# UXR100040C

## 40kW@1000V ACDC Highly- protective Charging Power Module

## + Introduction

UXR100040C is a charging module adopted by a fully encapsulated potting process, significantly enhancing the reliability and lifespan of air-cooled charging modules. It boasts high efficiency and demonstrates strong environmental adaptability, making it well-suited for challenging environments such as mining areas.

## + Excellent advantages

**Wide**
**DC output voltage range: 50-1000 Vdc**

Wide DC output voltage range of 50-1000Vdc meet the fast charging needs of various EVs and battery packs.

**Uninterrupted constant power output within the voltage range of 300-1000 Vdc**

Ensure stable, reliable, and safe charging with strong and fast charging capability.

**Fully potting technology**
**for high protection**

Potting process significantly enhances the reliability and lifespan of the modules, providing greater environmental adaptability.

**Full load efficiency 95.5%**

Efficient operation across the entire output voltage range, lower consumpiton.

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

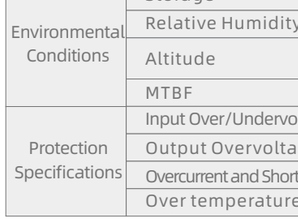
**Fully potting process significantly enhances module protection capabilities against salt spray, moisture, and mold, demonstrating stronger environmental adaptability.**



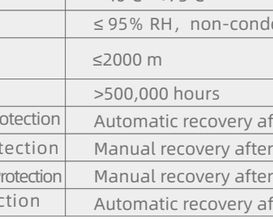
## + Key features

- Ultra wide output voltage range,50~1000Vdc, suitable for different types of EVs;
- Ultra high output power under 300V~1000V output voltage range, 40KW constant power output;
- Full-power wide working temperature range, -40~55℃;
- Full-load working efficiency ≥ 95.5%, high efficiency in full working range extra energy saving;
- Ultra low noise, improving user experience;
- No current retraction in low voltage range, faster charging rate;
- Built-in residual voltage releasing circuit, lower cost and higher reliability;
- Potting technology for higher protection.

**Output Voltage vs.Output Current Curve**




**Temperature Derating Curve**




**AC Input Power Limiting Curve**


| 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 |
| | Indicator | Green: normal operation Yellow: alarm Red: fault |
| Input Characteristics | Input Voltage | 285 ~ 475 VAC, 3-Phase+PE, 45~65Hz |
| | Input Current | <80A |
| | Power Factor | ≥0.99 |
| | ITHD | ≤5% |
| Output Characteristic | Output Power | 40kW@output voltage≥300Vdc |
| | Voltage Range | 50Vdc ~ 1000Vdc |
| | Current Range | 0A~133.3A |
| | Voltage stabilized accuracy | ≤±0.5% |
| | Current stabilized accuracy | ≤±1% |
| | Current Sharing Imbalance | ≤±3% |
| | Ripple voltage peak value coefficient | ≤1% |
| Environmental Conditions | Operating Temperature | - 40℃ ~ +75℃，output derating at above 55℃ |
| | Storage | - 40℃ ~ +75℃ |
| | Relative Humidity | ≤ 95% RH，non-condensing |
| | Altitude | ≤2000 m |
| | 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 |