



ENERGY CONTROLLER MONITORING UNIT FOR LV / HV-SYSTEMS 0 - 900 Vdc / 0 - 400 A / CANopen



KEY FUNCTIONS & FEATURES:

Ideal for Mobile Machines, Maritime, OFF-Grid applications

Up to 25 modules / scalable up to 900 Vdc and 400 A

Safety Protection Functions:

- Over-charge, Deep-discharge, Over-temperature, Over-current
- Isolation Monitoring >100 Ω/V, HV-Interlock, Service Disconnect, Pre-Charge function
- State of Charge (SoC), State of Health (SoH) Monitoring

Series and parallel monitoring of modules

Data Logging in Realtime

On board drivers: 2 x HV output contactors (12 V Tyco)
1 x Pre-Charge contactor (12 V Tyco)

INTERFACE:

CANopen communication (default 250 kbit/s - ISO 11898)

- Provides access to all relevant system information with function and parameter modification
- Enables communication between energy controller and customer application
- Remote management / track / diagnosis

MECHANICAL & DESIGN FEATURES:

Robust design – aluminium die cast housing
Made in Germany

| Technical Information | |
|-------------------------------------|---|
| Type | AEC900500R |
| Operational Voltage Range | 0 – 900 Vdc |
| Operational Current Range | 0 – 400 A / Peak (10s) 0 – 500 A |
| Operational Temperature Range | -30 °C to +100 °C |
| Max. Continuous Power | 450 kW (400 A / 900 Vdc) |
| DC/DC Converter Output | 9 – 14 Vdc / 50 W max |
| Current Accuracy | < ± 1% from 0 to 400 A @ +20 °C |
| Voltage Accuracy | ± 0.8% from 0 to 900 V @ +20 °C |
| Communication | CANopen / USB |
| Dimensions (L x W x H) | 422.2 mm x 310 mm x 115 mm |
| Safety Detection | Overcharge- / Deep Discharge- Protection, Temperature Monitoring, ISO-Resistance |
| Housing | 3mm Aluminum Die Cast |
| Water / Dust Protection | IP 66 |
| Humidity / Operational Elevation | 5 to 95 % / < 4.000 m |
| Inrush-current Limiter (Pre-charge) | 500 W / 0,5 s / 5 Ohm (60 Vdc) 50 Ohm (800 Vdc) Pre-charge resistor |
| Weight | Ca. 9 kg |
| Certificates | CE-2014-30-EU (EMC) EN 61000-62:2005, EN6200-6-3:2007, ISO16315:2006 Small Craft Standard, UN38.3, CB IEC62133, IP66, ECE-R10 (EMC) - Automotive, IEC 60945-(EMC) Marine, DNV-GL Type Approved, IEC62619 - Safety (DNV GL), IEC62620 - Performance (DNV GL) |
| Standards | CE-93-68-EU, CE-Battery Directive 2006-66-EC, CE-Low Voltage Directive 2014-35-EU, CE-RoHS 2011-65-EU, CE-Asbestos Directive 203-18-EU, ISO16315:2006 Small Craft Standard, Outgoing Test VDE 0100 Teil 610, Outgoing Test VDE 0701-702, Nach IEC61508 SIL2 / ISO26262 ASIL C (Functional Safety E/E) |