# M154B<sub>series</sub>

# **Yanmar T4F Control Panel**

# For TNV Series Engines

#### **DESCRIPTION**

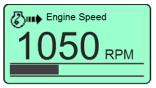
The M154B10-Y20 Series Control Panels are specifically designed for operation with Yanmar T4i and T4F Engines equipped with DPF or DPF SCR with DEF. With a family of configurations ranging from a panel mount with and without an enclosure and a NEMA 4X enclosure virtually any installation can be met. If a panel or enclosure is not required the M154B series offers a kit containing all necessary parts that can be mounted in a customer specific panel design.

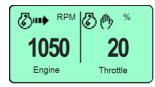
With a full featured J1939 interface the M154B series panels provide a complete interface for virtually any SAE J1939 T4F data. The M154B provides the most features in the price range.



# **DISPLAY**

The 2.3" Graphical high resolution LCD Display provides an easy to read viewing area for either a single or dual display of virtually any data reported by the ECU.





Single Display

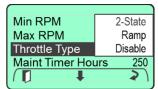
**Dual Display** 

#### THROTTLE CONTROL

A single momentary rocker switch adjusts the engine speed via CANBus communications to the engine. The throttle functionality is user selectable allowing the rocker switch to provide a smooth ramp function or a fixed rpm 2-State setting.







# **STANDARD**

2.3" Monochrome Graphical LCD display

 $1050\,\mathrm{\scriptscriptstyle RPM}$ 

- Adjustable backlighting
- 3 buttons provide easy navigation through software screens
- · Tier 4, 4i and 4F Ready
- · Engine Maintenance Timer
- · User configurable engine speed limits
- · Visual alarms
- SAE J1939 configurable throttle control
- SAE J1939 standard Diagnostics
- Engine Manufacturer Specific Diagnostics
- Inc/Dec or 2-State throttle switch

# **OPTIONAL M300DP MODULE**

- Auto Start
- Configurable input for oil pressure (Analog or CANBus)
- Configurable input for fuel level (Analog or CANBus)
- 2 configurable discrete inputs ( start protect, Engine Stop, Engine speed)
- · External engine shutdown

# **MECHANICAL**

- · Sealed Keyswitch 4 Position
- · Throttle Switch
- CE Approved design
- · Sealed 21 pin Interface connector
- 8 X 7 Black powder-coated enclosure or Flat Panel



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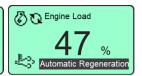
#### **DPF REGENERATION CONTROL**

The M154B supports all four Yanmar T4F engines DPF Regeneration states; Auto or Reset, Manual, Stationary and Recovery. Under normal operating conditions, Reset Regens are performed automatically. For Manual, Stationary and Recovery regens, the M154B Y20 Series panels provides user friendly on screen instructions.

Standard icons inform the operator of the regeneration status







# **CONFIGURABLE ENGINE SPEED LIMITS**

The M154B Series Control Kit provides the user with two configurable engine speed settings. These speed settings can be set to any engine rpm within the min and max rpm range of the engine. One speed setting for minimum engine speed (i.e. Min RPM) and the other speed setting for maximum engine speed (i.e. engine Max RPM).

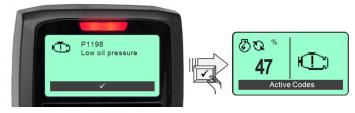






#### **FAULTS**

The M154B displays diagnostic messages from the ECU per J1939 format. All DM1, DM2, DM12 and DM23 diagnostic messages from the Engine ECU are reported. Engine specific diagnostics messages are available for specified engines. Faults are indicated with a Red blinking indicator.



### **DB VIEWER**

The Db Viewer feature provides a listing of all data supported by the M154B System and the operator may select which values to be viewed.

#### **MAINTENANCE TIMER**

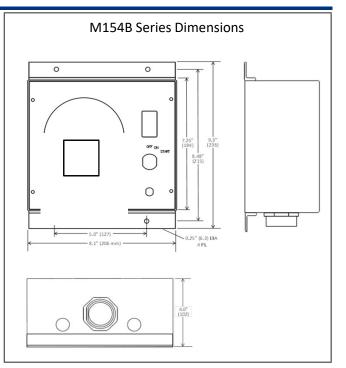
User configurable maintenance timer. When programmed, system provides warning message when maintenance timer has expired.

#### **ENCLOSURE**

All M154B Series Control Panels are made from .074 steel with welded seams. All units are powder coated to provide durability under extreme conditions.

# **CONNECTOR**

A water tight 21-pin connector is used for plug-in installation.



# **M154B SPECIFICATIONS**

#### **GENERAL**

Operating Voltage	10.5 VDC to 18 VDC
Operating Temperature	20C to 70C
Storage Temperature	30C to 85C
Reverse Polarity Protection	Yes
Power Consumption L15-00 / 50	400mA
Power Consumption GE / VE Series	90mA

# THROTTLE CONFIGURATION

Ramp - operate within engine range Two State – Set two operating speeds

## **OPTIONAL EXPANSION MODULE**

The M300DP Dual Programmable I/O control expands the M154B capabilities with 2 additional analog inputs for Oil Pressure, Fuel or Water Level and 2 additional discrete inputs for remotely controlling engine speed.

# **INPUTS with M300DP /AS OPTION**

- Configurable for Fuel Level:
  - 240 to 33 ohms (US)
  - 10 to 180 ohms (EURO)
- · Configurable for Oil Pressure:
  - 10 to 180 ohms (0 5 BAR)
  - 10 to 180 ohms (0-10 BAR)

Digital Inputs ...... 2 Configurable Mode, Active State and On Delay and Off Delay

Part Number	Description	Option
M154B00-Y2017	CP; Eng Ctrl, J1939, Kit of Parts	/AS
M154B01-Y2017	CP; Eng Ctrl, J1939, 8 X 6 NEMA Panel	/AS
M154B02-Y2017	CP; Eng Ctrl, J1939, 8 X 7 Black Panel	/AS
M154B10-Y2017	CP; Eng Ctrl, J1939, 8 X 7 Black Enclosure	/AS
M154B20-Y2017	CP; Eng Ctrl, J1939, NEMA 4X Enclosure	/AS

MN10078-00