

# Green'up Control Light operable electric vehicle charging stations

Cat.Nos : 0 580 31/32/33/34/37



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## 1. USE

The Green'up Control Light electric vehicle charging station allows Mode 3 charging for one vehicle. It is equipped with:

- RFID reader,
- MID meter,
- GSM module for connection to the operators' charging cloud.

This charging station is operable and communicates via OCPP 1.6 (upgradeable to 2.0.1). It is delivered pre-assembled for direct wall mounting. It can also be fitted with a pedestal, ref. 0 570 18, for floor installation.

It is suitable for commercial buildings or multi-dwelling residential applications and can be installed indoors or outdoors.

## 2. RANGE

### 2.1 References

Connection	Power	Reference
Without 4G	Single-phase 7,4 kW - 32 A	0 580 31
	Three-phase 22 kW - 32 A	0 580 32
With 4G	Single-phase 7,4 kW - 32 A	0 580 33
	Three-phase 22 kW - 32 A	0 580 34
	Single-phase 7,4 kW - 32 A	0 580 37 (pack version with RCCB and shunt trip)

### Connector details:

- For Mode 3 charging: T2s socket (three-phase, single-phase compatible) equipped with a locking system and communication wires compliant with IEC 62196-1 and IEC 62196-2. Use only a manufacturer-approved plug with silver-plated contacts.

### LEDs details:



Status report displayed on the front of the charging station:

- Steady green: ready to charge
- Steady blue: charging in progress
- Pulsing blue: waiting for charging
- Red: fault

### 2.2 Delivery status

MID Class B meter integrated in all charging stations.

Pack ref. 0 580 37 : 1 Green'up Control Light charging station, Cat. No. 0 580 33, with 4G, residual current circuit breaker (RCCB), Cat. No. 4 108 59, type F 30 mA and shunt trip coil, Cat. No. 4 062 76 to be wired in the external electrical switchboard.

## 3. TECHNICAL CHARACTERISTICS

### 3.1 Mechanical characteristics

Protection against impacts: IK 10  
Ingress protection against solids/liquids: IP 54  
T2s socket with plug engaged (Mode 3): IP 54

### 3.2 Material characteristics

- Polycarbonate
- Enclosure colour: RAL 7021 "Anthracite"
- Cover: white adhesive (RAL 9003)

### 3.3 Electrical characteristics

	Charging stations	
	Ph + N	3 Ph + N
Operating voltage (Ue) determined at 20°C	230 V~	400 V~
Impulse voltage (Uimp)	4 kV	
Insulation voltage (Ui)	500 V	
Frequency (fn)	50 Hz	
Rated voltage	230 V	400 V
Voltage tolerance (V) Regardless of vehicle requirements	208 V -253 V	
Conditional short-circuit	4,5kA / 6kA / 10kA according to the upstream protection device	
Allowable thermal stress in DC	16 000 A²s	
No-load consumption	6 W	

Compatible earthing system: TNS, TT.

In the event of an IT earthing system, this can be changed locally by adding an isolating transformer.

Built-in residual current protection: 6 mA DC fault current detection.

Built-in overload detection: 8 s at 125% In

## 3. TECHNICAL CHARACTERISTICS (continued)

### ■ 3.4 Electromagnetic compatibility

General interference classification: IEC 61000-6-1 and IEC 61000-6-3, criteria A.

EMC: IEC 61851-21-2.

- Immunity to electrostatic discharge (IEC 61000-4-2):

~ 8 kV in air / ± 4 kV on contact, criteria B

- Immunity to fast transients (IEC 61000-4-4):

~ 2 kV on command / ± 4 kV on power, criteria A

- Immunity to lightning shock waves (IEC 61000-4-5):

~ 2 kV differential mode criteria A on power

~ 4 kV common mode criteria A on power

~ 1 kV coupling clamp criteria A on command

- Immunity to magnetic fields (IEC 61000-4-8): 100A/m

- Immunity to voltage dips (IEC 61000-4-11 / IEC 61000-4-34):

0% residual voltage for 250/300 cycles at 50/60 Hz, criteria C;

0% residual voltage for 1 cycle at 50/60 Hz, criteria B;

70% residual voltage for 25/30 cycles at 50/60 Hz, criteria B;

40% residual voltage for 10/12 cycles at 50/60 Hz, criteria B.

- Immunity to short interruptions: IEC 61000-4-11 / IEC 61000-4-34

- Immunity to conducted disturbances:

IEC 61000-4-6: 10V/m from 0.15 MHz to 80 MHz, 80% AM – 1 kHz, criteria A

ETSI 301489-1: 3V/m, criteria A

- Immunity to earth measurement signal from vehicle (ZOE type):

Peak 1.5 to 2 ms, 20 mA peak for 30 s in state C1 according to IEC 61851-1 (ZE Ready specification)

- Immunity to electromagnetic fields radiated at radioelectric frequencies:

IEC 61000-4-3: 10V/m from 80 MHz to 6 GHz, criteria A

ETSI 301489-1: 3V/m, criteria A

### ■ 3.5 Climate characteristics

Operating temperature: -25 °C to +50 °C

Storage temperature: -40 °C to +70 °C; humidity < 95% without condensation; closed storage

Humidity: Severity 4 very humid, according to IEC 68.2.38

95% without condensation

Indoor or outdoor installation

Operating altitude: up to 2000 m

### ■ 3.6 RFID reader characteristics

RFID compatibility at the frequency of 13.56 MHz

Badge technology: ISO/IEC 14443 Type A, MIFARE

## 4. CONNECTION

The charging stations are delivered without the built-in protection.

The pack is delivered with the protection, to be wired.

Upstream protections (not supplied) must be installed in the electrical switchboard to comply with normative requirements.

### Supply connection :

Connection on the power terminal block using rigid copper cable H07 V R/U or flexible H07 V-K with ferrule (aluminium cable not permitted).

Maximum terminal capacity: 2.5 to 10 mm<sup>2</sup> (10 mm<sup>2</sup> recommended at rated power).

The charging station is permanently connected to the AC power supply network.

### Network connection:

OCPP 1.6 – JSON communicating charging station (upgradeable to 2.0.1)  
Connection via Wi-Fi, LAN, 4G GSM (if the charging station has this functionality)

WLAN

Ethernet network connection: maximum distance 100 m with Category 6 F/UTP or F/FTP cable

Wi-Fi connection: IEEE 802.11b/g/n 2.4 GHz

Encryption: WPA2-PSK (CCMP)

### External meter connection for DLM:

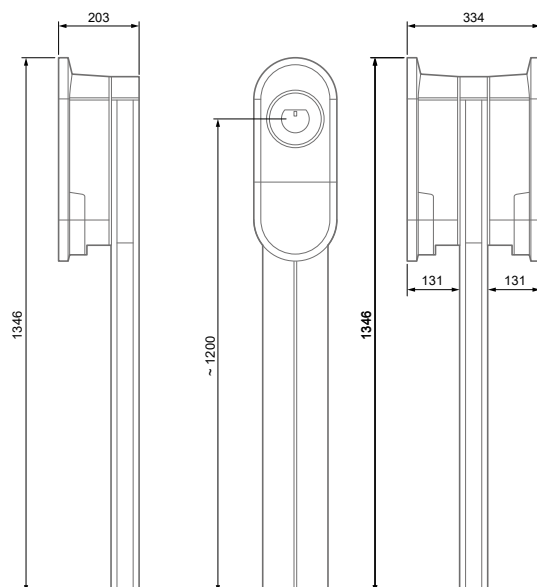
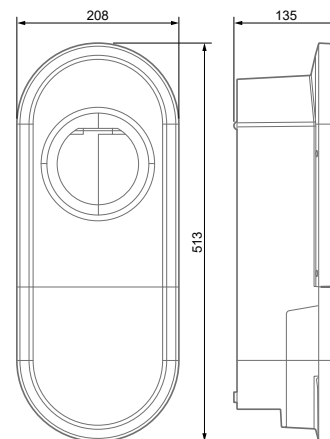
RS 485 connection: maximum distance 1200 m with Belden 9842 or Belden 3106A cable

Wired daisy-chaining (RJ 45) possible from one charging station to another (series)

### Configuration:

Access via web page by connecting the PC to the electronic board (see details in the installer's guide)

## 5. DIMENSIONS AND WEIGHTS



Weight of one charging station: approx. 5.5 kgs

## 6. CARE

**Caution:** Before using specific cleaning products, a preliminary test is necessary.

Resistant to the following products: 96% Ethanol, Ethylene glycol, Fuel, Hexane, 5W40 motor oil, Ergacid 1% solution, Ergagem 1% solution, white spirit.

Superficial cleaning with a cloth using soapy water, diluted ammonia, bleach diluted to 10%, window-cleaning products, pre-impregnated wipes.

## 7. NORMES ET RÉGLEMENTATION

The electric vehicle charging stations are designed in compliance with the following standards:

- IEC 61851-1: product standard for conductive charging system for electric vehicles
- NF C 15-100: low-voltage electrical installation standard
- UTE C 17-722 guide: installations for supplying electric or plug-in hybrid vehicles through socket outlets
- IEC 60364-7-722: requirements for installations and special locations for electric vehicles
- ISO 15118 Communication (PLC) with support for Plug & Charge authorization, charge management and automatic recharging

Radio : ETSI EN 300 328 - V2.2.2 : 2019

### RoHS :

Compliance with the 2011/65/EU Directive (RoHS), as modified by the 2015/863/EU Delegated Directive, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

### REACH :

The substances identified as SVHC (Substances of Very High Concern) according to the REACH Regulation (1907/2006), if present in the products at a concentration above 0.1% weight by weight, are declared inside the European SCIP database. At the date of publication of this document none of the substance listed in the annex XIV is found in this product.

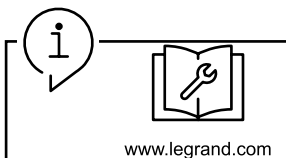
### WEEE Directive (2012/19/EU) :

The sale of this product includes a contribution to the appointed environmental bodies of each European country in charge of handling, at the end of their life, the products falling within the scope of the EU Directive on Electrical and Electronic Equipment Waste

### Packaging :

Design and manufacture of packaging compliant with European Directive 94/62/CE.

## 8. OTHER INFORMATIONS



**Instruction manual:** all mounting information available on the e-catalogue.

**Installer guide:** information on mounting and configuration available on the e-catalogue.

**PEP sheet:** available on the e-catalogue.