TIDESMARINE
Australasia/Pacific

SMART SEAL TEMPERATURE ALARM SYSTEM
Generation 2

NOW INCLUDES A 3-YEAR EXTENDED PRODUCT WARRANTY!

Temperature monitoring technology for the Tides Marine SureSeal ™ propeller shaft seal system.

www.tidesmarine.com.au

The SMART SEAL Temperature Alarm System

Tides Marine and Pros by Ditel have upgraded the Smart Seal Temperature Monitoring System: The Generation 2 unit is now available.

Smart Seal is an overheat warning system that uses solid state sensors to monitor the operating temperature of Tides Marine's American Bureau of Shipping-certified propeller shaft seal systems found on many commercial and pleasure craft.

Any increase in the normal operating temperature of the shaft seal installation will trigger an audible and visual alarm, allowing maintenance to be carried out before damage to the seal head results.

Smart Seal Generation 2 incorporates a new flush mount control panel with dedicated versions for single and twin-engine configurations, and has a quick-connect wiring system for both unit power and temperature sensors. Fitting the Smart Seal is a straightforward installation.

The control panel accepts a 12V or 24V DC power supply and has a self-diagnostic facility on power-up to ensure that the system is functioning correctly.

SMART SEAL works with both new builds and retro-fit markets.

Smart Seal FEATURES	Smart Seal BENEFITS
Provides early warning of overheating.	• SMART SEAL detects excessive increases in water temperature within the shaft seal or forward part of the stern tube. • Any interruption to the cooling water supply or the stern tube being blocked will cause the alarm to sound.
Low maintenance.	• Solid state sensor with no moving parts—mounts to water injection fitting on SureSeal™ unit. • Control panel has self-diagnostic test on power-up. • Standard Tides Marine SureSeal™ warranty is extended by an additional 3 years.
Easy to install.	• Control panel is flush-designed to offer engine room or helm station mounting options. • Dedicated panel for single or twin engine installations. • Sensors pre-wired with 10 metres of heat-resistant cable, allowing convenient control panel location. Optional 10-metre extension cables available when required. • Optional remote panel designed for mounting at helm or fly bridge locations.
Compatibility.	• Control module has output for optional remote siren or for connection to on-board warning/alarm system. • Suitable for 12V and 24V DC operation. • Can be retro-fitted to any Tides Marine SureSeal™ unit already in service.
Simple operation.	• Green 'OK' light to confirm that the system is functioning correctly. • Control module identifies which shaft seal is starting to overheat. • "RESET' button to cancel alarm events. • Memory re-activates alarm after power interruption.

- **1 x control panel**
- **1 sensor supplied with single engine system - 2 sensors supplied with twin engine systems**

Operation

When connecting the control panel to a 12/24 volt DC supply, an automatic self-diagnostic test takes place. The green 'OK' LED will illuminate if the system is functioning correctly. If the unit detects a failure in a sensor, both the green LED and the faulty sensor's red LED will flash and the buzzer will sound.

Once the automatic test is complete and the green 'OK' LED remains lit, the control panel will start to read the temperature measured by the sensor(s). If the control panel detects a temperature in excess of the predetermined value (default setting 60°C), the green 'OK' LED will go out, the red LED will flash with the internal buzzer and the optional external siren which signals the overheat situation will sound. The RESET button allows the operator to deactivate these signals. NOTE: The alarm will sound again after 15 minutes if the temperature has not lowered and the problem has not been corrected.

If the temperature continues to rise and reaches 80°C, the overheating sensor's red LED will illuminate. Also, the control panel's internal buzzer and external siren (where fitted) will emit a continuous, audible signal.

Installation:

The control panel must be attached to a flat surface, in a clean, dry area using the screws provided. The sensors come with a standard 10mtr cable, with optional 10mtr extension cables available.

Technical Characteristics:

Supply: **12V DC or 24V DC**

Temperature sensor: **PT1000**

Temperature activation of alarm: **60°C ± 1°C**

Temperature activation of second alarm: **80°C ± 2°C**

Output optional siren: **I max = 0.3A**

Optional external siren: **V = 12V or 24V**

Output LED remote panel: **I max = 0.3A**
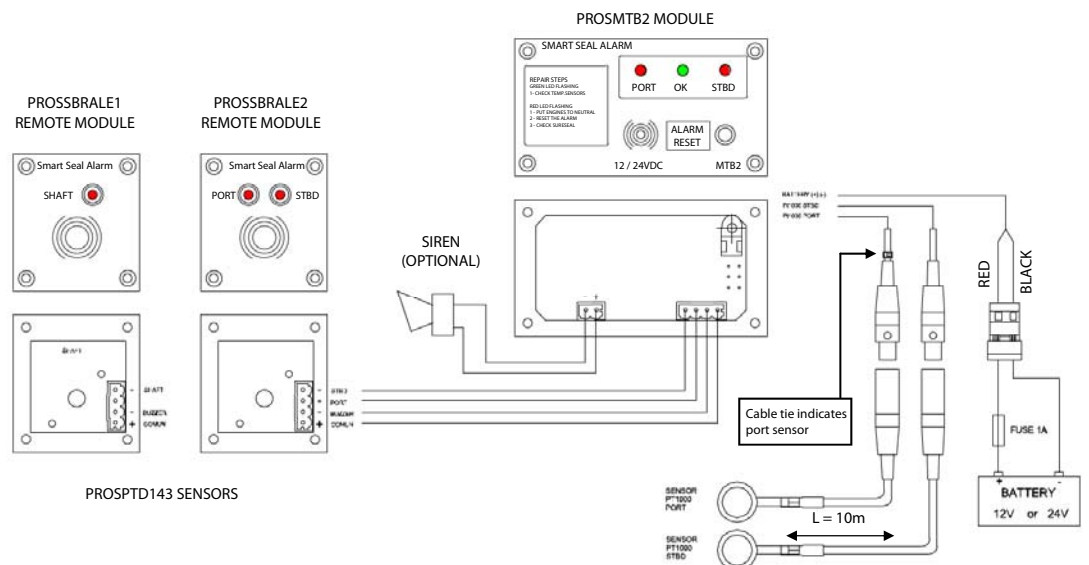
Output to buzzer remote panel: **I max = 0.3A**

Control panel dimensions (mm): **65 tall, 120 wide, 55 deep**

Remote panel dimensions (mm): **65 tall, 60 wide, 65 deep**

Memory Events:

When the control panel has detected a high temperature situation in either of the SureSeals™ and the alarm has activated, this can only be cancelled by pressing the RESET button.

If the power supply to the unit is disconnected with the unit in alarm mode, the alarm will automatically re-activate when power is resumed. The alarm will continue until the RESET button is pressed and the problem checked.

Extended Warranty:

When a Smart Seal System is fitted in conjunction with new Tides Marine SureSeals™, and the installation is registered with a Tides Marine office, an additional 3 year warranty (total 5 years) will be offered against damage caused to the SureSeal™ by an overheating event.

This extended warranty does not include normal wear of parts, labour or associated costs.

Visit www.tidesmarine.com for full warranty information.

Prevent damage to your shaft seal system before it even happens.

Remote Panel for Single Engine
Part # SP-SS-R/PANEL/1

- Aluminum face plate 65 mm x 60 mm
- 4 screws 3.5 x 16
- 1 red LED
- 1 buzzer 104 dB
- 1 connector block
- Waterproof
- Connected using 4 x 1mm cable (not supplied)

Remote Panel for Twin Engine
Part # SP-SS-R/PANEL/2

- Aluminum face plate 65 mm x 60 mm
- 4 screws 3.5 x 16
- 2 red LEDs
- 1 buzzer 104 dB
- 1 connector block
- Waterproof
- Connected using 4 x 1mm cable (not supplied)

Optional Siren for PROSTB2
Part # SP-SS-SIREN

- 1 siren 12V/24V DC
- 1 instruction manual
- Not waterproof

Extension Cable for Sensor
Part # SP-SS-EXTWIRE

- 10 mtr / 33 ft long
- Quick Connect wiring system
- Maximum of 2 extension cables can be used

SMART SEAL: The most effective way to monitor shaft seal temperature.

Call for further details and pricing:
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