

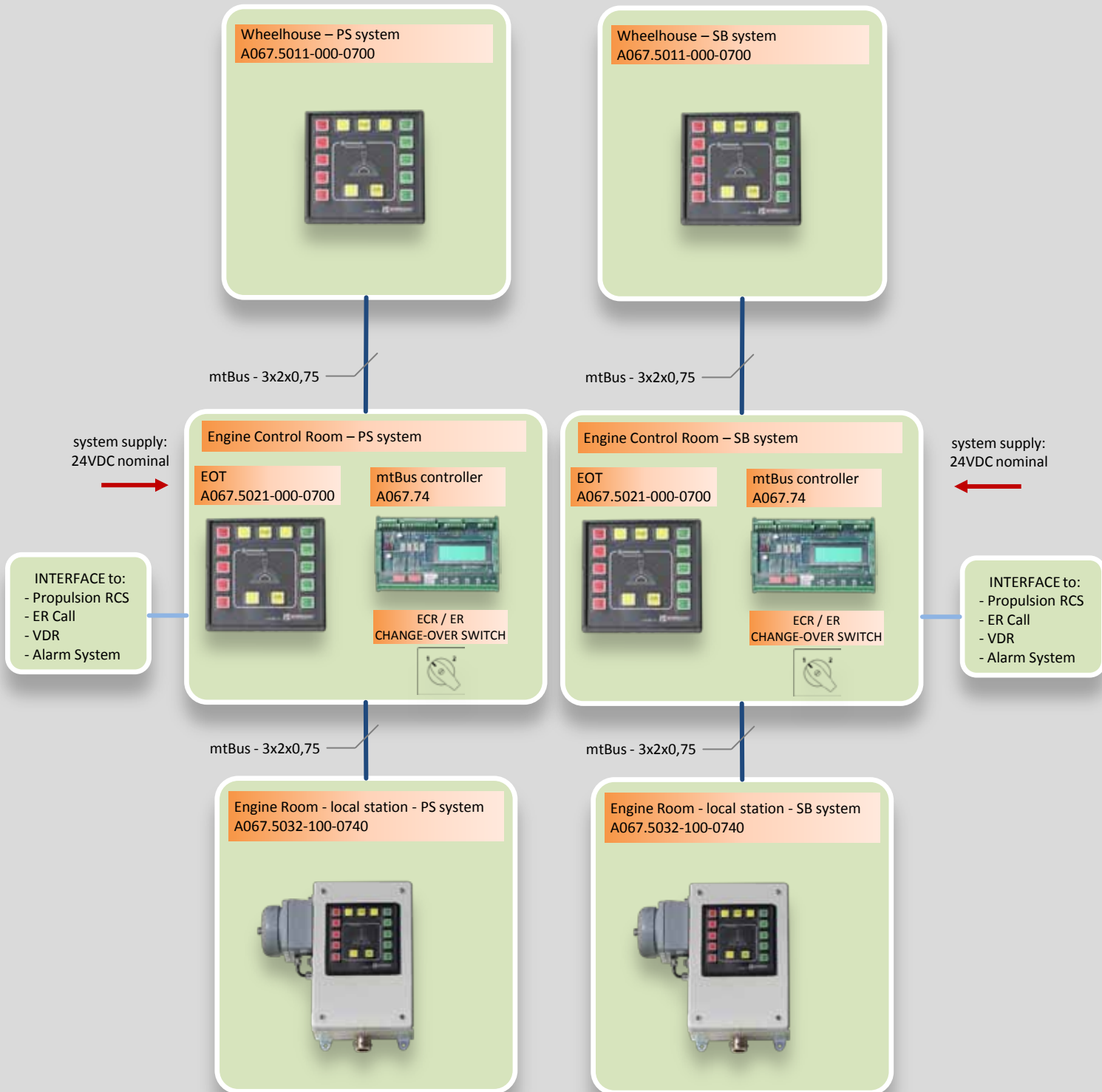
## Emergency Engine Order Telegraph System (EEO) – A067



- ✓ *intuitive operation*
- ✓ *reliable and economic mtBUS-system*
- ✓ *easy to install, simplified ship cable topology*
- ✓ *highly integrated and modular structure*
- ✓ *clear system diagnosis via central LCDisplay*
- ✓ *serial VDR interface*
- ✓ *type approved by all major classification societies*

## Em'cy Engine Order Telegraph System (EEO) – A067

### typical EEO system composition



## Em'cy Engine Order Telegraph System (EEOT) – A067

### Emergency EOT system **A067**

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 back-up 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.

### Your benefits

- ✓ *intuitive operation*
- ✓ *reliable and economic mtBUS-system*
- ✓ *easy to install - simplified ship cable topology*
- ✓ *highly integrated and modular system structure*
- ✓ *twin Emergency EOT for twin main engine control available*
- ✓ *clear system diagnosis via central LCDisplay*
- ✓ *serial VDR interface*
- ✓ *type approved by GL, BV, LR, RMRS, RRR*

## Em'cy Engine Order Telegraph System (EEO) – A067

### A067 mtBUS controller



sm electrics' 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)

## Em'cy Engine Order Telegraph System (EEO) – A067

### **A067 Emergency EOT operation units**



*EEO transmitter / receiver  
push button operation  
144x144mm for console mounting*



*EEO receiver for ME local station  
push button operation  
in wall box with alarm bell*

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: 24VDC nominal
- all languages available
- protection rating: IP44

### **TECHNICAL SYSTEM DATA**

- **system power supply: 24VDC nominal**
- **A067 mtBUS RS485 control**
- **operation for twin main engine control available**
- **VDR interface acc. to IEC 61162-2**
- **interface to propulsion RCS and IAMCS**
- **all environmental tests min. acc. IEC 60945**
- **full operation EEOT repeater for ME local station**
- **protection rating: IP44**
- **type approved by: GL, BV, LR, RMRS, RRR**

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