



## Buses Quick Charge Station

### Overview

- Charge any CCS compatible vehicle
- Combo DC output (Mode-4)
- DC power up to 150 kW
- TFT color display
- Network integration (OCPP or proprietary protocol)
- Built-in communications (3G; LAN; Wi-Fi)
- Different power levels available (40, 90 and 150 kW)
- On board Module for CCS control available for bus manufacturers

### Product description

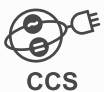
Societies are facing a growing pressure to reduce CO<sub>2</sub> emissions and electric buses have arisen as a solution for a more sustainable form of transportation. An electric bus allows cities to go a step ahead on the sustainability path, and it is the right beginning for a greener way of transporting the world.

The **QCBus Charger** is a user-friendly and safe process to charge any CCS Compatible Bus with power levels ranging from 40 to 150 kW. Users only need to plug the charger to the vehicle and the charging process will start immediately. If authentication is required, the charger has an RFID card reader which will ensure only the right users have access to the charger. The TFT color display shows the charging details (time, energy and battery details). The charging cycle finishes by itself or it can be terminated by pressing the “Stop” button.

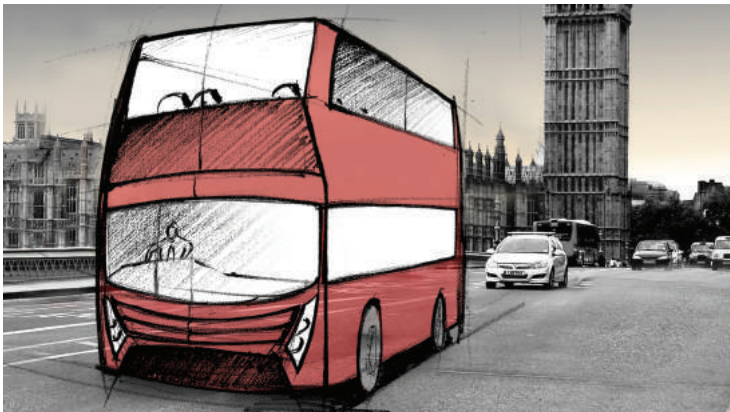
Using Efacec’s more than 30 years of experience in power electronics technology, the **QCBus** charger system is safe, robust, durable, stable and environmentally friendly.




QC40B    QC90B    QC150B

### DC plug-in charging system



CCS



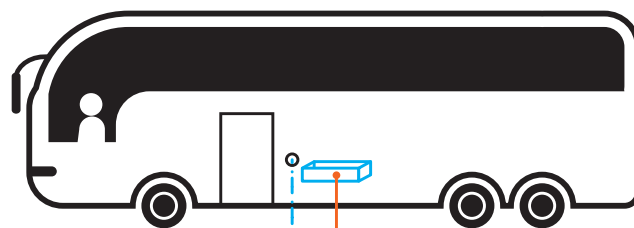
Technical data		 QC40B	 QC90B	 QC150B
Nominal Input				
Phases / lines		3 phases + neutral + PE		
Voltage & frequency		400 ± 10% Vac; 50 Hz		
Nominal input current & power	68 A @ 48 kVA	135 A @ 96 kVA	225 A @ 160 kVA	
Efficiency		> 95 %		
Power factor		0,98		
DC Output				
Voltage		50 Vdc to 750 Vdc		
Current	0 to 60 A	0 to 120 A	0 to 200 A	
General Specifications				
Equipment		Combo DC output (Mode-4)		
Communication with EV		IEC61851-23 PLC (CCS / Combo-2)		
DC Plugs		Combo T2 (CCS / Combo-2)		
Human Machine Interface		By default		
Display		6.4" TFT Color screen		
RFID system		Mifare (Classic, DesFire EV1) or others upon request		
Communication		3G (GSM or CDMA)   LAN   Wi-Fi		
Communication Protocols		OCPP (1.2;1.5) and others		
Place of installation		Indoor/Outdoor		
Altitude		Up to 1000 m		
Protection degree		IP54   IK10		
Operating Temperature		-25 °C to +50 °C		
Optional Cold Option		-35 °C to +50 °C		
Storage Temperature		-40 °C to +60 °C		
Humidity		5 % to 95 %		
Dimensions (W x D x H)	600 x 600 x 1800 mm	800 x 800 x 1800 mm	1000 x 800 x 1800 mm	



### On board CCS controller

This unit can be used in the bus and assures interface between the charger and the vehicle CANbus, and controls the on board contactors.

QCBUS



Charging process : power and communications

OnBoard CCS Module

