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MK6 OMD

OIL MIST DETECTION SYSTEM

The Mk6 OMD is an analogue addressable oil mist detection system, capable of monitoring up to 64 detector heads fitted on up to 8 engines. Each detector head monitors a single crankspace and is a stand-alone device. When assigned a unique address and supplied with 24V DC it gathers oil mist density data and converts it to a digital signal for transmission via the data cable to the control unit. The control unit can be configured to monitor from one to eight engines. Detector addresses are identified and associated with the appropriate engine. Deviation levels, average alarm levels and alarm output requirements are all set from the control unit.

The large LCD display shows, on demand, the signal from each detector and indicates the average oil mist level for each engine. In the event of an alarm, the display immediately shows the oil mist signals for the relevant engine. It also enables the individual readings of each detector and the average on an engine to be displayed on demand and automatically under alarm conditions. Detectors can be changed in isolation without affecting others situation on the engine. The system will continue to operate while the faulty detector is replaced.

FEATURES

- MULTI-ENGINE CAPABILITY
- HIGH [illegible] RATE - 64 DETECTORS IN 1.2 SECONDS
- COMPLETE FLEXIBILITY - UP TO 8 ENGINES ON SINGLE SYSTEM
- PIPE-FREE INSTALLATION
- COMPACT DETECTORS MOUNTED ON ENGINE WITH PLUG/SOCKET CONNECTION
- CONTROL UNIT LOCATED IN ENGINE CONTROL ROOM OR OTHER SUITABLE LOCATION, CONNECTED TO DETECTORS VIA JUNCTION BOX
- LOW INITIAL COST AND SIMPLE TO EXTEND
- [illegible] CONTROL UNIT
- 24V DC OPERATION
- NO AIR SUPPLY OR EXTRACTOR FANS NEEDED
- EVENT LOG

"Designed for workboats, fishing vessels and offshore operators.

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TECHNICAL DATA

Construction	Detector	Black Zytel 70G30 Nylon 66
	Junction Box	Cast Aluminium
	Control Unit	Painted steel enclosure
Response time	Less than 1.2 seconds for a 64 detector system	
Sensitivity	Detects average crankspace oil mist densities between 0.3mg/l and 1.3mg/l. Easily adjustable by customer to suit individual engine (lower explosion limit 30 - 50mg/l depending upon oil type). Detects variation of individual crankspace densities from the average of between 0.05mg/l and 0.5mg/l (simple adjustment by customer).	
Operating Temperature	Detector and Junction Box: 0-70°C (ambient and sample temperature) Control Unit: 0-55°C ambient.	
Strorage temperature	-20°C to +60°C	
System Protection	Detector and Junction Box: Designed to meet IP65. Salt fog immune.	Control Unit: Designed to meet IP32.
Operating Voltage	24V DC (+30% -25%)	
Power Consumption	Detector: 116mA	Control Unit: 215mA
Protection	By self re-settable fuse inside	Control Unit: Junction Box 4.0 amp fuse
Insulation	Flash tested to 2000V for 1 minute	
Immunity to noise	System tested to requirements of classification societies including: - Radiated susceptibility to radiated noise - Conducted susceptibility to electrical noise - Short duration supply interruption - 1kV high frequency transient voltages.	

TECHNICAL DATA

System Outputs	Fault alarm: 1 set volt-free change-over relay contacts. Relay normally energised when system is powered. De-energises for fault or test condition. Main alarm: 1 set volt-free change-over relay contacts. Relay normally energised when system is powered. De-energises for alarm or test condition. Engine shutdown: 8 sets of volt-free change-over relay contacts. Relays normally de-energised when system is powered. Energises for alarm or test condition.	
Back-up Alarm	1 set per engine mounted junction box	
Alarm Ranges	Average	0.3 mg/l to 1.3 mg/l
	Deviation	0.05 mg/l to 0.5 mg/l
	Back-up	1.6mg/l fixed
Output relay contacts	30V 1A DC	
System dimensions (L x W x H) (mm)	Detector Junction Box Control Unit	95 x 205 x 175 318 x 186 x 90 500 x 313 x 118 (Bulkhead mounting) 619 x 369 x 118 (Panel mounting)
System weights (kg)	Detector Junction Box 2.7 Control Unit	0.6 2.7 6.6

Ordering Information

Product Name
MK6 OMD