

# **FEATURES:**

- Provides Auto-Start capability when you replace your factory CAT 7-13L panel
- For both Mechanical and Electronically governed engines
- Supports SAE J1939 CAN communications
- Built around the simple-toconfigure Murphy PowerCore<sup>®</sup> MPC-20 Controller
- Meets Tier 4 Final Compliance
- Add an optional telematics<sup>2</sup>. unit to automate or remotely monitor your engines





# MPC-20 AUTO-START REPLACEMENT PANEL





DO YOU OWN THIS PANEL?

WOULD YOU LIKE AUTO-START?

## ADD AUTO-START & TELEMATICS CAPABILITY

MurCal's CAT Retrofit Panel is a superior panel offering which includes the powerful, yet simple-to-configure MPC-20-R2 Controller. This fully sealed industrial controller, part of the Murphy PowerCore® family, gives CAT engine operators the ability to choose manual/auto start, manual/auto throttling options, and add a countdown timer or multiple start/stop times utilizing the internal clock.

Our Retrofit Panel replaces the CAT factory panel with minimum effort. Deutsch connectors and mounting inserts are exactly the same. If the default parameters set by MurCal are not desired, the operator has the ability to fully configure the software from the front user interface or change these settings with the optional <sup>1</sup> configuration tool.

This panel upgrade allows users to automate or remotely monitor their engines from a computer or mobile device using the optional<sup>2</sup>. Murphy CONNECT Plug-and-Play Telematics Unit. With this cloud-based dashboard, engine owners can control or schedule engine functions to reduce costs, establish alarms or warnings to prevent downtime, and optimize operational efficiency with intelligent analytics.

MurCal's CAT Retrofit Panel is capable of handling sophisticated engine diagnostics whether installed on the simplest mechanical engine or the most advanced, fully electronic Tier 4 engine supporting SAE J1939 CAN communications. The MPC-20's large 3.8-inch QVGA Monochrome LCD screen is viewable in full-sun conditions. The panel's input/output capabilities allow the operator to change the input type for the analog inputs, use additional analog inputs as digital ground inputs, assign functions and actions to digital inputs, and to use digital inputs as battery or ground inputs on 12VDC and 24VDC systems alike.

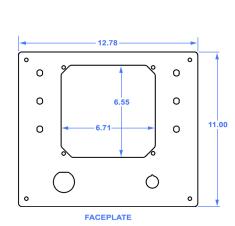
- 1. Optional Murphy PowerVision Configuration Studio<sup>™</sup> (78000752), sold separately.
- 2. Optional Murphy CONNECT Plug-and-Play Telematics Unit (40700525), sold separately.

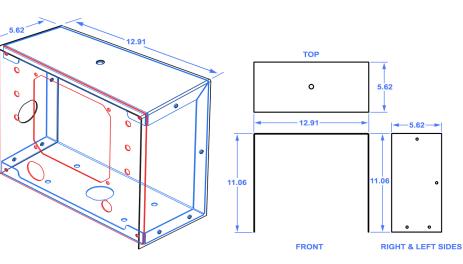
## CAT RETROFIT PANEL MPC-20 AUTO-START REPLACEMENT PANEL

11.06



## DIMENSIONS





#### **PRODUCT SPECIFICATIONS**

MPC-20 DISPLAY	
DISPLAY TYPE	3.8" (97mm) QVGA (320 x 240 pixels); monochrome transflective LCD with white LED backlight and heater
KEYPAD	Eleven (11) tactile feedback buttons with silicon pads
LED LIGHTS (3)	(1) red shutdown, (1) amber warning, (1) green auto mode
INPUTS: (14)	User Defined, (1) Dedicated
DIGITAL	Six (6) high / low
ANALOG	Eight (8) resistive, 4-20mA, 0-5 VDC or digital low
DEDICATED	One (1) frequency input, 2Hz-10KHz, 3.6-120VAC
OUTPUTS	
USER DEFINED	Two (2) 1A max low-side (B-) FETs
USER DEFINED	Two (2) 2A max high-side (B+) FETs
USER DEFINED	Two (2) 200mA max 5VDC
USER DEFINED	One (1) 0-5VDC analog
USER DEFINED	Six (6) 10A max form C relays
COMMUNICATIONS	
CAN BUS	SAE J1939 compliant
RS485	Modbus RTU
USB	Programming

SPECIFICATIONS AND DESIGNS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

CONNECTOR		
MPC-20	FCI, SICMA 90 way	
PANEL (SIDE)	Deutsch 31 pin	
PANEL (BOTTOM)	Deutsch 21 pin	
PANEL (FACEPLATE)	Deutsch 9 pin	
FACEPLATE	EEATURES	
SWITCHES	Three (3) way selector switch (On, Off, Override)	
CIRCUIT BREAKERS	One (1) 10A, Four (4) 15A, One (1) 60A,	
ENVIRONMENTAL SPECS		
OPERATING VOLTAGE	8 to 32VDC	
OPERATING TEMP.	-40°F to +185°F (-40°C to +85°C)	
STORAGE TEMP.	-40°F to +185°F (-40°C to +85°C)	
ENVIRON, SEALING	IP67: complete controller	
	IP66: panel mount with gasket	
DIMENSIONS	& WEIGHTS	
PANEL DIMENSIONS	12.91"(328mm) W x 11.06"(281mm) H x 5.62"(143mm) D	
PANEL WEIGHT	16 pounds (7.26 kilos)	
SHIP. DIMENSIONS	14.0"(356mm) W x 10.0"(254mm) H x 14.0"(356mm) D	
SHIPPING WEIGHT	17.5 pounds (7.94 kilos )	

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

### HOW TO ORDER

40-19-037 CAT C9.3 - C18 MPC-20 Retrofit Enclosure

40-19-XXX Optional USB Thumb Drive and Programming Harness

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