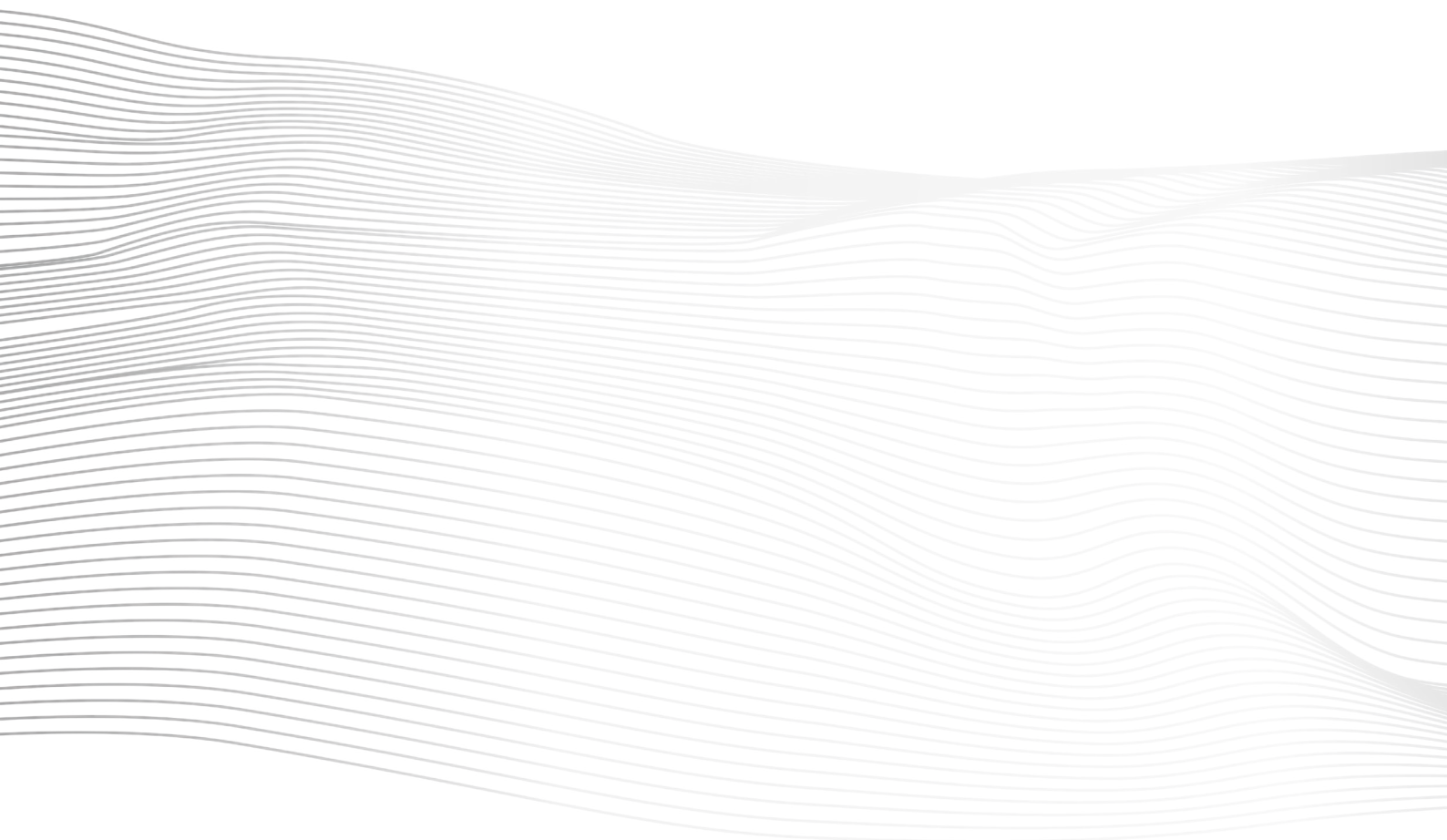

EMERGENCY ENGINE ORDER TELEGRAPH

EEOT



sm electrics



EMERGENCY ENGINE ORDER TELEGRAPH

EEO (Push Button Telegraph)

The main purpose of sm electrics' Emergency Engine Order Telegraph system is to operate as the last back-up manoeuvre command transmission system, in case the classical propulsion remote control system and its backup mechanism fail. In such emergency case the em'cy engine order telegraph system is in use to transfer manoeuvre commands to the engine control room or, if required, directly to the engine room's ME local station. The by push buttons given manoeuvre command activates a visual and audible alarm as long as the command has been accepted by corresponding operation at the selected participants. The centralized A067 mt-Bus controller, mostly located inside the engine control room console, controls and monitors all network participants and provides further interface signals for ER call, VDR and connected IAMC systems.

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24217 Stakendorf
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OPERATIVE LOCATION

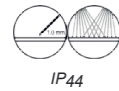
Eichkamp 30
24217 Schoenberg
Germany



APPLICATION

As the core element, the sm electric's A067 mtBUS controller is designed to manage and monitor permanently all connected network units. Simply to be mounted on a terminal rail (TS35) the controller provides useful system information to the commissioning, service and maintenance staff indicated clearly on a 4 lines 20 characters LC display. Following interface signals are provided: Wrong-way contacts, working with a corresponding set of propulsion system contacts generating an alarm in case the given manoeuvre command and the current propulsion direction (propeller shaft or propeller pitch) do not correspond. EOT Call contact, causing the audible and/or visual alarm means to be activated in case the two connected EOT parties' manoeuvre command do not correspond. Failure contact, causing an alarm to be transferred to the connected IAMC system or Bridge Alert Management system in case the mtBUS controller detects an abnormal system situation. Serial VDR interface, RS 485, 2-wire / 3-wire uni-directional connection to VDR/S-VDR system acc. to IEC 61162-2

system diagnosis via LCD
type approved by major classes
simplified ship cable topology
serial VDR interface



IP44



system voltage:
24 DCV nominal

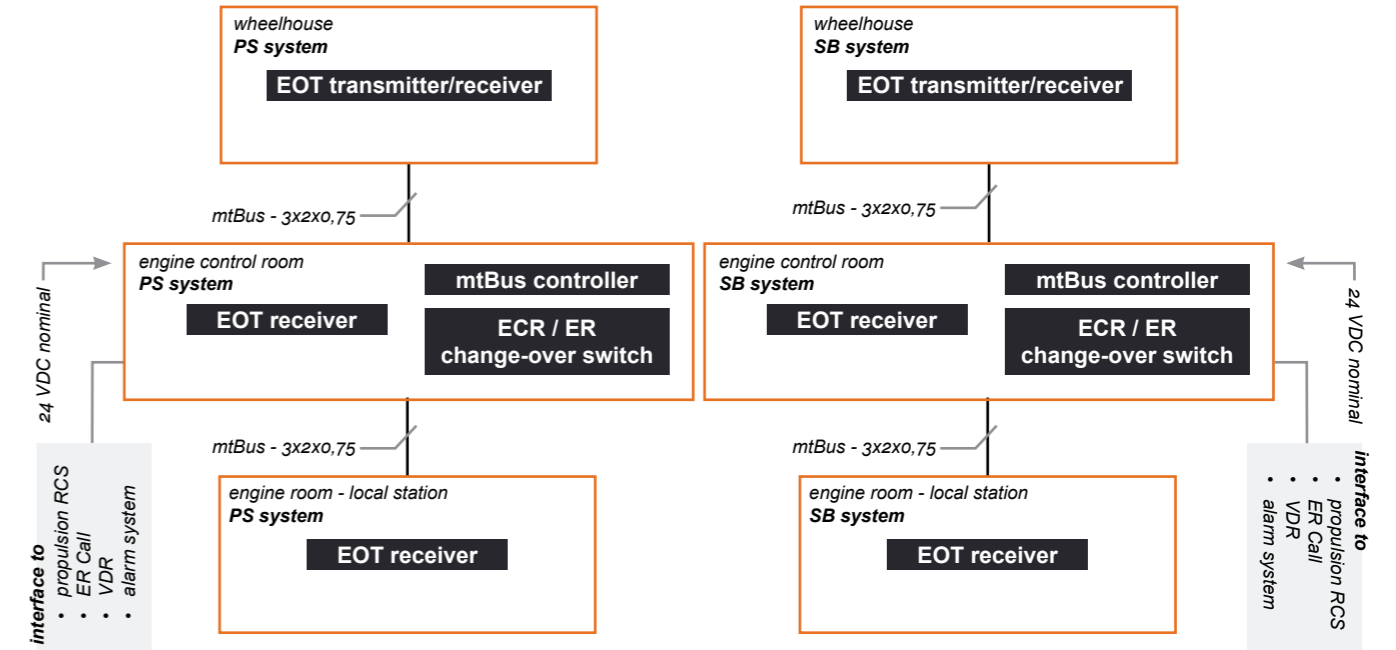


VDR interface acc. to
IEC 61162-2

DATA & FEATURES

- A067 mtBUS RS485 control
- operation for twin main engine control available
- interface to propulsion RCS and IAMCS
- interface to propulsion RCS and IAMCS
- all environmental tests min. acc. IEC 60945
- full operation EEOT repeater for ME local station
- type approved by: DNV-GL, RMRS

TYPICAL SYSTEM COMPOSITION



PERIPHERY EQUIPMENT

mtBus controller

sm electric's A067 mtBUS controller is designed to manage and monitor permanently all connected network units. Simply to be mounted on a terminal rail (TS35) the controller provides useful system information to the commissioning, service and maintenance staff indicated clearly on a 4 lines 20 characters LC display.

Following interface signals are provided:

Wrong-way contacts, working with a corresponding set of propulsion system contacts generating an alarm in case the given manoeuvre command and the current propulsion direction (propeller shaft or propeller pitch) do not correspond.

EOT Call contact, causing the audible and/or visual alarm means to be activated in case the two connected EOT parties' manoeuvre command do not correspond.

Failure contact, causing an alarm to be transferred to the connected IAMC system or Bridge Alert Management system in case the mtBUS controller detects an abnormal system situation.

Serial VDR interface, RS 485, 2-wire / 3-wire uni-directional connection to VDR/S-VDR system acc. to IEC 61162-2.

Performance characteristics:

- well established and sustained RS485 bi-directional mtBus technology
- system voltage: 24VDC nominal
- power consumption: 2-3W
- to be installed on TS35 terminal rail
- LC display with 20 characters in 4 lines for system diagnosis
- VDR connection baud rate selectable 4.800 to 38.400bit/s
- Wrong-way contacts (dry relay contacts)
- EOT Call alarm (dry n/o relay contact)
- Failure contact (dry n/c relay contact)

PERIPHERY EQUIPMENT

mtBUS CONTROLLER

2000103003



EOT | A067.74

- with VDR interface
- 24 VDC nominal

operation units

sm electrics' Emergency Engine Order Telegraph units installed as console mounting version on bridge with silk printed high resistant foil are available with eleven or thirteen manoeuvre command push buttons incl. a precise night vision design. The manoeuvre commands sent from bridge will be indicated as a visual/audible alarm on the corresponding receiver units located traditionally at the engine control room respectively, if required, at the ME local station. The alarms have to be acknowledged accordingly. The acknowledgement will be transferred to the bridge as a responding action.

At the ME local station the push button repeater version is finally installed into a matching wall box incl. alarm bell.

Performance characteristics:

- system voltage: 24 VDC nominal
- all languages available
- protection rating: IP 44

TELEGRAPH TRANSMITTER *WH*

2080099585



EOT | A067.5011-000-0700

- desk mounting
- 144 x 144 mm

TELEGRAPH RECEIVER *ECR*

2080101154



EOT | A067.5021-000-0700

- desk mounting
- 144 x 144 mm

TELEGRAPH RECEIVER *ER with bell*

2080101236



EOT | A067.5032-100-0740

- in wall box
- with bell
- dimension: h300 x w316 x d135

PERIPHERY EQUIPMENT

TELEGRAPH RECEIVER *ER without bell*

2080101290



EOT | A067.5032-000-0740

- dimension: h300 x w200 x d135
- without bell
- in wall box

ALARM BELL

2080099478



EOT | A060.9-00024

- IP55
- ø 105 mm
- 24 VDC
- RAL 7001

ALARM BUZZER

999593



EOT | BUZ-TS35

- 24 VDC
- 85 dB
- DIN-Rail mounted (TS35)
- single hole mounted (28,5mm)

CHANGE OVER SWITCH

2030403002



EOT | A067.T0-8221e

- ECR/R command change over
- 48 x 48mm
- double pole double throw (DPDT)

ALARM DEVICE

760093



EOT | LSD 208.1.0.A

- triangular LED light & sounder
- 24 VDC
- adjustable sound level (67 up to 112dB(A))



sm electrics

