

Product Manual

Generator Control Panel Mechanical Engines

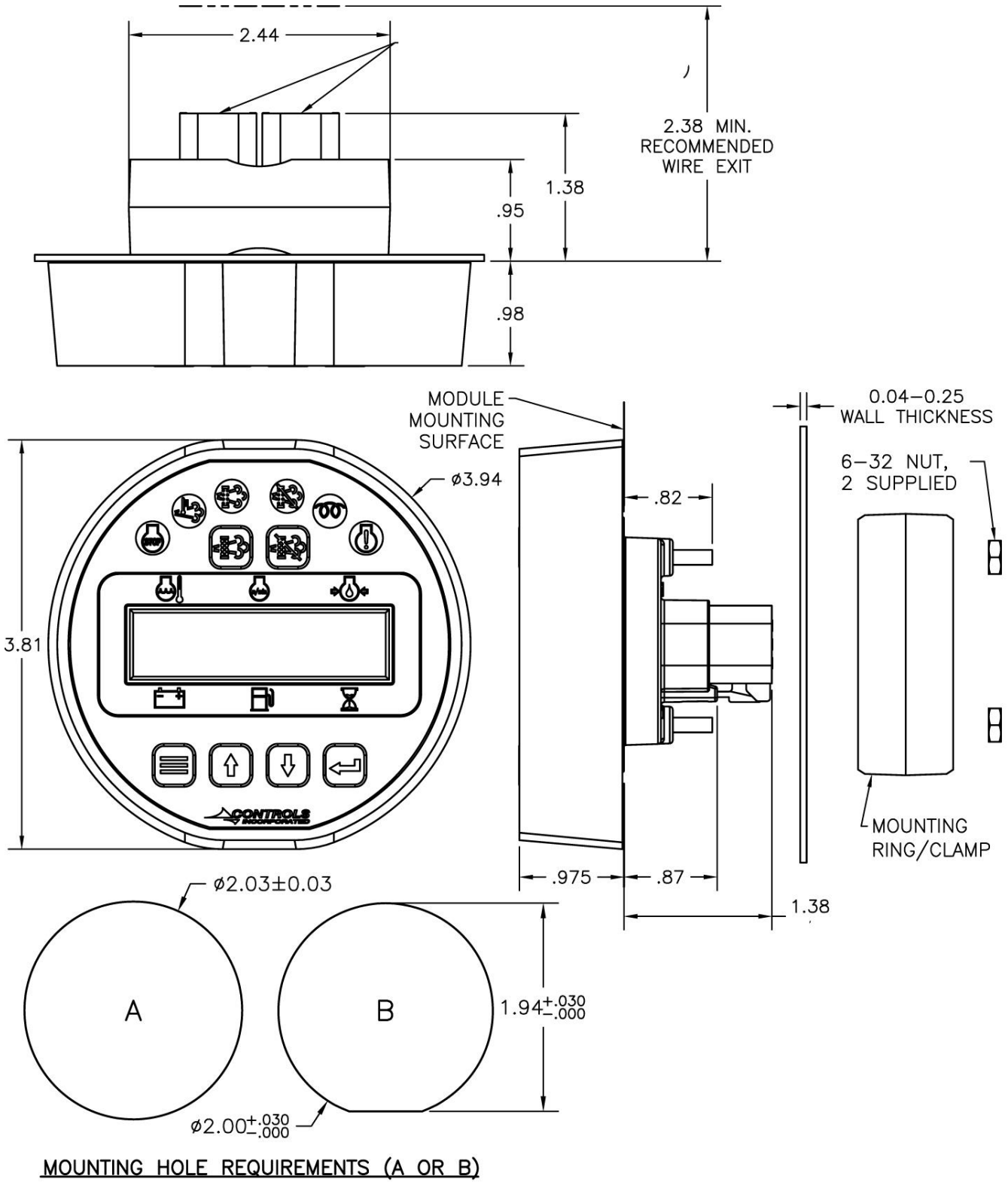


Part Number: ASM-25
Revision: 1.0

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INSTALLATION INFORMATION



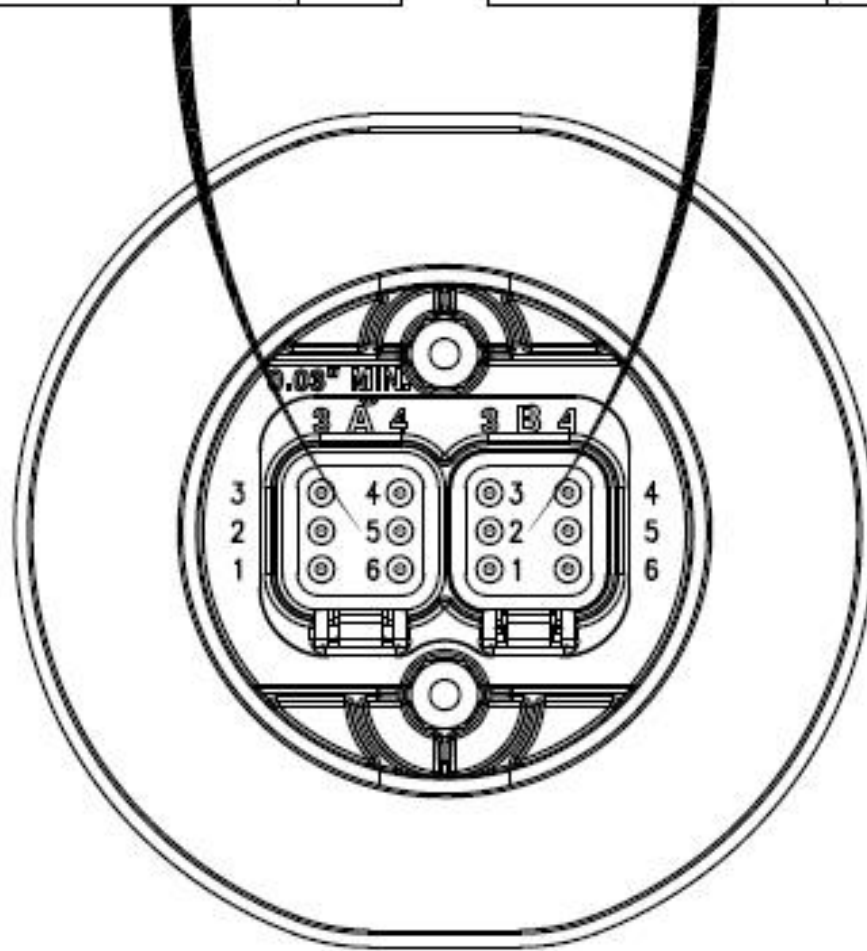
MODULE CONNECTOR INFORMATION

CONNECTOR A

FUNCTION	PIN
BATTERY +	1
N/A	2
N/A	3
SPEED INPUT	4
FUEL LEVEL INPUT	5
BATTERY -	6

CONNECTOR B

FUNCTION	PIN
AUTO START	1
FUEL/RUN	2
COOLANT TEMP	3
OIL PRESS INPUT	4
PREHEAT	5
CRANK	6



CONTROL PANEL SPECIFIC ALARMS AND SHUT DOWNS

The panel has its own engine safety alarms and shut downs that can be enabled. These alarms and shut downs are managed by the control panel. The available options are listed below and can be accessed via the Engine Safety Configuration menu.

Each alarm must be enabled in the Engine Safety Configuration menu to activate.

Heading	Default	Range	Units
Sender Check Bypass	0:10	0:05 – 1:00	Min:Sec
Fuel Level Check	Off	Off / Always / Run	
Low Fuel Pre Alarm	20	0 - 100	%
Low Fuel Alarm	1	0 - 100	%
Fuel Alarm Delay	0:05	0:01 – 1:40	Sec
Oil Pressure Check	Run	Off / Always / Run	
Oil Press Alarm Delay	0:00	0:01 – 1:40	Sec
Temperature Check	Run	Off / Always / Run	
Temp Alarm Delay	0:00	0:01 – 1:40	Min:Sec
Battery Volts Check	Off	Off / Always / Run	
Low Battery Pre Alarm	12.0	0.0 – 40.0	Volts
Hi Battery Pre Alarm	15.0	0.0 – 40.0	Volts

- 1) Off / Always / Run – Describes when the parameter will be monitored for alarm conditions. Run refers to when the engine is running. Off disables the alarm conditions. Always enables the alarm constantly regardless of engine state.
- 2) Alarm Delay – The time period, after Sender Check Bypass, that the parameter must be on the alarm condition before the alarm becomes latched.

Indicator Lamps

Engine
Fault
Lamp

Engine
Alarm
Lamp



CONTROL PANEL DIGITAL INPUTS AND OUTPUTS

The panel has one analog input and up to one digital input available to monitor other components, senders or signals. These inputs can be used for a number of purposes including alarms and shut downs.

Input	Heading	Default	Options	Connector	Pin
Digital B1	Action	Auto Start	N/O	B	1

Output	Heading	Default	Options	Connector	Pin
Digital B2	Function	Fuel/Run			
	Polarity	Positive			
	Initial State	On			
Digital B5	Function	Preheat			
	Polarity	Positive			
	Initial State	Off			
Digital B6	Function	Crank			
	Polarity	Positive			
	Initial State	Off			

Digital Outputs

- 1) Alarm – Engine shutdown when active with display message as assigned. A red lamp will also be illuminated.
- 2) Pre Alarm – Warning message will be displayed along with a yellow lamp when active.
- 3) Pre Alarm & Alarm - Energizes an external audible alarm when a pre alarm or alarm condition is present. Pressing the ENTER button will silence.
- 4) Alarm Horn - Energizes an external audible alarm when an alarm condition is present. Pressing the ENTER button will silence.
- 5) Engine Run - Relay will be active when engine RPM is greater than 600. Typically used to drive an auxiliary circuit such as louvers or send a signal to a monitoring station.
- 6) Low Oil Press Alarm - Relay closes if a low oil pressure shutdown is detected.
- 7) High Coolant Temp Alarm - Relay closes if a high engine temperature shutdown is detected.
- 8) Over Speed Alarm - Relay closes if an over speed shutdown is detected.
- 9) Over Crank Alarm - Relay closes if an over crank alarm is detected.
- 10) Low Fuel Level Alarm - Relay closes if a low fuel level shutdown is detected.

- 11) Fuel / Run - Relay will be active during an engine start request and while the engine is running.
- 12) Custom 1 - Reserved for OEM applications.
- 13) Preheat - Relay will be active during programmed preheat period. Used to drive a preheat relay.

Digital Function Activation

- 1) Off / Always / Run – Describes when the parameter will be monitored for alarm conditions. Run refers to when the engine is running. Off disables the alarm conditions. Always enables the alarm constantly regardless of engine state.
- 2) Alarm Delay – The time period, after Sender Check Bypass, that the parameter must be on the alarm condition before the alarm becomes latched.

MENU SYSTEM

To Enter Menu System

Hold MENU button and press ENTER button.

Menu Navigation

Press MENU button to scroll menu options.

Press UP arrow button to enter menu.

Press DOWN arrow button to reverse.

Exit Menu System

Hold MENU button and press ENTER button.

To Change a Setting

Press ENTER button to bring up brackets [].

Press UP arrow button and DOWN arrow button to change setting.

Press ENTER button to make selection, brackets disappear.

Recycle key to the OFF position after changing a setting.

Main Menu

Main Menu	Sub Menu	
Operations Log	View Last 32 Events (Start, Stop, Alarms)	} Viewing Menu
Module Information	Control Unit Part# View	
	Control Unit Software Version View	
Controller Setup (PASSWORD PROTECTED)	Parameter Configuration	(1) rowspan="7" style="vertical-align: middle; text-align: center;">} Configuration Menu
	Input Configuration	(2)
	Output Configuration	(3)
	Engine Safety Configuration	(4)
	Module Configuration	(5)
	CAN Configuration	(6)
	Auto Start Configuration	(7)

To access the controller setup menus, a password is required. The password is 4345.

Configuration Menus

(1)	Parameter Configuration	Parameter	Selection	Default Settings
		Speed	Flywheel Teeth	30
			Auto Set Teeth	No
		Fuel Level	Fuel level Source	0-90 Ohm
			Fuel Sender	S-W,
			Fuel Channel	Primary Connector Pin 13
		Voltage	Voltage Source	Battery -J1939
			Battery Trim (Internal	
		Hour Meter	Hour Meter Source	Engine ECU
		Set Hours (Internal		
(2)	Input Configuration	Digital B1 Action Auto Start		
(3)	Output Configuration	Digital B2 Function (Default = Fuel/Run)		
		Digital B2 Polarity (Default = Positive)		
		Digital B2 Initial State (Default = On)		
		Digital B5 Function (Default = Preheat)		
		Digital B5 Polarity (Default = Positive)		
		Digital B5 Initial State (Default = Off)		
		Digital B6 Function (Default = Crank)		
		Digital B6 Polarity (Default = Positive)		
		Digital B6 Initial State (Default = Off)		
(4)	Engine Safety Configuration	Sender Check Bypass		
		Fuel Level Check		
		Low Fuel Pre Alarm		
		Low Fuel Alarm		
		Fuel Alarm Delay		
		Oil Pressure Check		
		Oil Pressure Alarm Delay		
		Temperature Check		
		Temperature Alarm Delay		
		Battery Voltage Check		
		Low Battery Pre Alarm		
		High Battery Pre Alarm		

(5) Module Configuration	Low Power Mode
	Clear Alarm Log
(6) CAN Configuration	Source Address (Default = 44)
	Speed Transmit (Default = Off)
	Fuel Level Transmit (Default = Off)
	Voltage Transmit (Default = Off)
	Hours Transmit (Default = Off)
	Fault Transmit (Default = All)
(7) Auto Start Configuration	Auto Start Delay (Default = 0:00)
	Preheat Time (Default = 0:00)
	Crank Time (Default = 0:10)
	Rest Time (Default = 0:10)
	Crank Cycles (Default = 5)
	Fault Bypass (Default = 0:10)
	Crank Hold Delay (Default = 0 TSec)