SIEMENS

For all charging standards

# Rapid Chargers

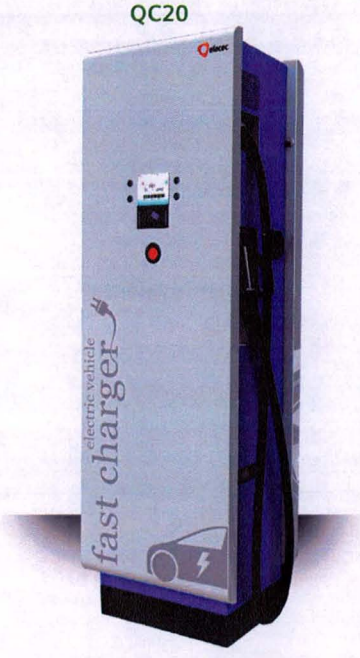
Siemens believes that electric vehicles will deliver considerable benefits to the environment - improving air quality, cutting emissions and reducing noise pollution. Siemens is committed to be a key innovator and solutions provider in the electric vehicle infrastructure market, delivering sustainable and long-term electric vehicle infrastructure solutions.

PLANNING AND BUILDING CONTROL
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- Customised paint, construction and branding
- Full downloadable RFID access and control
- Full OCPP compatibility
- Fully integrated with 3rd party Pay-As-You-Go systems and providers
- All units are 1.2 ZE/EV ready, certified for the Renault Zoe
- All units are tested and accredited to all available electric vehicles and vans

In exclusive partnership with Efacec, Siemens provide an extensive portfolio of electric vehicle charging solutions, offering mature and proven technology, designed, built and installed for long-term field deployment and high level of usage, making Siemens a sustainable long-term technology choice.

QC20




All units have an aesthetic design that demonstrates core product values of simplicity, durability and safety. They units are styled with simple lines and form that help the charger blend-in with most environments and landscapes. The design is intended to provide users with the assurance and confidence that vehicle charging is both simple and safe.

**Benefits:**

The charging units can be supplied with all rapid charging standards (AC and DC) and if not required at time of installation, can be fully upgraded in the field.

QC45 combined AC and/or DC rapid charger:

- Charging time: 20 mins on DC / 1-7 hours on AC depending on EV type
- Charging standards: AC 22kW or 43kW, CHAdeMO, and CCS COMBO
- Configuration options: Kiosk or non-kiosk
- High power: 0,98 Power Factor - High efficiency (< 96%)

QC20 combined AC and/or DC fast charger:

- Charging time: 40 mins on DC / 1-7 hours on AC depending on EV type
- Charging standards: AC 22kW, CHAdeMO, and CCS COMBO 2 options
- Greater flexibility on site selection
- Reduced impact on electricity network
- Reduced installation and capital costs
- Reduced operating costs

| | | QC45 - CE (EUROPE) | QC20 - CE (EUROPE) preliminar |
|---|---|---|---|
| Nominal Input | Phases/Lines<br>Voltage<br>Current (Maximum with Vmax output, Imax output)<br>Power<br>Frequency<br>Efficiency<br>Power Factor | 3 phases + neutral + PE<br>(400 ± 10%) V (a.c.)<br>73 A<br><br>50 KW<br>(50/60 ± 10%) Hz<br>>94%<br>0,98 | 3 phases + neutral + PE<br>(400 ± 10%) V (a.c.)<br>33 A<br><br>23 KW<br>(50/60 ± 10%) Hz<br>>94%<br>0,98 |
| DC Output | Voltage (Vdc)<br>Current (A)<br>Nominal Power (@ 400V output)<br>Communications with EV<br>Plug | 50 to 500<br>0 to 120<br>45kW continuous, 50kW peak<br>JEVS G104 CAN / PLC<br>JEVS G105 / Combo-2 | 50 to 500<br>0 to 50<br>20kW<br>JEVS G104 CAN / PLC<br>JEVS G105 / Combo-2 |
| Insulation | Input / Output / Ground<br>Control Circuit / Ground | 2000Vac<br>500 Vac | 2000Vac<br>500 Vac |
| AC Output | Efacec provides an AC Charging plug compliant with future European AC Quick Charging Standard EN/IEC 61851 | Rated up to 63A, 3 phase, 43kVA, Mode 3, Case C connection; RCD-Type B | Rated up to 32A, 3 phase, 22kVA, Mode 3, Type-2 Socket; RCD-Type B |
| Cabinet | Dimensions(WxDxH) mm<br>Weight<br>Protection Degree | 600 x 600 x 1800mm<br>600 kg<br>IP55 / IK10 | 610 x 410 x 1822 mm<br>~550 kg<br>IP55 / IK10 |
| HMI and Command Unit | Contactless card specification (for private operation card functions can be disabled)<br>TFT color display<br>Communication Protocol (others under request)<br>Emergency STOP | Mifare Classic 1K & 4K<br>Mifare DesFire EV1<br><br>6.4 inch<br>Web Services over IP;<br>router 3G (GSM/GRPS)<br>YES | Mifare Classic 1K & 4K<br>Mifare DesFire EV1<br><br>6.4 inch<br>Web Services over IP;<br>router 3G (GSM/GRPS)<br>YES |
| Environment Conditions | Temperature<br>Humidity<br>Place of installation<br>Altitude<br>Sound Noise | -25° to +50°C<br>5% to 95%<br>Outdoor / Indoor<br>Up to 1000m<br><55 dB in all directions | -25° to +50°C<br>5% to 95%<br>Outdoor / Indoor<br>Up to 1000m<br><55 dB in all directions |
| Applicable standards | CHAdeMO | | |
| | IEC 61851-1 & EN 61851-1: Electric Vehicle charging system - Part 1: General requirements | | |
| | IEC 61851-22 & EN 61851-22: Electric vehicle conductive charging system: Part 22: AC electric vehicle charging station | | |
| | IEC 61000-6-2 & EN 61000-6-2:Electromagnetic compatibility (EMC): Part 6-2: Generic standards - Immunity for industrial environments | | |
| | IEC 61000-6-4 & EN 61000-6-4: Electromagnetic compatibility (EMC): Part 6-4: Generic standards - Emission standard for industrial environments | | |

**Siemens Infrastructure & Cities**
**Traffic Solutions**
Sopers Lane, Poole, Dorset, BH17 7ER
Tel: +44 (0) 1202 782000 Email: sales.stc@siemens.com

**siemens.co.uk/traffic**

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