



Monitoring Unit



- **A- and B alarm free programmable**
- **Memory for disappearing alarms**
- **High/Low Voltage alarm**
- **Earth fault detection**
- **2 free alarm inputs**
- **Battery unsymmetrical monitoring of 2 battery banks**
- **Fuse monitoring as option**
- **Digital display as option**

The monitoring unit MU500 is applicable especially in small power supply systems with combined battery backup. All main system parameters can be controlled and indicated. Battery monitoring, earth fault monitoring, low battery voltage protection (contactor controlling as an option), analogue measuring inputs for DC voltage and DC current (as an option), 2 free digital inputs are examples of the extensive standard functions.

The digital inputs of the unit can be used for monitoring of internal or external signal contacts (for example fuse monitoring). Different relay outputs A and B alarm are available for remote signalling of general faults. Single faults and their connections can be assigned to each relay output.

TYPE LISTING			
Type	MU500-xS	MU500-xL	MU500-xW
Mat.-No. x=1 (24-108 VDC)	01-1011	01-1012	01-1013
Mat.-No. x=2 (216 VDC)	01-1021	01-1022	01-1023
Category	Monitoring and signalling unit		

POWER SUPPLY / MEASURING RANGE	
Supply voltage	Type 1; 15-130V. Type 2; 157-250
Measuring range	Type 1; 15-130V. Type 2; 157-250
Input power consumption	Max: 40mA

ANALOGUE MEASURING INPUTS (WITH DISPLAY OPTION)	
Voltage inputs	1 x accuracy 1%
Current inputs	1 x \pm 60 mV for battery charge / discharge current measurement
PE - connector	1 isolation fault

DIGITAL SIGNALLING INPUTS	
Signalling inputs	1 x Mains fault 1 x Rectifier fault 2 x Free inputs

STANDARD FEATURES	
LED indications	- Operation (Yellow LED) - Mains fault (Red LED) - Rectifier fault (Red LED) - Voltage high (Red LED) - Voltage low (Red LED) - Earth fault (Red LED) - Battery fault (Red LED) - Alarm 1 (Red LED) - Alarm 2 (Red LED)
Relay outputs	2 relay contacts, potential free change over contacts A- and B alarm, free programmable
Functions	Battery midpoint voltage monitoring for 2 battery banks Isolation fault monitoring High voltage detection Low voltage detection Battery low protection (incl. In fuse monitoring option)
Languages	Universal with alarm symbols

ENVIRONMENT	
Ambient temperature	Operation: 0°C to +40°C Storage: -30°C to +50°C
Climatic conditions	IEC 721-3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2
Humidity class	F
Altitude	\leq 1000 m a.s.l., extension possible
Audible noise	< 30 dB (A) in 1 m distance

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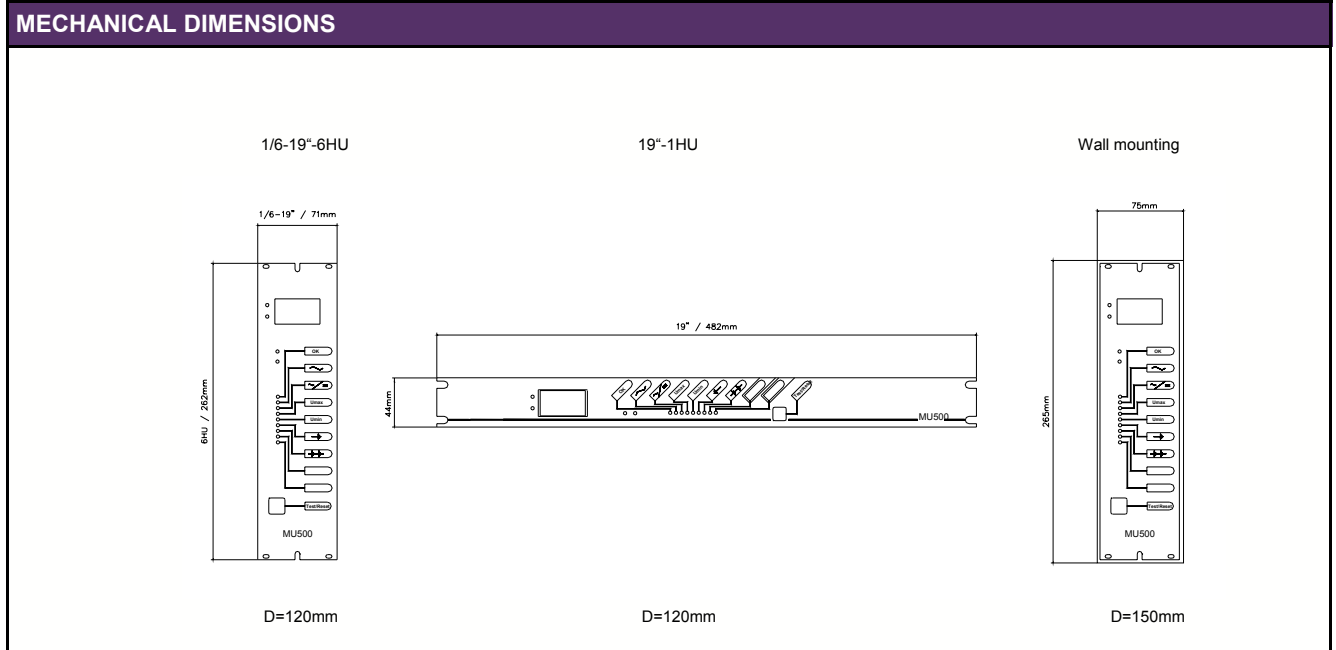
MECHANICAL CONSTRUCTION		
Construction	-S -L -W	- 19"-1/6HU, rear side connectors - 19"-1HU, rear side connectors - Wall cabinet
Dimensions WxHxD (mm)	-71/262/120 -482/44/120 -75/265/150	
Weight	appr. 0,4 kg	
Protection class	IP20 (mech.); 1 acc. to EN 60950 (electr.)	
Surface	front panel RAL 7032	



COMPLIANCES	
Certification	CE-mark
Safety	EN 60950; VDE 0100 part 410; VDE 0110, EN 50178, EN 60146
EMC	EN 55022 class „B“, EN 61000-4 part 2-5

Options:

- Extension board DU1, for measuring and displaying voltage and current
- Extension board FM1, Build in module for fuse monitoring of up to 21pcs of 1 or 2-pole fuses
- Extension board FM1, Included in FM1 is also battery low disconnect controlling



Additional Information

Full information, drawings, manuals and application notes and advice to any of the wide range of CP Kontakt AB's products are available on request.

CP Kontakt AB reserve the right to change the specification, product design and parameters at any time, without notice.

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