

# NAVITEK ELECTRONICS

## DESCRIPTION

The model TD400 is an Automatic Engine Control Module. The module is used to automatically start and stop engine, indicating the operational status and fault conditions, automatically shutting down the engine and indicating the engine failure by means of an LCD display and an appropriate flashing LED on the front panel. Selected timers and alarms can be altered by the customer from the front panel.

### Easy pushbutton control.

Operation of the module is via pushbutton controls (with security locking facility) mounted on the front panel with **STOP**, **MANUAL**, **AUTO** and **START** pushbuttons. The first three pushbuttons feature LED “selected” indications. Further pushbuttons provide LCD DISPLAY SCROLL functions.

### Microprocessor control.

The module features 16 Bit microprocessor control and a comprehensive list of timers and pre-configured sequences. This allows demanding specifications to be achieved. Configurable expansion facilities are also provided.

### Metering.

The TD500 module provides metering via the LCD display this the following instrumentation displays, accessed via the LCD DISPLAY SCROLL push-buttons:

- Generator Volts, amps, Frequency: L1-N, L1, Hz
- Generator Volts L1-N, L2-N, L3-N
- Generator Volts L1-L2, L2-L3, L3-L1
- Generator amps L1, L2, L3
- Generator Frequency Hz
- Engine Oil Pressure
- Fuel Level %
- Engine Temperature
- Plant battery Volts
- Engine Hours Run

### Digital input

The module accepts the following digital inputs:

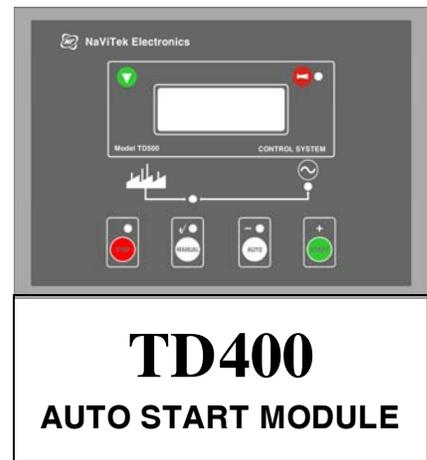
Emergency stop input-A N/C DC positive input.

Fully configurable warning or shutdown input.

With the exception of the Emergency Stop Input, these are configurable to be either N/C or N/O contacts connected to the –Ve DC.

The 2 fully configurable auxiliary inputs can be selected to be indication, warning or shutdown input either immediate or held off during start up to allow for use as protection expansion inputs.

Alternatively they may be configured to control extra functions such as Remote start input, and any others- refer to appropriate manuals for details.



**Analog input.**

Provided for Oil Pressure, Engine temperature and Fuel Level. These connect to conventional engine mounted resistive sender units (such as VDO or Datcon Type) to provide accurate monitoring and protection facilities. Alternatively they can be configured to interface with digital switch type inputs for Low Oil Pressure and High Engine Temperature shutdowns. Fuel Level alarm.

**Relay outputs.**

Provided for Fuel Solenoid Output, Start Output and configurable outputs.

The configurable relay functions can be selected from a range of different functions, conditions or alarms. The relay supply positive plant supply out refer to appropriate manuals for details.

**Multiple alarm channels**

Provided to monitor the following:

- Under/Over Generator Volts
- Over current
- Under/Over Generator Frequency
- Charge Fail
- Emergency Stop
- Low Oil Pressure
- High Engine Temperature
- Fail to Stop
- Fail to Start
- Low DC battery Volts
- Loss of speed sensing signal

**DC supply:**

11 to 35V continuous.

**Cranking Dropouts:**

Able to survive 0V for 50mS, providing supply was at least 10V before dropout and supply recovers to 5V. This is achieved without the need for internal batteries.

**Max. Operating Current:** 425mA at 12V and 215mA at 24V.

**Alternator input Range:** 75V (ph-N) to 277V (ph-N) AC (+20%)

**Alternator Input Frequency:** 50-60 Hz at rated engine speed (minimum 25V AC (ph-N))

**Start Relay Output:** 10Amp. DC at supply voltage.

**Fuel Relay Output:** 10Amp. DC at supply voltage.

**Auxiliary Relay Outputs:** 7 Amp. DC at supply voltage.

**Dimensions:** 240mm X 172mm X 75mm

**charge Fail:** 0V to 35V

**Operating Temperature Range:** 0 to +70°C

**NHÀ PHÂN PHỐI CHÍNH THỨC:**

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