

MetriGuard Water Ingress Alarm System

Satisfies SOLAS Chapter XII, Regulation 12

Description:

JOWA USA's MetriGuard Water Ingress Alarm System is intended for use on bulk carriers. MetriGuard operates with the unique Metritape sensor that provides reliability and accuracy, even in demanding cargo hold conditions.

Protected from damage in a stillpipe that runs from the weather deck down to the inner bottom of the hold, the Metritape sensor allows two alarm set points to be derived from one sensor. Liquid level indicators can be added to MetriGuard, which makes it possible to monitor water levels and allow for additional alarm points.

With approved intrinsic safety barriers, MetriGuard may be operated in hazardous areas.

Key Features:

- Two high level alarms for cargo holds: one fixed at 0.5 meters, the other adjustable up to 2.0 meters
- Alarms can be disabled with the "Override" switch when holds are utilized as ballast tanks and for port ballast. The status indicator on the alarm panel shows that the cargo hold or tank is in "override" mode. Override feature is automatically disabled when ballast level drops below 0.5 meters
- Used with holds and tanks up to 35 meters high
- Common buzzer, acknowledge (buzzer silence) switch and test switch
- Provision for operation from backup (secondary) power source; includes automatic switchover
- Sensor fault will set off alarm
- Provides one HHLA relay and one HLA relay common to all holds and spaces. Provides one Fault / Loss of Power relay
- Second (slave) alarm panel can be installed
- Optional direct connection via serial data output to VDR
- Optional level indicator for ballast and port ballast tanks/holds



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Specifications:

Front Panel:

Front Panel Components (per unit):

- Buzzer
- ACKnowledge (common) switch
- TEST (all) switch
- PRIMARY POWER 'on' indicator: Green
- SECONDARY POWER 'on' indicator: Green
- 3 Switches for Override Set-Up
- Dim Control for Indicator Intensity

Front Panel Components (per hold):

- HHLA (High High Level Alarm) LED Indicator: Red
- HLA (High Level Alarm) LED Indicator: Amber
- Status Indicator for Override: Blue

Calibration and Set-Up: Via front panel RS-232 connector

Size (panel mount): 152 mm W x 264 mm H x 65 mm D [6.0" W x 10.38" H x 2.5" D]

Inputs:

AC Power (primary and back-up): 90 to 135 VAC or 180 to 270 VAC, 50/60 Hz

Inputs (Continued):

DC Power (back-up): 24 ± 8 VDC

Sensor type (in cargo holds and ballast tanks): Metritape

Sensor type (in dry spaces): Float switch

Metritape Sensor Length: 3 - 35 meters [10 - 115 feet]

External "Acknowledge": Dry contact closure, 12 VDC @10 mA

Outputs:

HLA Relay: Form C, 5A @ 240 VAC

HHLA Relay: Form C, 5A @ 240 VAC

Fault / Loss of Power Relay: Form C, 5A @ 240 VAC

Buzzer Output: 12 VDC, 0.1A (maximum)

Alarms:

High (rising action): 2

Hysteresis (nominal): 50 mm [2 inches] (software selectable)

Time Delay: 0 to 99 seconds (software selectable)

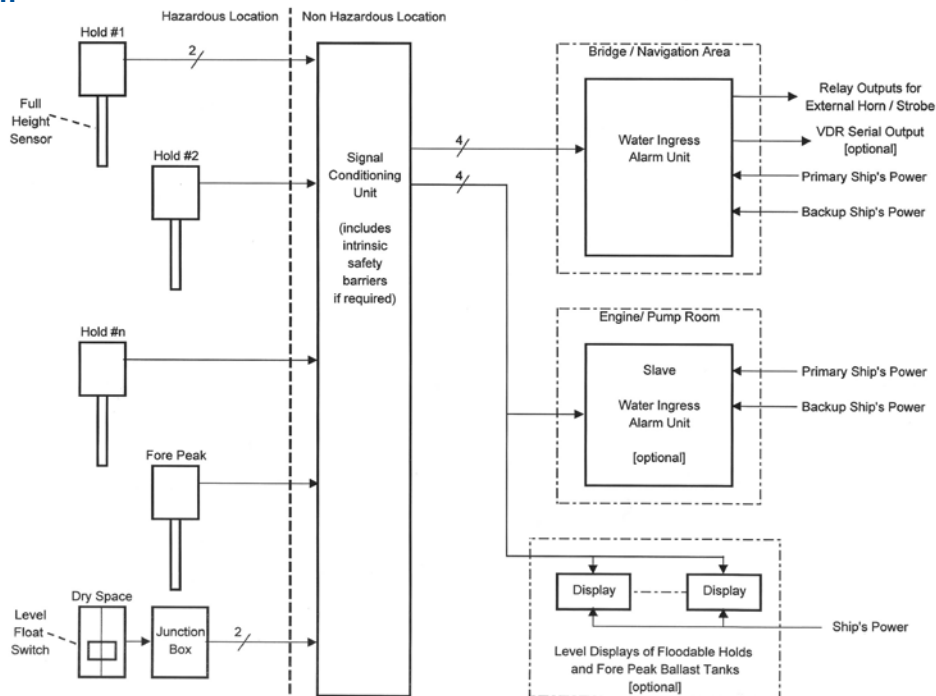
Options:

Slave Display

Serial Output for VDR

Serial Output for Level Indicator (for floodable holds and ballast tanks)

Block Diagram:



Disclaimer:

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