

DISTRIBUTED CHARGING SYSTEM



DISPENSER



POWER UNIT



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Technical Specifications

Power Unit

CCS2 EV Dispenser Unit

Input Power

Input Voltage	400 VAC ± 10% (3P+N+PE)	230 VAC ± 10% (P+N+PE)
Standby Power	≤ 100 W	≤ 50 W
Input Frequency	50Hz ± 10%	
Power Factor	≥ 0.99 (More than 1/3 Load)	--
THD	≤ 5%	--

Output Power

Output Voltage Range	100 to 1000 VDC Constant Power 300 to 1000 VDC	≤ 1000 VDC
Total Power	Supports Up to 1.92MW (Configurable)	--
Output Terminal (Configurable)	Up to 12 Nos.	
Gun Connector	--	2 x CCS2 per Dispenser
Single Gun Output Current	--	Up to 375A per CCS2 Gun (Natural Air Cooling)
Stable Voltage Accuracy	≤ ±0.5%	--
Efficiency	≥ 95 % (Full Load) ≥ 92% (more than half load)	
Stable Current Accuracy	≤ ±1%	--

Safety

Electrical Protections	<ul style="list-style-type: none"> • Electric Shock Protection • Earth Protection • Surge & Short Circuit Protection • Overcurrent & Under Current Protection • Overvoltage & Residual Current Protection • Input & Output Earth Fault Monitoring • Over Temperature Protection (Device & System-Level) • Emergency Shutdown with Audible/Visual Alarm 	
	Input Phase Reversal Detection	DC Input Phase Reversal Detection
	Cabinet Temperature Monitoring	Vehicle Connector Pin Temperature Monitoring

Electrical Connection

Between the Power Unit and the Dispenser Unit	<p>DC Power Cable: 2 × 150mm² Per Pole, Per Vehicle Connector Terminal</p> <p>Power Supply Cable: 230 VAC, Single-Phase with 2.5 mm² Wire</p> <p>Communications Cable: 2-Core Twisted Pair and Shielded</p>
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Compliance

Standards	IEC 61851-1 IEC 61851-23 IEC 61851-21-2
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Communication

Protocol	OCPP 1.6j (Upgradeable to OCPP 2.0.1)	
Network	Ethernet / WiFi	Ethernet / WiFi / 4G LTE (fall back to 2G)
Machine to Machine	MQTT Protocol	--
Display	HMI with Android User Interface	
Interface	CAN 2.0	
Charging Protocol	--	DIN 70121:2012 ISO 15118-1:2013
Authentication Mode	--	<ul style="list-style-type: none"> • RFID • OCPP (Customer Backend) • Payment Terminal • Plug and Play (PnP) • ISO 15118-2 Plug and Charge (PnC)
Status Indicator	LED Indicator (Multicolour for Status)	

Environmental

Operating Temperature	-30°C to +55°C	
Storage Temperature	-40°C to +60°C	
High Altitude	≤ 5500 m (Above Sea Level)	
Working Altitude	≤ 2000 m	
Output Power Derating	>55°C Output Derating	Charging Current Limited by Cable Pin Temperature
Humidity	≤ 95% Relative Humidity	

Mechanical

Mean Time Between Failures (MTBF)	1,00,000 hours	
Operational Noise Level	≤ 60dB at 1 m Distance	--
Acoustic Noise Level	≤ 65dB	--
Thermal Management	Fan Cooling	
Enclosure Rating	IP54 Compliance	
Dimension (LxBxH)	1105 X 1655 X 1860 mm	450 X 450 X 1675 mm
Weight	≤ 350 kg (± 10 kg)	≤ 44 kg (Each Dispenser)
Installation	Fixed on ground (Floor-mounted)	

