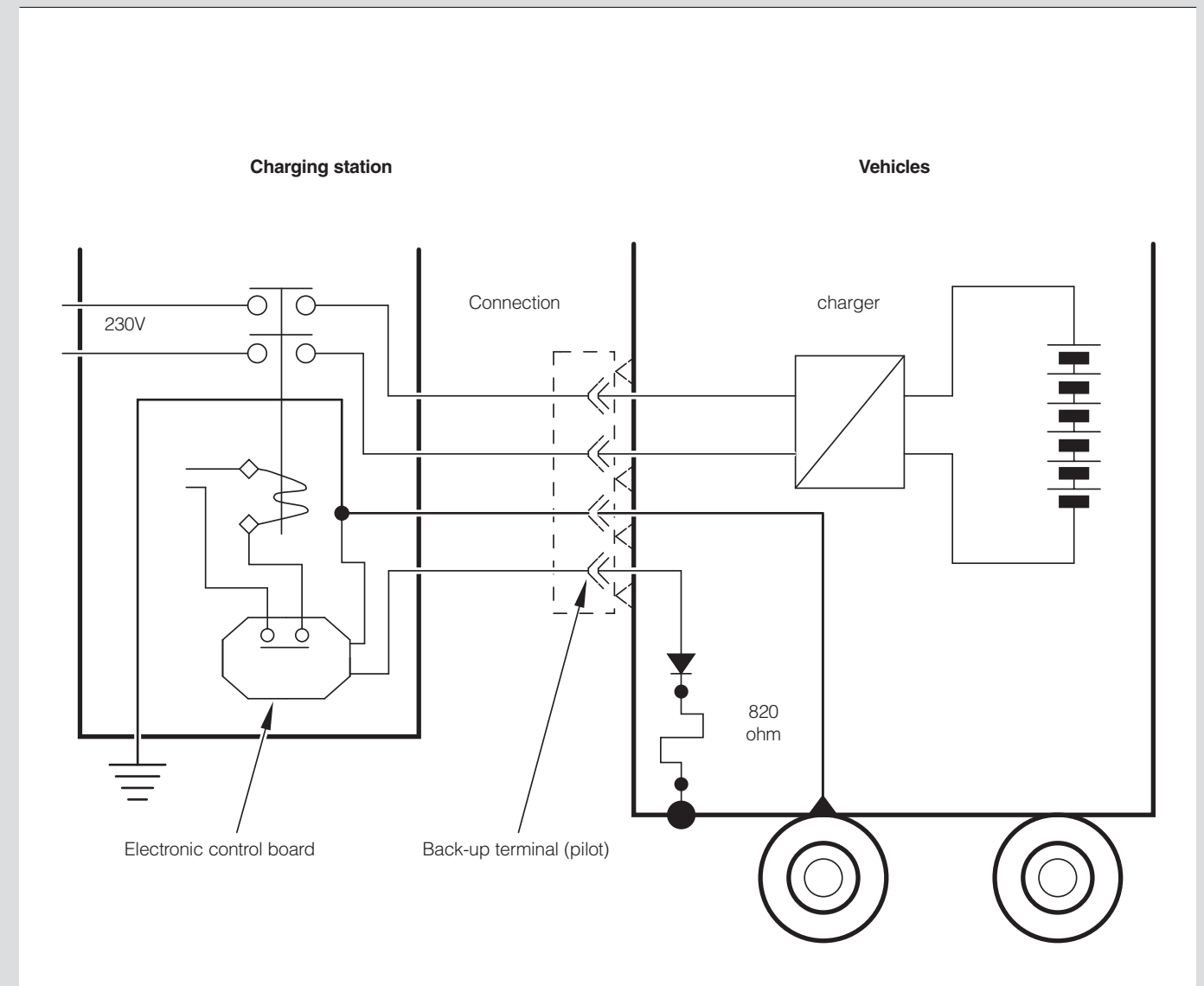
- verification that the vehicle is properly connected;
- continuous protective earth conductor integrity checking;
- energization of the system;
- de-energization of the system.



Connector tube protective shutter for greater safety against direct contacts. (The SAFE-IN safety device).



> EXAMPLE OF ELECTRICAL ROAD VEHICLES CHARGING



The indicated solution, that is checking the presence of a 820 ohm resistance, is the adopted solution in Italy and also in the order European country.

> SNAP-ON DEVICE



**OPENING**  
The product is supplied in the open position; opening is obtained by a simple rotation of the handgrip or of the fruit.



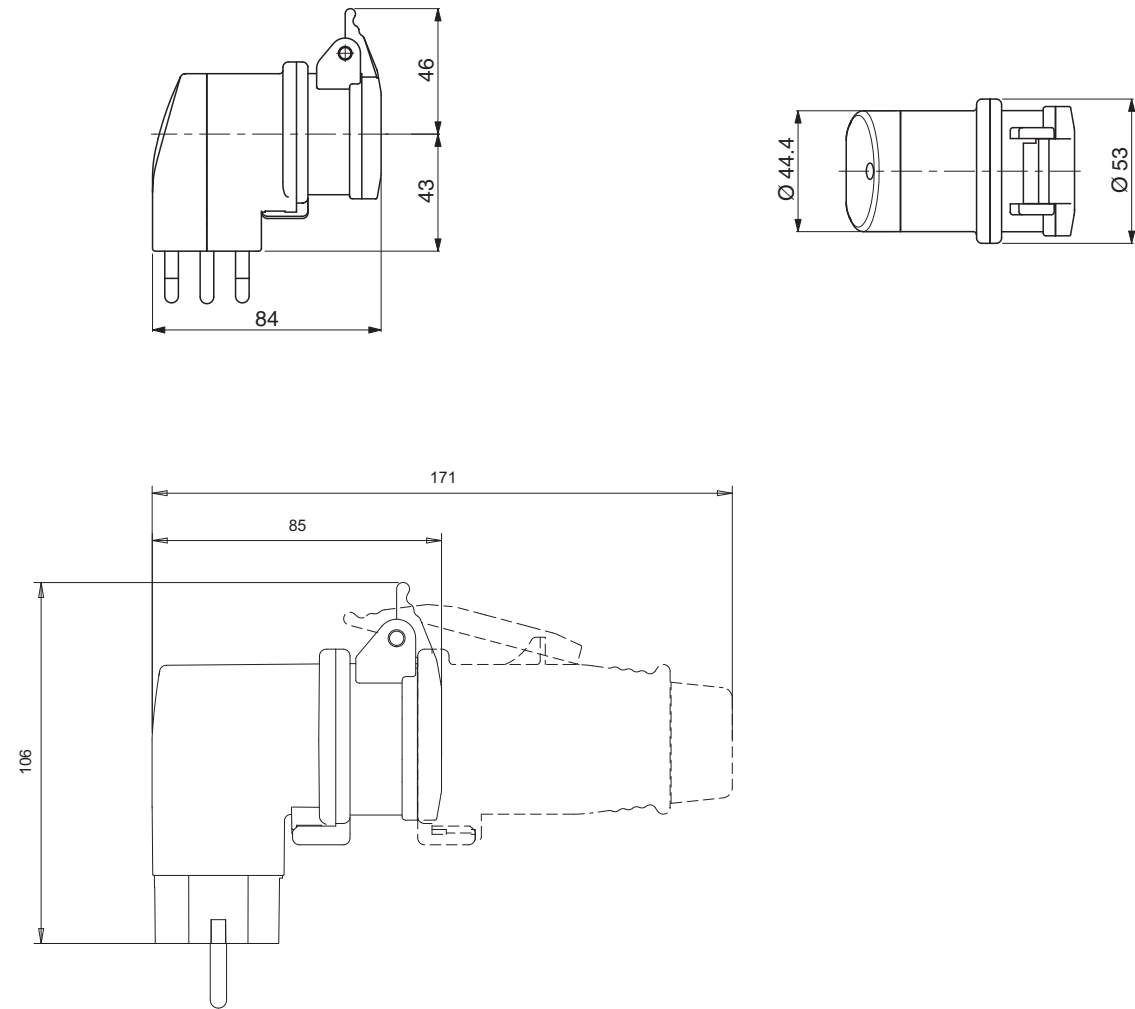
**CLOSURE**  
The spring located on the side of the handgrip locks the same on the contact-holding fruit. The assembly is locked through a simple rotation, engaging the spring into its seat.



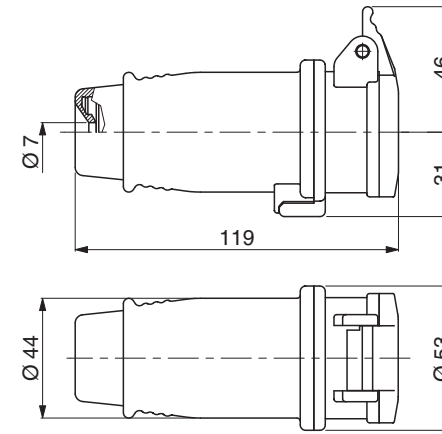
**INSPECTION**  
Opening is possible by means of a tool (screw driver) to be used following the ideographs marked on the handgrip.

> DIMENSIONS

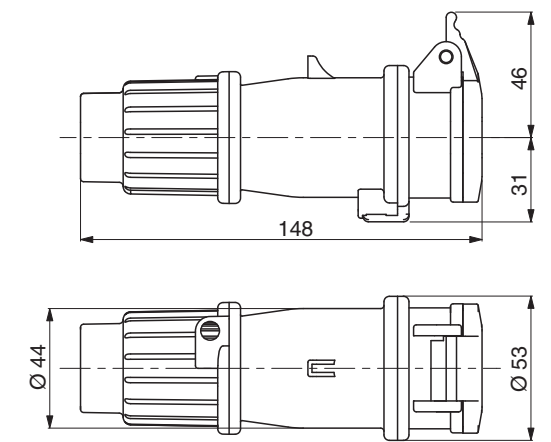
ADAPTOR FOR DOMESTIC APPLICATIONS - 16A



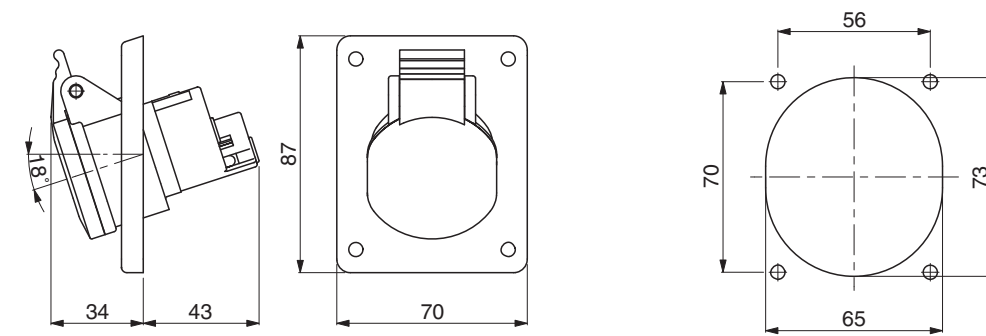
CONNECTOR - 16A



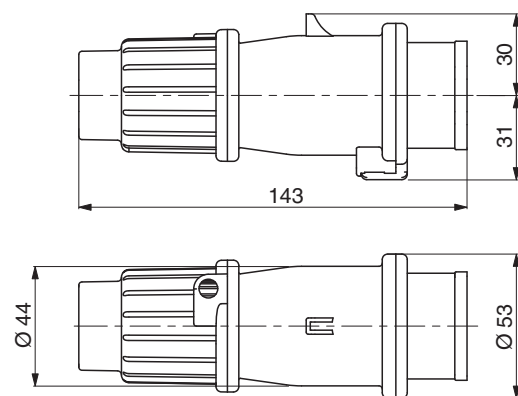
CONNECTOR - 32A



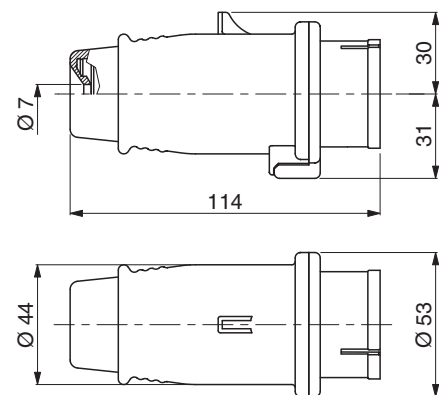
FLUSH MOUNTING SOCKET - 16A-32A



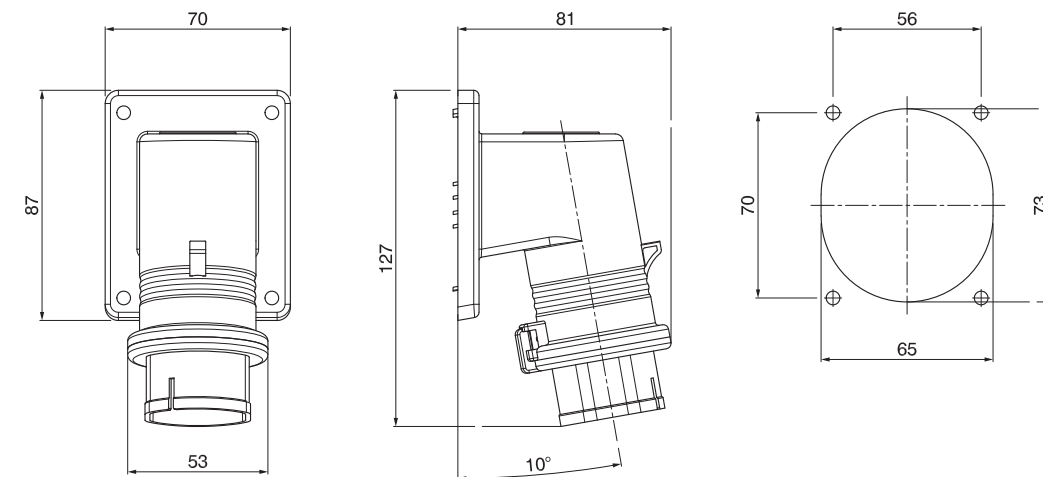
PLUG - 32A



PLUG - 16A



APPLIANCE INLET - 16A-32A



(Dimensioni in mm)

(Dimensioni in mm)