DC CONTROLLER MU1000C

Battery voltages: 24 up to 220V_{DC}

KEY FEATURES

- **Wide measuring and supply voltage range**
- **Easy programming via RS232-interface with PC**
- **Wide range of monitoring and signalling functions**
- **Temperature compensation of the charge voltage for PSS-rectifiers**
- **Alphanumeric LCD display for measuring values and system parameters**
- **CAN-Bus interface**
- **Remote control via modem interface (optional)**

PRODUCT DESCRIPTION

The DC controller MU1000C is a built-in module for front panel mounting for control, monitoring and signalling of DC–power supply systems with battery backup. The units are easy to use and they are programmable via keys at the front panel or via RS232 interface and PC.

The control of all connected PSS–rectifiers, DC-DC converter and inverter modules is realized via a CAN communication bus.

The measuring values and operation states of the devices are shown on the alphanumeric display.

The designations of all inputs are individually programmable. Different relay outputs are available for remote signalling of single or general faults. Single faults and their linkages can be assigned user defined to the relay outputs.

In addition to internal text messages several front side LED's indicate the state of main system parameters (2 LED's are free programmable).

The functionality of the basic module can be upgraded with optional extension boards.

APPLICATIONS

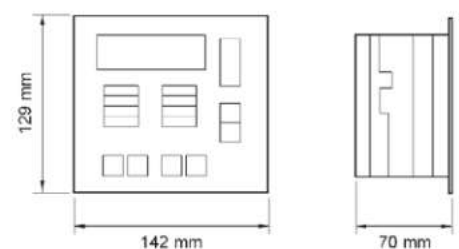DC power supply systems with battery backup in all areas of industry, power generation and power distribution.

TECHNICAL DATA

Type	MU1000C-I Language	MU1000C-II Language
Article code	300-110-660.00	300-110-770.00
Supply voltage range	18-80V_{DC}	80-300V_{DC}
Voltage measuring range	0-100V_{DC}	0- 300V_{DC}
Input power consumption	appr. 3W	
Voltage measuring inputs	3, accuracy 1%; 3 x mains voltage and frequency (with optional mains monitoring board only)	
Current measuring inputs	3 (1 x ± 60mV for battery charge / discharge current measurement; (2 x + 60mV) 3 x mains current (option: Battery monitoring board)	
Temperature measuring input	1 (for optional temperature sensor)	
PE–connector	1 (isolation fault)	
Digital measuring inputs	8 (free programmable)	
Alphanumeric display	LCD, 2x16 characters, with backlight	
LED indications	Operating, V>Vmin, V>V max, isolation fault, S1/S2 (free programmable LED indications), alarm A (general fault, urgent alarm), alarm B (free programmable linkage of single faults, non urgent alarm)	
Relay outputs	4 relay contacts, error messages free programmable, extension to 10 free programmable relays (with optional relay board)	
Configuration/interfaces	RS232 interface, CAN interface	
Communication	CAN-bus interface for communication with PSS/PSR-rectifier modules, UNV–inverter modules and UNB modules; RS232 interface for external modem control (optional) and programming of all functions and parameters via PC	
Functions	Boost charge control (current-, voltage- and time dependent); battery test (voltage- and time dependent); controlling of voltage drop-down diodes; battery low protection; battery midpoint voltage monitoring; isolation fault monitoring	
Microprocessor controlling	Programmable monitoring functions with history function, real time clock, device parameters via front keys and alphanumeric display	
Languages	German, English, Swedish, Italian, Russian, Czech, French	
Ambient temperature	Operation: -20°C to +55°C, storage: -40°C to +85°C	
Climatic conditions	IEC 721-3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2	
Max. installation altitude	≤ 1500m	
Audible noise	≤ 30dB (A) in 1m distance	
Construction	Built-in module for front panel mounting, rear side connectors	
Dimensions (W/H/D)	142/129/70mm	
Weight	approx. 0,6kg	
Type of enclosure / Protection class	IP20 (mech.); 1 acc. to EN 60950 (electr.)	
Colour (front panel)	RAL 7035	
CE conformity	yes	
Compliance to safety standards	EN 60950-1; VDE 0100 part 410; VDE 0110, EN 50178, EN 60146	
Compliance to EMC standards	EN 55022 class „B", EN 61000-4 part 2-5	

OPTIONS

Article code	Designation
300-110-000.CZ	Czech language for the alphanumeric display/further languages on request
300-110-000.F	French language for the alphanumeric display/further languages on request
300-110-000.RUS	Russian language for the alphanumeric display/further languages on request
302-110-CON.00	MU1000C configuration software, Win based PC software (once/customer)
302-DCC-0MM.00	Mains monitoring board 1/3 phase; DIN rail module; connection via CAN interface
302-DCC-0BM.00	Battery monitoring board (up to 3 additional battery strings; U,U/2,I,T); DIN rail module
302-DCC-DI8.00	Signalling board with 8 digital alarm inputs; DIN rail module; connected via CAN interface
302-DCC-0RB.00	Relay board with 6 isolated signalling outputs; DIN rail module; connected via CAN interface
880-300-TMP.01	Temperature sensor LM335 with 4 m connecting cable and cable shoe

DIMENSIONS

129 mm · 142 mm · 70 mm

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