

30KW DC Charging Power Supply Module

Product Description

The Deltrix 30KW DC Module range offers a highly efficient (up to 96%) power supply that adopts the latest power electronics technology. They were designed specifically for DC Chargers targeted at Electric Vehicles. They offer active power factor correction, green ultra-high efficiency, high power density, High reliability, and intelligent control. The modules use forced air-cooled heat sinks and have a small form factor. Hot-Swapping with built-in anti-battery reverse current protection circuit is also supported.



Key Features

- Ultra-high efficiency > 96%, rated efficiency > 95.5%
- Compatible with the CCS and CHAdeMO Standards
- Compact Form Factor (L*B*H): 437.5mm * 300mm * 84mm
- Ultra-high-power density: up to 45W/in³
- Ultra-wide output voltage range: from 200VDC ~ 1000VDC
- Ultra-small output ripple voltage, peak-to-peak ripple = 2V
- Ultra-small standby power consumption: ~10W
- Complete protection & alarm functions: input over/under voltage, output over voltage, over current, Over-temperature, output under-voltage alarm and output short circuit protection
- LED display configurable for display voltage, current, group, protocol, address, manual/automatic or fault information
- CAN Bus and RS485 communications
- DSP digital control and support for voltage and current adjustments
- Built-in anti-battery reverse current protection circuit that supports Hot-Swapping
- Automatic identification and verification of new addresses without manual intervention
- Built-in output voltage bleeder circuit

Product Specifications

| | | DU30AD1000M | DU30AD750M | DU30AD500M |
|----------------------------------|-------------------------------|--------------------------------------------------------------------------------|------------|------------|
| DC Output | Output | 1000V/30A | 750V/40A | 500V /60A |
| | Output rated power | 30KW | | |
| | Output voltage range | 200~1000V | 200~750V | 200~500V |
| | Output current range | 0~33A | 0~50A | 0~80A |
| | Output overvoltage protection | 1010±5V | 760±5V | 510±5V |
| | Output undervoltage alarm | 190V±2V | 190V±2V | 190V±2V |
| | Short circuit protection | In case of short circuit, it can automatically restore. | | |
| | Output voltage tolerance | ≤±0.5% | | |
| | Load sharing | ≤±3% | | |
| | Max. startup overshoot | ≤±1% | | |
| | THD | ≤5% | | |
| | Boot time | Start time 3s≤t≤8s | | |
| | Efficiency | Highest efficiency>96%, rated efficiency>95.5% | | |
| AC input | Input voltage | 304VAC~485VAC | | |
| | Input frequency | 45Hz~65Hz | | |
| | Number of phases | Three-phase + Protected earth wire | | |
| | Power factor | Rated output load PF≥0.99 | | |
| | Max. input current | <60A | | |
| | Input undervoltage protection | 255V ±5V, Hysteresis ≥15V | | |
| | Input overvoltage protection | 490V ±5V, Hysteresis ≥15V | | |
| | Input power limit | Input voltage Vin is 304V ±5V~260V±5V, output power is derated linearly to 50% | | |
| Communication & Alarm | Communication | CAN & RS485 | | |
| | Max. No. of parallel machines | 60 | | |
| | Alarm and status | Report to monitor via CAN bus or 485 bus; Display it on LED panel | | |
| Operating Environment | Operating temperature | From -30°C to 65°C | | |
| | Over temperature protection | On temperature >70°C±4°C or <-40°C±4°C, module will shut down automatically | | |
| | Storage temperature | From -40°C to 85°C | | |
| | Humidity | ≤95% without condensation | | |
| | Pressure | 79kPa~106kPa | | |
| Physical Characteristics | Noise | <55dB | | |
| | cooling method | Fan cooling | | |
| | Dimensions (L*B*H) | 437.5mm *300mm*84mm and with front mounting holes | | |
| | Weight | <15Kg | | |
| | MTBF | 120000 hrs (at 40°C) | | |

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