

UXR100040B

RoHSCECBUK

40kW@1000V ClassB AC/DC Charging Power Module



UXR100040B is a charging power module specifically designed to address the bottleneck in the charging station industry, boasting prominent advantages such as an ultra-high full-load working temperature and an ultra-wide constant power range within the industry. Meanwhile, key features of this module encompass high reliability, efficiency, power factor, and power density, as well as a wide output voltage range, low noise, minimal standby power consumption, and excellent EMC performance.

+ Application scenarios

- PV-ESS-charging system
- Urban rail transit
- Public - operated charging point
- Highway service areas

+ Excellent advantages

Ultra-wide output voltage range of **100-1000**_{Vdc}
Ultra-wide output voltage range,suitable for a wide range of EVs.

Semi-independent air duct design
Higher protection for high-voltage components inside the module to improve adaptability and reliability.

Ultra-wide output voltage range, suitable for various electric vehicle charging scenarios, designed for ultra-fast chargers.

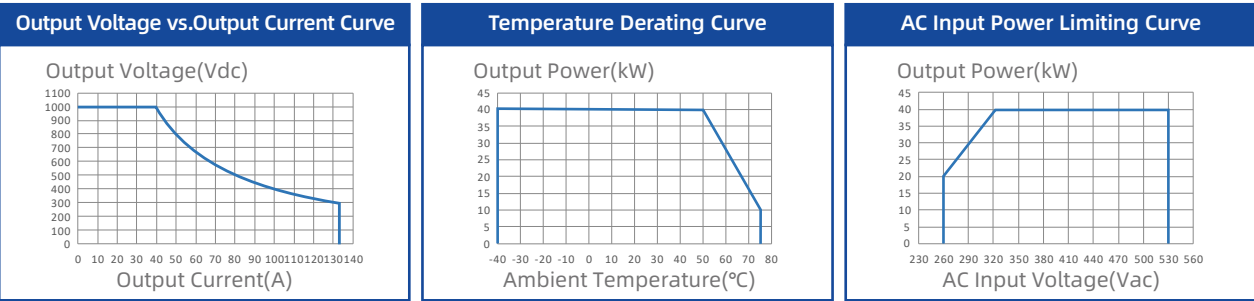
Ultra-wide output constant power range: **300-1000**_{Vdc}
UXR100040B offers output range of 100-1000V, delivering 40kW constant power from 300V to 1000V, setting an industry standard for ultra-wide voltage and power ranges.

EMC Class Bcompliance
Low electromagnetic radiation and strong interference resistance.

Meets CE/UL certification requirements, complies with IEC-61851-21 standard for EMC Class B.

+ Key features

- Ultra-wide output voltage range,100~1000Vdc, suitable for different types of EVs;
- Ultra-high output power within the 300V~1000V output voltage range, 40kW constant power output;
- Full-load working efficiency ≥ 95.5%, high efficiency in full working range, extra energy saving;
- No current retraction in low voltage range, faster charging rate;
- Built-in residual voltage releasing circuit, lower cost and higher reliability;
- Industry-leading volume design with high power density of 46.7W/in³ provides greater flexibility in charger design for equivalent power output;
- Meets CE / UL / UKCA certification requirements;



Item		Specifications
Basic Specifications	Dimensions	85mm (H) ×360mm (W) ×459mm (D)
	Weight	≤20 kg
	Efficiency (full load)	≥95.5%
	Standby Power Consumption	<13W
	Cooling Mode	Fan cooling
	Communications Bus Protocol	CAN bus
	No. of Parallel Modules	≤60pcs
Input Characteristics	Indicator	Green: normal operation Yellow: alarm Red: fault
	Input Voltage	260Vac~530Vac,3P+PE
	Input Current	<80A
	Grid Frequency	45Hz~65Hz
	Power Factor	≥0.99
Output Characteristics	iTHD	≤5%
	Output Power	40kW@output voltage≥300Vdc
	Voltage Range	100Vdc ~ 1000Vdc, default value: 200Vdc
	Current Range	0A~133.3A
	Voltage Stabilized Accuracy	≤±0.5%
	Current Stabilized Accuracy	≤±1%
	Current Sharing Imbalance	≤±3%
Electrical Isolation Method	Ripple Voltage Peak Value Coefficient	≤1%
	Electrical Isolation Method	High Frequency Isolation
Environmental Conditions	Inlet Temperature During Operation(@10l/min)	- 40℃ ~ +75℃, output derating at above 50℃
	Inlet Temperature at Storage Env.(@10l/min)	- 40℃ ~ +75℃
	Relative Humidity	≤ 95% RH, non-condensing
	Altitude	No derating@ 2000m. When altitude ≥ 2000m, operating temperature decreases by 1℃ for every 100m. The actual altitude value needs to be set @1000m
	MTBF	>500,000 hours
Protection Specifications	Input Over/Undervoltage Protection	Automatic recovery after power-off
	Output Overvoltage Protection	Manual recovery after power-off
	Overcurrent and Short-circuit Protection	Manual recovery after power-off
	Over Temperature Protection	Automatic recovery after power-off