N3000-SAP

The compact engine protection system for combustion engines

Overview

The N3000-SAP protection system has been designed to electrically monitor a combustion engine's elementary operating parameters. It is the central unit for initiating a machine emergency-stop in order to prevent the engine from being damaged. Its compact and robust design makes it ideally suitable for use in ships, directly mounted near to or on the combustion engine and other machinery as well.

Features

- 4 x emergency-stop inputs
- 1 x emergency-stop button in the front plate
- 5 x automatic-stop inputs, 2 of them can be delayed by up to 30 seconds
- 2 x pick-up inputs for non-contact rpm monitoring
- 2 x override inputs: for channels automatic-stop channel distribution according the different class rules
- 1 x remote reset input for automatic-stop input
- All inputs are wire break monitored
- 2 x shut-down valve outputs; wire break monitored (2 A max. per output)
- 4 x outputs for single signals for automatic-stop channels 1 - 4
- 2 x common outputs for emergency-stop signals
- 2 x common outputs for automatic-stop signals
- 2 x outputs for over-speed stop signals
- 2 x outputs for signal system fault emergency-stop
- 2 x outputs for signal system fault automatic-stop
- 2 x outputs for signal system fault over-speed stop
- 2 x outputs for rpm frequency (non-galvanic)
- 2 x analogue outputs 4 - 20 mA / 0 - 10 V for rpm signal (non-galvanic)
- Power supply voltage monitoring
- Pick-up signal discrepancy monitoring
- Earth fault monitoring of all inputs

System Details

The signal processing is purely digital. It ensures the highest possible degree of safety and system reliability together with the fast and quartz-accurate speed measurement.

The application N3000-SAP is directly mountable in the front plate of a switch gear cabinet and very flexible: numerous engine types are already pre-programmed and can be set up by using the decode switches. The measurement related channel states are displayed by using three-colour status LEDs. Every LED is mounted at the front alongside an inscribed text field with coloured background.

All of the connections can be connected by using terminals, screw connections or spring-type terminals. This simplifies the installation and the service work.

Type Approvals

All major classes: ABS, BV, DNV, GL, LR, RINA, CCS and others

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