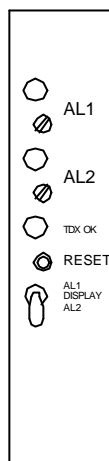




MTN/6140 Series

Displacement/Vibration module

- Eddy Current Driver Input
- Two Adjustable Alarms
- Transducer Integrity
- 4-20 mA Output
- OEM
- Low Cost Monitor



The MTN/6140 Displacement Module operates in the MTN/6000 system with an Eddy Current Driver and probe to enable continuous monitoring of shaft displacement in pump/motor systems. It can be used in the same rack as the MTN/6100 Vibration Module to give a comprehensive indication of machine condition.

The module provides outputs to the MTN/6200 Display Module for displacement display and 0-10V and 4-20mA output signals proportional to displacement are provided for PLC interface.

A fixed Transducer Integrity alarm and two pre-settable displacement alarm circuits operate local panel indicators and relay contacts for remote alarm functions. The displacement alarms can be set for either latching or non-latching modes and a facility for remote alarm inhibit and remote alarm reset is also provided.

MTN/6140 Modules are available to display either shaft radial displacement (AC vibration) or axial thrust (DC gap) which must be specified at time of order. The axial thrust version has a bipolar alarm facility, which allows alarms to be set in positive and negative directions.

Standard Configurations are as follows:

MTN/6140/1 – Radial Displacement 0-200µm peak-to-peak.

MTN/6140/2 – Unipolar gap 0-2mm

MTN/6140/3 – Bi-polar gap ±1mm

The alarm functions are set:-
TDX OK - LED & relay non-latching, normally closed.
AL1 & AL2 - LEDs & relays latching, normally closed.

Technical Specification

Input	From Eddy Current Probe & Driver, ie MTN/EP080 or MTN/EP200, to be specified.
Range	0 to 5mm (dependent on probe)
Outputs	To MTN/6200 display scaled in mm Buffered output to MTN/6200 via panel BNC -5 Volts for FRO 0-10V to MTN/6000 rear terminals 4-20mA to MTN/600 rear terminals
Display Resolution	0.1mm
Accuracy	± 2.5%
Alarms	Transducer Integrity (TDX OK) checks ECPD output level. LED extinguishes when a transducer or cabling fault occurs and outputs are inhibited if this state exists. AL1 and AL2 alarm levels adjustable over full range via front panel potentiometer and 3-position switch. Warning LEDs illuminate when preset levels exceeded. Bipolar version allows positive and negative alarm levels. Alarm level monitor to display or to 0-10V output selectable via link. All three alarms have normally energized (fail safe) relays, which de-energise on alarm. Relay contacts selectable N/O or N/C via links. Relay & LEDs non-latching selectable via links. Relay & LEDs latching selectable via links. LEDs latching and relays non-latching selectable via links. Latch reset via local panel switch Alarm relay rating 240V AC, 1A AL1 & AL2 Alarm delay adjustable 5 – 45sec. Via potentiometer on axial vibration module. Remote alarm reset by external momentary switch connected to MTN/6000 rear terminals. Remote alarm inhibit (opto-isolated) by application of 5 to 24V DC to MTN/6000 rear terminals.
Construction	Eurocard, 100mm x 160mm with 64 pin DIN41612 edge connector
Operating	0 to 70°C