



ENERGY CONTROLLER

MONITORING UNIT FOR LV / HV-SYSTEMS

12 - 900 Vdc / 1 - 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	12 – 900 Vdc
Operational Current Range	1 – 400 A
Operational Temperature Range	-40 °C to +80 °C
Energy Controller – max. continuous power	320 kW (400 A / 800 V)
DC/DC converter output	8 – 30 V / 50 W max
Current Accuracy	< ± 1% from 0 to 300 A @ 25 °C
Voltage Accuracy	± 0.8% from 0 to 800 V @ 25 °C
Communication	CANopen
Dimensions (L x W x H)	442,5 mm x 310 mm x 115 mm
Safety Detection	Overcharge- / Deep Discharge- Protection, Temperature Monitoring, Service Disconnect, ISO-Resistance
Housing	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 / 50 Ohm Pre-charge resistor
Weight	Approx. 9 kg
Certificates and Standards	UN 38,3, CE, RohS, UL 94 VO, DNV-GL, IEC 62619, IEC 62620, IEC 61508, UN-ECE-R10, EN 61000-6-2:2005, EN 61000-6-3:2007