

## PowerCharge

Reduce your charging time significantly with the PowerCharge. With a high peak current of 1000 A and a long peak current time the charge power can be constantly as high as 800 kW. The integrated electronics takes care of the thermal management, the power reduction and the contactor activation. A safe voltage measurement ensures the electric safety of the vehicle charge inlet.

### Description

The PowerCharge receives high-voltage DC power from the Inlet and relays it to the vehicle high-voltage system. The PowerCharge includes the DC Charge switches as well as the necessary safety measurements needed for DC Charging. All is controlled through CAN by the built-in electronics to maximize charge power over the complete charging cycle.

*The PowerCharge is available as validated A-Sample.*

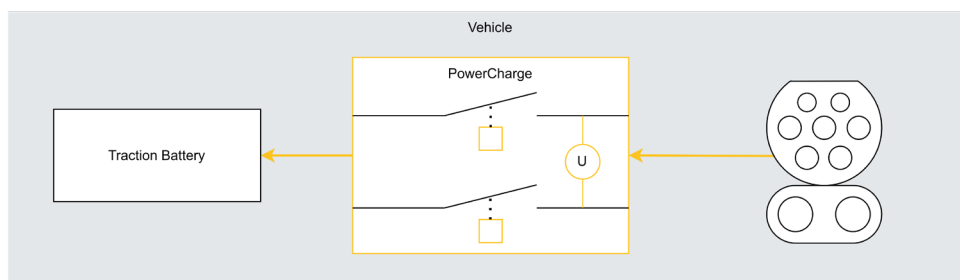
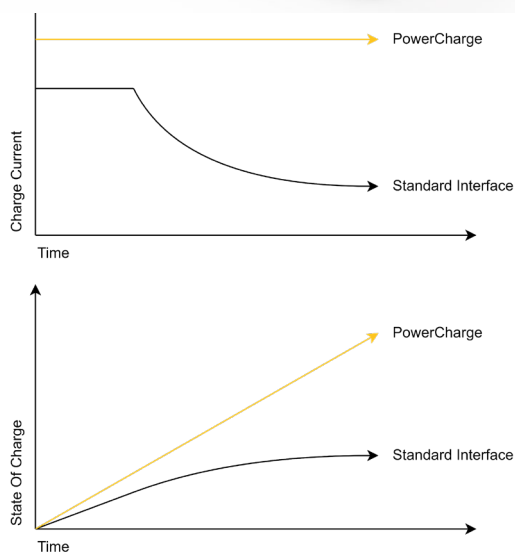
### Features

#### Norms and Regulations

- AECQ-100 automotive compliant
- ISO 6469-3:2018 compliant
- ISO 20653 IP67
- ECE R10 compliant

#### Specification Overview

- 400V & 800V system voltage
- 1000A peak current
- 600A continuous current, thermally limited
- 12V & 24V supply voltage
- CAN 2.0B Interface (250/500/1kBaud)
- Cooling Water Glycol 50/50
- Safe Voltage measurement for DC charging
- Temperature Sensor integrated
- Two Interlock circuits integrated
- Inlet Control integrated on request (CP, PP, Lock, Temp, LED)
- DC Charge Communication integrated on request (CCS, GB-T, NACS)
- Size 253mm / 308mm without plugs
- Height 120mm
- Weight 7.7 kg



**Pinning LV Connector X1**

Pin	Name	Description
1	GND	ECU Ground
2	VCC	ECU Supply, 6..32V
3	Wakeup	ECU Wakeup, 6..32V
4	CAN_H	CAN High, 500 kBaud, no internal resistor
5	CAN_L	CAN Low, 500 kBaud, no internal resistor
6	Interlock_in	Optional: Interlock circuit, 200mA max
8	Interlock_out	Optional: Interlock circuit, 200mA max
9	GND_Contactor	Optional: Contactor Ground
10	VCC_Contactor	Optional: Contactor Supply, 10..32V
11	n.c.	Not connected
12	n.c.	Not connected

**HV Connections**

Name	Description
X10	DC Charge Input from Inlet
X20	DC Charge Output to Battery

**Technical Drawing**



**Order Information**

PWCA-W12D-A01

