

## Features & Benefits

- Automatic control for Heat Tracing and Freeze Protection
- Built-in MODBUS RTU interface to B.M.S. over RS485
- Integrated electronic controller with backlit LCD display
- Adjustable Temperature Set-point
- Multiple sensors input – optional
- Up to 30A & 120/240V outputs to the heaters load
- Integrated Ground Fault Sensor
- Adjustable Hold-On-OFF Delay and
- Optional Manual On override
- Technician testing / commissioning mode for easy and fast system test all year long (even during summer or at high temp)
- User friendly interface
- ETL certification



## Models:

- **FPC-02-MDB-120V** - Supports 30A heating loads at 120VAC
- **FPC-02-MDB-240V** - Supports 30A heating loads at 240VAC

## Description

The FPC-02-MDB is a "Plug and Play" heat-tracing control and monitoring system and a power panel for frost protection, Heat tracing, ice and snow melting applications.

When the temperature drops below the pre-defined adjustable set-points, it activates the contactor energizing the heating elements.

The Technician Settings mode allows installer or technician to adjust the parameters for customized installations using the electronic controller installed in the front panel or from the Building Management System host computer over the MODBUS RTU protocol.

The adjustable Hold-On timer, keeps the outputs to the heaters active to ensure complete freeze protection.

The Hold-On (Time delay) is adjustable in the range of 0 up to 99 hours.

The FPC-02 Built-in Ground Fault interruptor allows manual reset from the front panel

3 LEDs visible through the transparent plastic cover provides information about the status of the system.

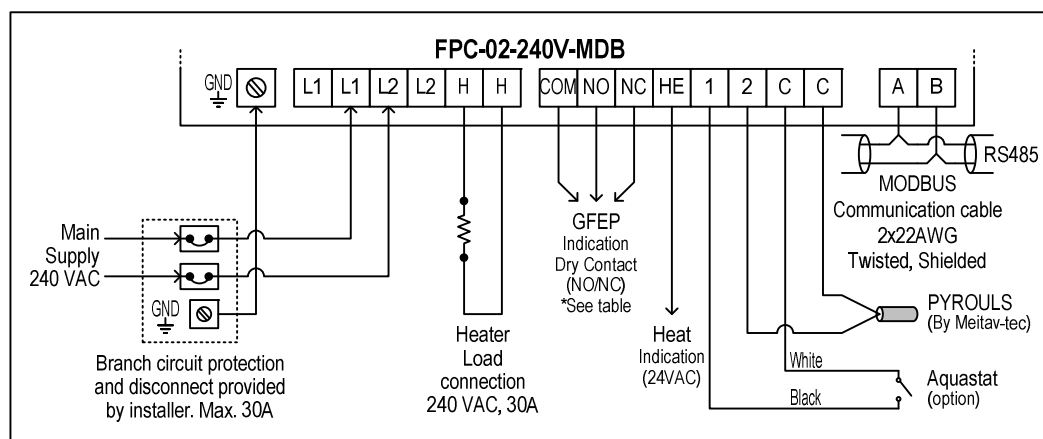
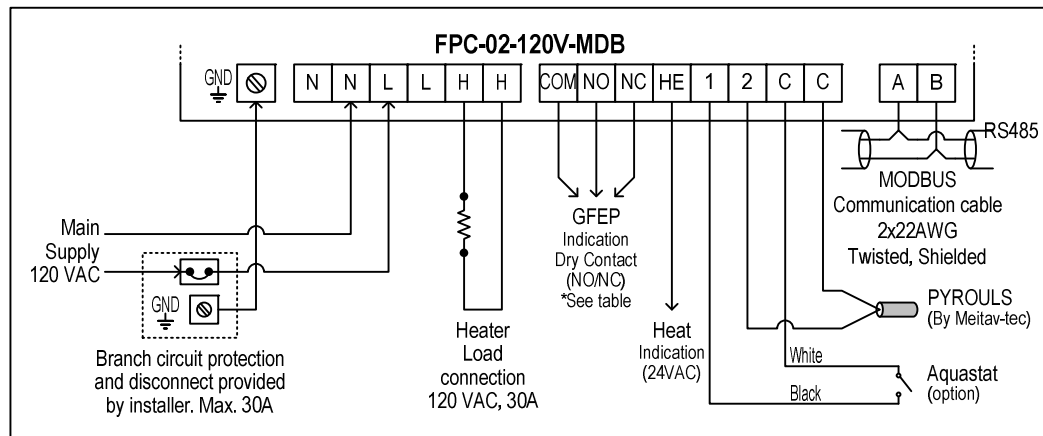
### ***The parameters that can be modified are as follow:***

- Temperature set-point
  - Lower ambient temperature limit to stop the heaters
  - Time delay (Hold-on) before deactivating the heaters
  - ON time for Manual mode
  - Enable/Disable 2nd temperature sensor logic (AquaStat)
  - Commissioning / Test mode
  - Restore defaults
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- DIP Switches located on the controllers provide easy access to technician mode and to the system configuration settings.
  - The FPC-02-MDB allows temperature input both from the provided temperature sensor (10 m. / 30 feet long) and also from a 3rd party aquastat.
  - Installing the system is a quick and easy task. Apart of mounting the box to the wall, the installer needs only to connect power lines and the low voltage temperature sensor wires in the marked terminals and the system is ready to work.

## Technical specifications

<b>Approvals</b>	ETL Listed CAN/CSA-C22.2 No. 14   UL-508A	<b>Manual Test GFEP</b>	Push button on Front Panel
<b>Enclosure Protection</b>	IP20, Indoor Mounting	<b>One Satellite Contactor</b>	277 VAC, 30 A Max (Resistive), 50/60 Hz, 1-Pole
<b>Dimensions</b>	8x12x5 inch (20x30x13 cm)	<b>High Voltage Terminal blocks</b>	6 mm <sup>2</sup> , 10 AWG (max)
<b>Ground Fault Equipment Protection (GFEP)</b>	Trip current 30mA	<b>Low Voltage Terminal blocks</b>	4 mm <sup>2</sup> , 12 AWG (max)

## Wiring diagram



For further information, operating & installation manual, please refer to our website at [www.meitavtecamerica.com](http://www.meitavtecamerica.com)

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Meitav-tec office or representative. Meitav-tec shall not be liable for damages resulting from misapplication or misuse of its products.

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