Motor Controllers
DMPUC-HMI Operator Interface
Motor Protection Unit

DMPUC-HMI

- **Programmable operator interface**
- **Displays the instantaneous variables from DMPU**
- **Alarm warning through LED indicator and displayed message**
- **Controls the virtual digital inputs of DMPU**
- **Four programmable keys**
- **Freely configurable pages**
- **2 lines LCD (2x8 DGT)**
- **Modbus RTU communication port**

Product Description

DMPUC-HMI is freely programmable operator interface to show instantaneous values (currents, voltages, harmonic distortions, temperatures, etc.) measured by DMPU, display the alarm situations with customized messages and start-stop the motor.
Modbus RTU protocol is available for device configuration by PC and communication with DMPU main module (through two RS485 ports). The whole programming is performed via PC software (DMPU-PSHMI).
The housing is for panel mounting with IP65 protection degree (front).

Ordering Key

DMPUC-HMI

Model
Type

Communication Specification

RS485 port	
Numbers of ports	2, COM0 and COM2.
Type	Bidirectional (static and dynamic variables).
Functions	
COM0 port	For DMPUC-HMI configuration download
COM2 port	For communication with DMPU main module: modifies digital virtual inputs and monitors the measured variables and virtual alarms.

Connection	2-wires
Address	Selectable by DMPU-PSHMI software.
Protocol	Modbus RTU.
Factory-defined data format	Data bits “8”, parity “none”, stop bit “1”.
Speed	
COM0 port	Fixed: 19.2kbps.
COM2 port	Default: 9.6kbps. Selectable by software: 9.6kbps, 19.2kbps, 38.4kbps.

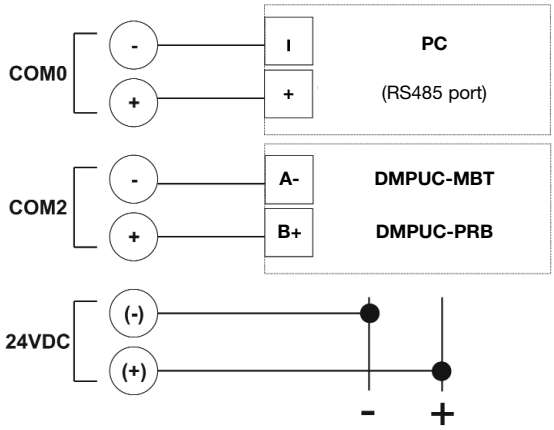
Power Supply Specification

Power supply	24VDC ±20%.
Power consuption	1W.

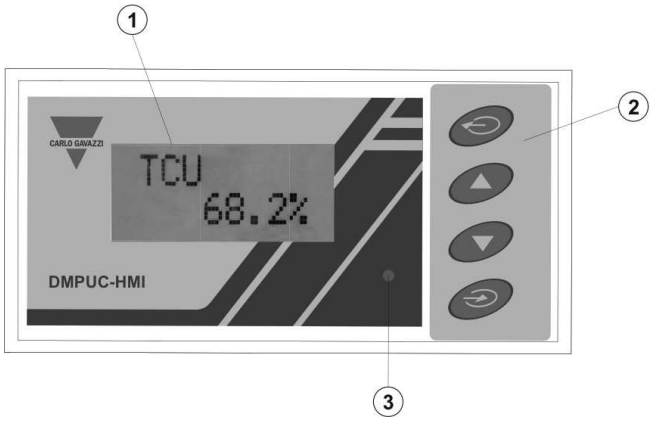
Connection

Terminals connection	Screw-type, 6 x 1.5 mm² terminal blocks.
Screw tightening torque	0.4 Nm / 0.8 Nm (min./max.)

Wiring Diagrams



Front Panel Description



1. **Display:**
   2 lines LCD (2x8 DGT); displays the pages with text, external variables values and alarm messages.

2. **Key-pad:**
   Four programmable keys.

3. **Alarm status LED on warning**

General Specifications

Operating temperature	0°C to +60 °C (R.H. from 0 to 90% non-condensing @ 40°C).
Storage temperature	-10°C to +70 °C (R.H. from 0 to 90% non-condensing @ 40°C).
Installation category	Cat. III (IEC60664, EN60664)
EMC	According to EN61000-6-2, EN61000-6-3.
Electrostatic discharges	15kV air discharge.
Immunity to irradiated	Test with current: 10V/m from 80 to 2000MHz; 1V/m up to 2.7MHz.
Immunity to conduced disturbances	10V from 150kHz to 80MHz.
Surge	On DC power supply 2kV; on signal lines 1kV.
Radio frequency suppression	According to CISPR 22, B class.

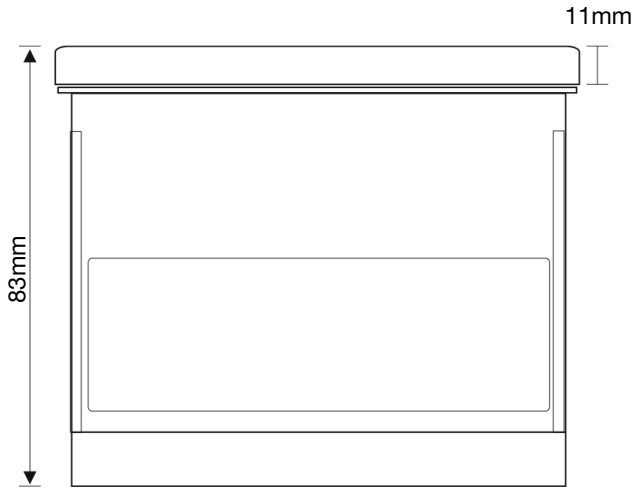
Safety standards	
Safety	IEC60664, IEC61010-1 EN60664, EN61010-1
Approvals	cUL listed
Marking	CE
Housing	
Dimensions (WxHxD)	96 x 48 x 88.5 mm^2
Material	ABS, self-extinguishing: UL 94 V-0.
Mounting	Front panel.
Protection degree	Front: IP65 Connections: IP20
Weight	Approx. 195g

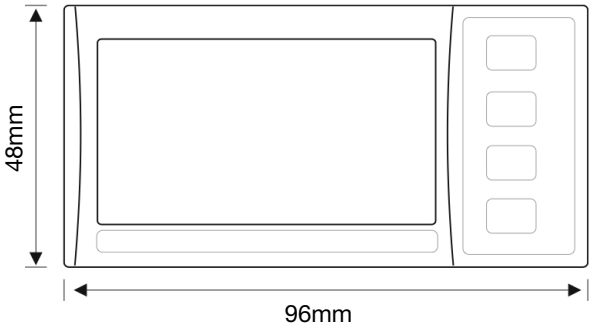
Operator Interface Functions

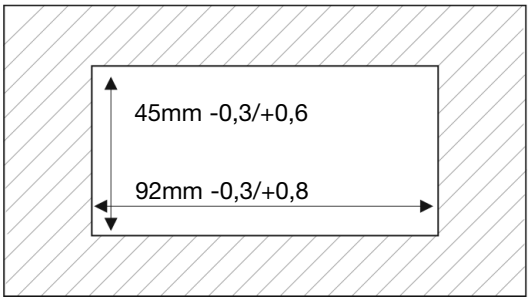
Displayed pages	Freely configurable pages with text (editable by user) and external variables values.
Front panel keys	Four programmable keys: to change the displayed page and control the virtual inputs of DMPU main module. (Take care, if profibus communication on DMPU main module is performed, not control the virtual inputs through DMPUC-HMI).

Alarms	Up to 32 alarms are available; these alarms are linked to DMPU main module virtual alarms. Every alarm can be displayed or ignored by DMPUC-HMI.
External variables	All variables from DMPU main module can be displayed and modified.
Data format	INT16, UINT16, INT32, UNIT32, IEE754 SP, ASCII.
Functions	Cycling reading, acyclic reading, cycling writing, variable scaling.

Dimensions







Max. allowed panel depth: 8mm

Accessories

Code	Description
DMPUC-PSHMI	DMPUC-HMI programming software (included with DMPUC-CPC or downloadable from the web).