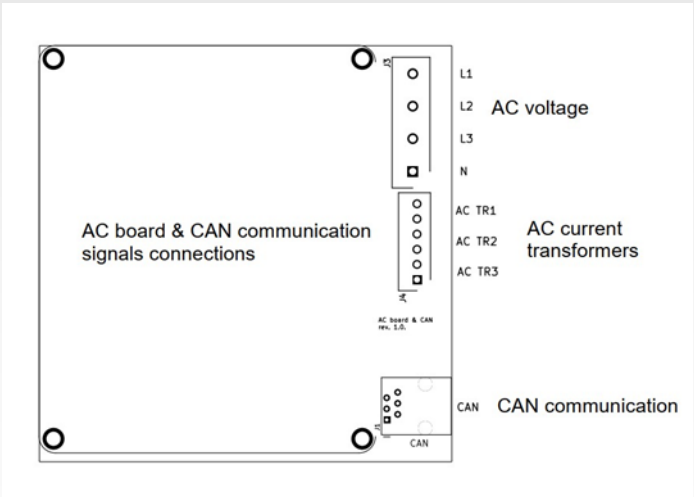
MPJ 04

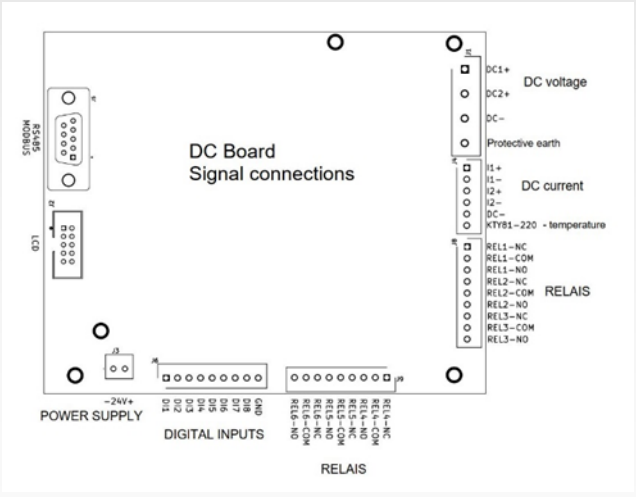
MICROPROCESSOR MONITORING

and CONTROL UNIT

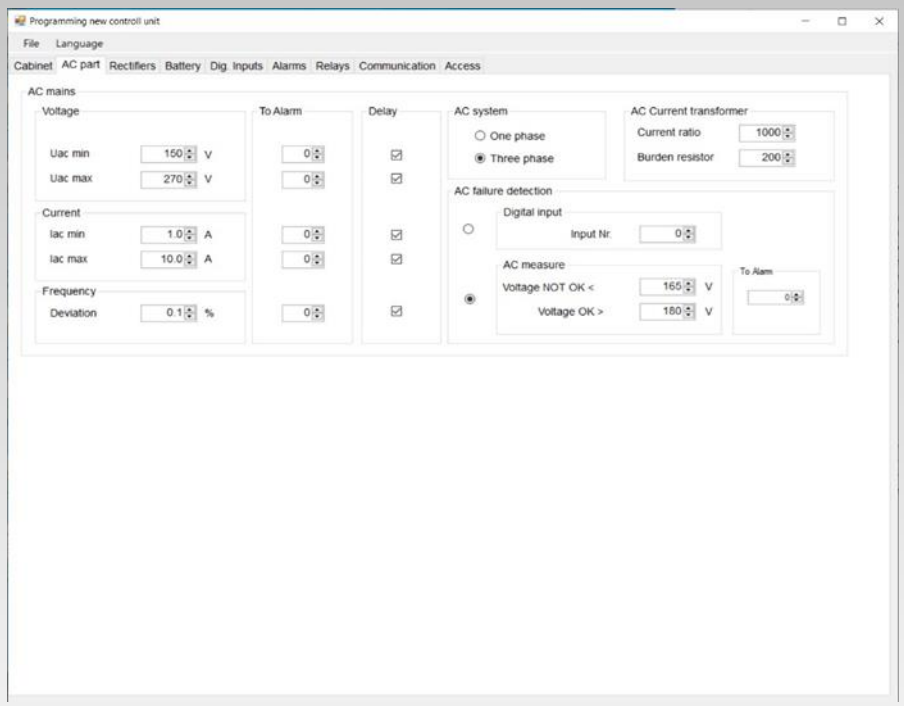
DESCRIPTION

The new monitoring unit is our product fully developed in-house with the aim of meeting the increasing demands of clients for higher quality monitoring, control and signaling. Unlike our monitoring unit type MJ-02, which has distributed units for measurement, control and management, this monitoring unit is designed for compact systems, and for modular products of the built-in rack type with rectifiers that include battery chargers and control and battery charge monitoring. This is why this monitoring unit has integrated measurement, control and management modules, so that a single system does not need any additional modules for measurement or management. The modules are located on the printed circuit boards, positioned in such a way as to allow easy access to the associated connectors, and to ensure the galvanic isolation of the modules located at different potentials. The control unit has a CAN interface through which it is connected to the battery chargers.





Through are read and system parameters are adjusted, while all other system parameters are programmed via a special PC program, the appearance of which can be seen in the attached picture:



In addition to the local reading of system parameters, the monitoring unit also enables remote reading of these same parameters via MODbus via two built-in interfaces, RS485 and Ethernet.

POSSIBILITIES OF MEASUREMENT, CONTROL AND MANAGEMENT

AC PART:
- **3 phases, voltage, current and frequency,**
- **Measuring voltage range – up to 290V RMS,**
- **Current range - depending on the used current transformers,**
- **Voltage and current measurement accuracy - better than 0.2%,**
- **Frequency measurement accuracy - better than 0.02 %**

DC PART:
- **2 voltages, 2 currents, insulation resistance and temperature,**
- **Voltage measurement range – up to 310 V,**
- **Range of measured currents - depending on the shunts used,**
- **Voltage and current measurement accuracy - better than 0.2%,**
- **Temperature measurement accuracy – about 2%,**
- **Insulation measurement accuracy - about 3%**

DIGITAL INPUTS:
- **8 digital inputs,**
- **galvanically isolated**

RELAY OUTPUTS:
- **6 relay outputs,**
- **AC voltage and current: up to 250 V / 1A,**
- **DC voltage and current: voltage up to 100V,**
- **current depending on the voltage, from 1A@24V to 0.1A@100V**

DISPLAY
- **High visibility 4,3˝ LED TFT display with touch functionality**

COMMUNICATIONS

CAN:
- **CAN 2.0, 11 bit ID, speed: 100 Kb**

RS485:
- **Galvanically isolated interface,**
- **Ability to adjust speed, parity and number of stop bits**

ETHERNET:
- **Speed: 100 Mb,**
- **Ability to adjust all communication parameters**

MARETON Ltd
Odranska 1, HR-10000 Zagreb, Croatia
Tel.: ++385 1 3028 127
E-mail: mareton@mareton.hr
Internet: www.mareton.hr