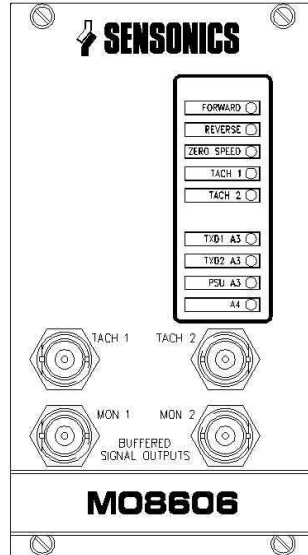


SENTRY SYSTEM



MO8606 – REVERSE ROTATION MODULE



- 2 EDDY CURRENT PROBE INPUTS.
- MODULAR, RACK MOUNTED.
- INDEPENDENT MICROPROCESSOR.
- PROGRAMMABLE SET UP VIA RS232
- INDEPENDENT POWER SUPPLY.
- HIGH VISIBILITY LED DISPLAY.
- 4 ALARM RELAYS PER MODULE.
- RECORDER/SERIAL OUTPUTS.
- DESIGNED TO MEET API 670.

The Sensonics MO8606 Module is one of the SENTRY series microprocessor based signal conditioning units that is used to measure shaft reverse rotation by means of an eddy current probe and a toothed target wheel fitted to a turbine shaft. The modules in the SENTRY series are designed to be housed in the Sensonics RA8600 series 19 inch 3U extended eurocard rack system. The signal conditioning unit is fitted with alarm indications and additional Tach and Mon front panel buffered outputs.

The signal input to the module is a series of pulses per revolution derived from both Eddy Current Probes looking at the target wheel on the shaft of the machine being monitored. These pulses will normally be voltage pulses produced from 2off Sensonics eddy current probes mounted on the machine at right angles to the shaft axis and in proximity to the target wheel. Associated EC driver units provide the signal output to the reverse rotation module, the latter supplying -24V dc power to the driver unit. The module has an adjustable or self-tracking threshold level through which the input signal pulses must pass to produce a trigger.

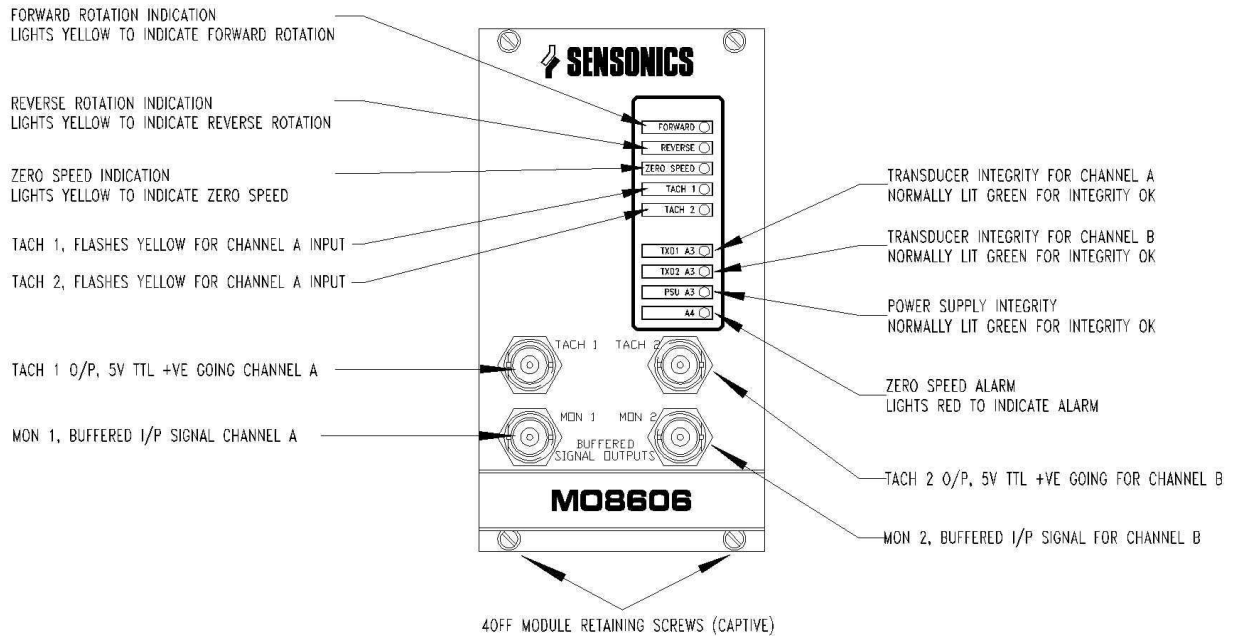
The module calculates the position and time between both probe pulses to establish the direction of shaft rotation. During normal operation the FORWARD LED on the front panel will illuminate, which shows that the shaft is in correct direction of rotation. The module is also fitted with a ZERO SPEED indication and alarm O/P. If the shaft starts to turn in the wrong direction, the module will sense it and can operate a set of alarm contacts to trip the machine if necessary. The REVERSE LED will also illuminate.

The module also has a transducer and system integrity alarm and relay fitted, with an internal microprocessor watchdog. The 'MON' BNC connectors mounted on the front panel are to provide information on the input signals. The signal level is the 'raw' input voltage direct from the module signal input from the transducer. The output is buffered and therefore an accidental overload or a short circuit will not affect the integrity of the module. The 'TACH' BNC connectors at the front panel provide the conditioned tacho signals as seen by the microprocessor.

SENTRY SYSTEM

MO8606 – REVERSE ROTATION MODULE

Front Panel Facilities and Functions



SPECIFICATION

Input

Transducer Type	Eddy current probe system
Sensitivity	100mV/ thou or 200mV/ thou
Power Supply	110V or 240V AC 50-60 Hz or DC 24Vdc also available (Must be used with PS8606 power supply)
Operating temperature range	0°C to 50°C

Output

Meter accuracy	+/- 5% of true value
Recorder outputs	Up to 6 voltage or current outputs per module plus serial RS485
Relays	4 alarm relays per module as standard A1 and A2 – Forward & Reverse rotation alarms A3 - Channel integrity alarm A4 – Zero speed alarm
Buffered transducer output	BNC connectors on front of panel
Tach signal (TTL)	BNC connectors on front of panel, and rear of rack.

Dimensions

Height	128.8mm (3U)
Width	70.7mm (14HP)

DS1036



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