



**MURPHY**<sup>®</sup>  
by **ENOVATION CONTROLS**

# POWERCORE<sup>™</sup> MPC-20

## CONFIGURABLE, MULTIFUNCTION CONTROLLER FOR ELECTRONIC AND MECHANICAL ENGINES

- Auto and Manual Start with Various Throttling Options and Real-Time Clock
- Large, Easy-to-Read Display — Even in Full Sunlight
- Setpoint Alarm and Shutdown Control
- CAN J1939 Communications
- Easy-to-Use Configuration Software
- Tier 4/Stage IIIB/IV Ready



The Murphy PowerCore 20 Controller (MPC-20) features an out-of-the-box fully sealed industrial controller for various environments. This controller is powerful and full of easy-to-use features for most applications.

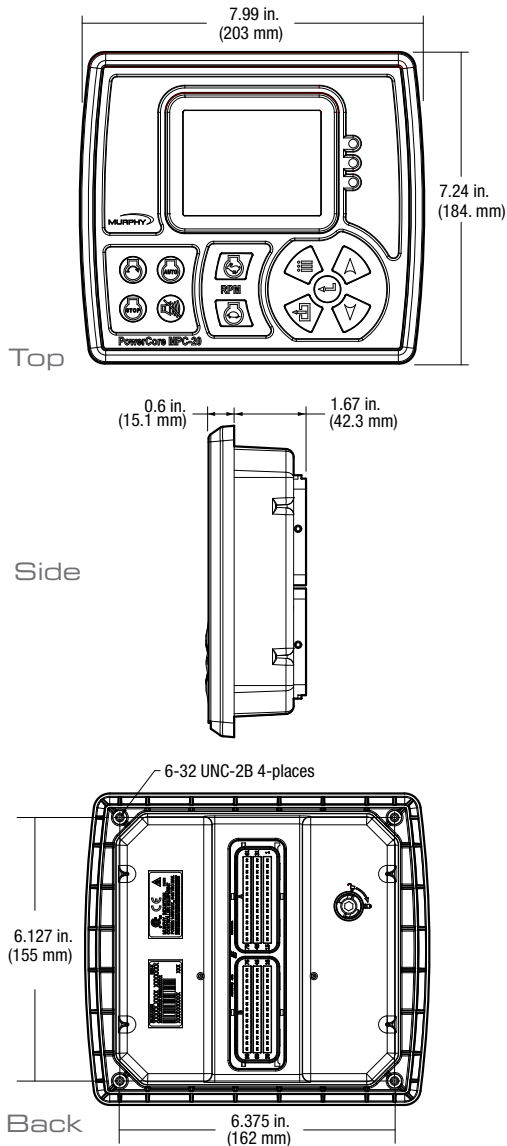
The MPC-20 has a large 3.8-inch [97 mm] QVGA Monochrome LCD. The controller is capable of handling sophisticated engine diagnostics whether installed on a mechanical or electronic engine.

The MPC-20 is targeted at pumping and irrigation applications but can be used and utilized in many other applications requiring an auto or manual start controller.

Customize and save default settings for specific applications with the user friendly configuration tool. See the specs on the back of this sheet for a full overview of the MPC-20 Controller.

# POWERCORE™ MPC-20

## STANDARD DIMENSIONS



## SPECIFICATIONS

- Display: 3.8" (97 mm) QVGA (320 x 240 pixels); monochrome transfective LCD with white LED backlight and heater
- Keypad: 11 Tactile Feedback Buttons with Silicon Pad
- LED: (3); Red Shutdown, Amber Warning, Green Auto Mode
- Inputs: (14) User Defined, (1) Dedicated (6) Digital (High/Low) (8) Analog (Resistive, 4-20mA, 0-5 VDC or Digital Low) (1) Frequency Input (2Hz -10KHz, 3.6-120VAC)
- Outputs: (13) User Defined (2) 1A Max Low-side (B-) FETs (2) 2A Max High-side (B+) FETs (2) 200mA Max 5VDC (1) 0-5VDC Analog (6) 10A Max Form C Relays
- Communications: CAN Bus: SAE J1939 Compliant RS485: Modbus RTU USB: Programming
- Connector: FCI, SICMA 90 way
- Shipping Weight: 2 lbs. 7.1 oz. (1.11 kg.)
- Shipping Dimensions: 9.5 x 9 x 5 in. (241 x 229 x 127 mm.)

## ENVIRONMENTAL SPECS:

- Operating Voltage: 8 to 32VDC
- Operating Temperature: -40°F to +185°F (-40°C to 85°C)
- Storage Temperature: -40°F to +185°F (-40°C to 85°C)
- Environmental Sealing: IP67 Complete Controller IP66 Panel Mount with Gasket (Min 14Ga Metal Plate)
- Relative Humidity: 90% RH @ 140°F (60°C) 70% RH @ 185°F (85°C)

## APPROVALS:



C US (Non-Hazardous Locations)

**ENOVATION CONTROLS CORPORATE HEADQUARTERS**  
5311 S 122ND EAST AVENUE  
TULSA, OK 74146

**ENOVATION CONTROLS – SAN ANTONIO OFFICE**  
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ROSENBERG, TX 77471

**ENOVATION CONTROLS LTD. – UNITED KINGDOM**  
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HANGZHOU, ZHEJIANG 310018 CHINA

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