Series 800
Municipal Engine Control Panels

- **Suitable for booster, well, and flood control applications**

- **Large 7" touch HMI with rich, full-color graphics and best-in-class sunlight readability ***

- **Single board design simplifies installation, maintenance and troubleshooting**

- **Wi-Fi or cellular modem capable, upon hardware module installation on S800 board**

- **Manual and auto start capable with various throttling options**

  * Larger displays available upon request

The introduction of the Series 800 controller marks a renewed dedication to our customers. The Series 800 is an all-purpose engine controller, designed to meet the needs of nearly every municipality. The controller is designed to be a municipal-specific control platform, and incorporates the necessary hardware to efficiently execute these projects.

The Series 800 control platform embodies the culmination of the experience we have gained over nearly 60 years in the control business. We enhanced the standard features, lowered the cost, increased the connectivity options, and increased the configurability by basing the controller on Linux, an open-source operating system.

The Series 800 benefits from a simplified modular design. We've reduced installation and maintenance costs, while greatly increasing the quality and reliability of the product. The Series 800's single board design eliminates the majority of factory wiring that is traditionally seen with PLC control panels, while retaining features such as true hardware interlocks for local and remote E-Stops. The Series 800 has the ability to withstand a wide ambient temperature range, comes standard in a NEMA 4 rated enclosure and has a HMI display that is view-able in extreme environments.

Many municipalities have an additional challenge outside of engine controls. An increasing number must meet or exceed a variety of engine emissions standards. Meeting these standards can be achieved by adding a plug-n-play FW Murphy Production Controls Air Fuel Ratio controller to the enclosure. AFR information is directly displayed on the existing Series 800 HMI display. Additionally, a Johnson Matthey emissions control solution including housing and elements may be required, based upon your emissions requirements.

- ONE CALL, PROBLEM SOLVED -

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SPECIFICATIONS:

Operating Voltage: 9-28 VDC, reverse polarity and load dump protected.
Operating Temperature: -40° to +85°C (-40° to 185°F)
Storage Temperature: -40° to +85°C (-40° to 185°F)

Total Current Consumption:
Power on, HMI active, in stopped state: 550 mA at 24 VDC.

Enclosure:
Hoffman CONCEPT™ NEMA 4 and 12, polycarbonate window, MurCal Red finish.

Communications:
(3) CANport
(2) RS485, Modbus RTU
(1) USB 2.0 type A
(1) Micro USB type A
(1) RJ-45 Ethernet Port, 100 Mbps
(1) Micro SD card slot
(1) Socket for a cellular modem or Wifi module

HMI:
Display: Touchscreen with bonded print/glare free glass and 7" color transmissive TFT LCD
Resolution: WVGA 800x480 pixels, 16 bit color
Viewing Angle: ±65° horizontal, +55° / -65° vertical

Outputs:
(14) Relays, 5A @ 24 VDC
(4) Sinking digital outputs, 0.5 A @ 24 VDC
(2) Sourcing digital outputs, 0.5 A @ 24 VDC
(2) Analog outputs, shunt configurable from 0-5 VDC and 4-20 mA

Inputs:
(26) Isolated Digital Inputs; 22 Sinking (GND=Active); 4 Sourcing
(11) Analog Inputs, shunt configurable from 0-5 VDC, 4-20 mA, and resistive sender
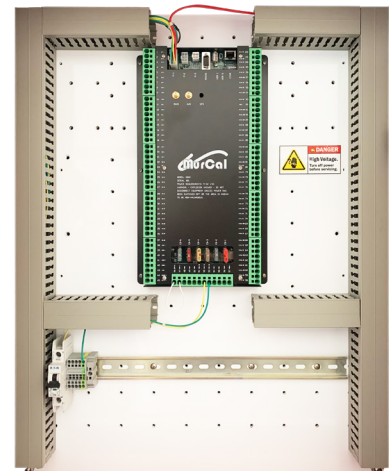(1) Frequency Input, magnetic pickup (30Hz – 10kHz, 2.0VAC – 120VAC)

Dimensions:
24.0 x 30.0 x 10.0 in. (609.6 x 762 x 254 mm) (W x H x D)
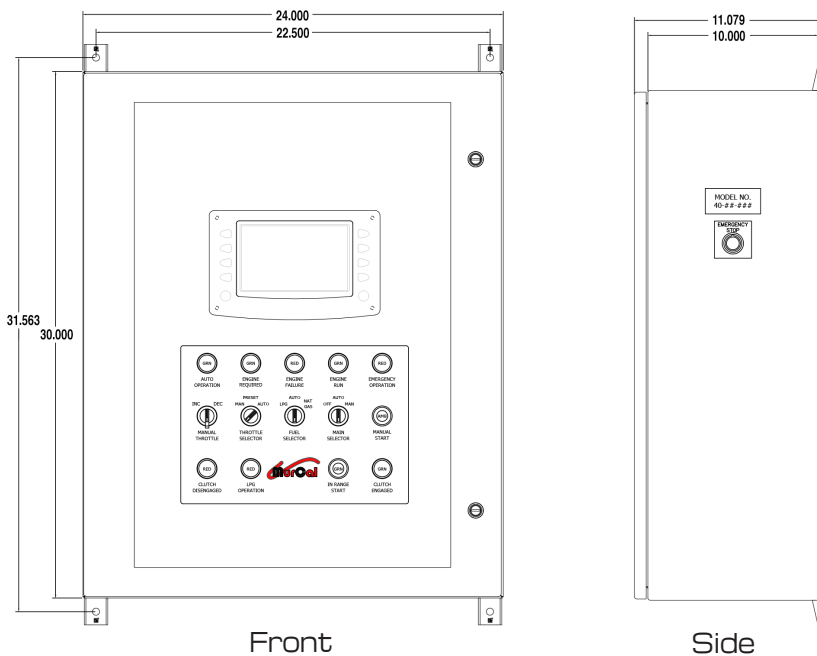
Languages:
English

INTERNAL PANELS

Main Board

STANDARD DIMENSIONS

Front

Side

Door Board

MurCal Inc.
41343 12th Street West
Palmdale, CA 93551
661-272-4700

sales@murcal.com

www.murcal.com

HOW TO ORDER:

Part Number	Model and Description
40 – 15 – 133	S800 Engine Controller
65 – 15 – 125	S800 Main Board
65 – 15 – 126	S800 Door Board
78 – 15 – 127	S800 HMI