

# RCS 3000

# REMOTE CONTROL SYSTEM



## **PROGRAMMABLE FOR INCREASED ENGINE CONTROL**

The RCS 3000 is a digitally programmable control system for maneuvering and monitoring the propeller pitch and engine speed on ships of all sizes. The system is also designed to control and monitor controllable pitch thrusters.

The system is easy to upgrade and extend, easy to install and delivers highly accurate positioning. The RCS 3000 can be ordered as replacement or update of an existing electronic system.



### **HIGH ACCURACY**

The accuracy of the piston positioning is significantly improved compared to traditional systems. This is achieved through higher resolution in position measurements and better control over the hydraulics.

### **HIGH RELIABILITY**

The system contains no trimmer potentiometers and fewer cables compared to a more traditional electronic system. All settings are stored in a non-volatile memory.

### **SMALL UNITS WITH SERIAL COMMUNICATIONS BUS**

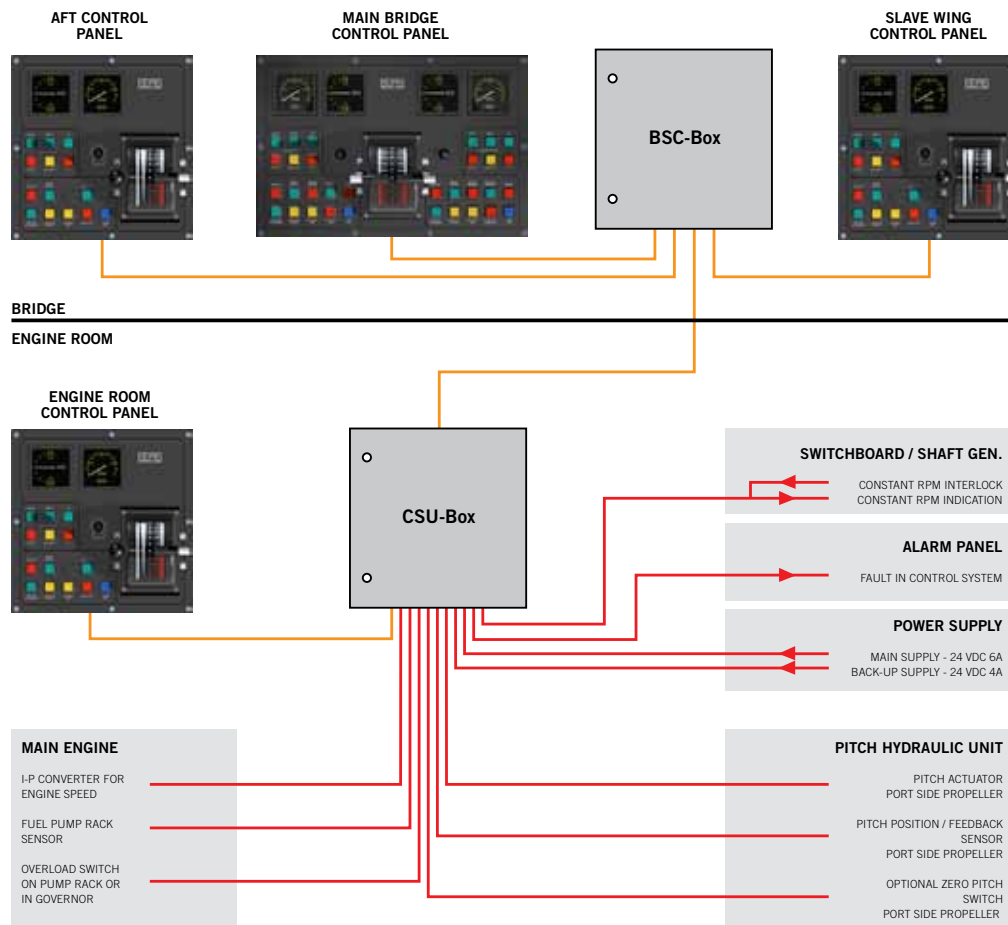
Small units enable easy retro-fit and incorporate a serial bus enabling two or more units to be easily interconnected. For example, one unit could be on the bridge and another in the engine room.

### **LOCAL INTERFACE WITH LCD DISPLAY**

All units have a LCD display with clear graphics making it easy to read the system data. Settings, faults and warnings are shown in plain text simplifying trouble-shooting.

### **NMEA-0183 COMPATIBLE VDR PORT**

An NMEA-0183 compatible port is provided as standard equipment so that an easy connection can be made to VDR systems. For ships that require VDR, it is often more cost effective to replace an old propulsion control system with the RCS 3000 than to buy analogue interface units for the VDR system.



## TECHNICAL DATA

- › Supply: 24 V DC
- › 12 Digital Inputs, 24 V, NPN
- › 12 Digital Outputs, 24 V, 0.3 A, NPN
- › 2 Isolated Analogue Outputs 4 - 20 mA,
- › 2 Four Quadrant Outputs, +/- 24 V, 2.5 A
- › 2 Four Quadrant Outputs +/-24 V, 1.0 A (For electric shafts)
- › 8 Analogue Inputs, 0-10 V
- › 2 Serial Communication Ports RS485
- › 1 Ethernet port 10 Mb/s for TCP/IP server
- › 1 RS485 port for VDR
- › Relay Output for system faults and warnings
- › All settings performed from display menu
- › All settings saved in non-volatile EEPROM
- › All faults and warnings are displayed in plain text
- › For easy upgrade of ERC2000
- › Type of System approved by ABS



## FEATURES AND BENEFITS

- › Specially designed for control of pitch propellers.  
**Benefit:** the system is small, easy to install and cost efficient.
- › One unit handles all functions.  
**Benefit:** no extra circuit boards for load control or control of engine speed need to be installed.
- › Equipped with the RS485 serial communication bus.  
**Benefit:** decreases the number of cords required between bridge and engine room.
- › All settings are digitally stored in a non-volatile memory.  
**Benefit:** no need for analogue trimmers.
- › Can easily be used to update older analogue or digital systems.  
**Benefit:** shorter downtime, better cost efficiency leading to increased reliability and accuracy in older vessels.
- › New control panels can be custom-made to fit in existing equipment or fulfill special needs.  
**Benefit:** better cost efficiency, easy installation and fewer modifications.
- › Alarm list and alarm history.  
**Benefit:** better troubleshooting and facilitates detection of intermittent faults in external equipment.

## ADVANTAGES

- › Supports most actuators and governors
- › Faults and warnings indication
- › NMEA-0183 compatible VDR port
- › Drivers for electric shaft motors
- › Load Control System
- › All functionality supported in one compact unit
- › Proportional Pitch Control
- › Proportional Engine Speed Control
- › Combinatory or Separate Control Levers
- › Constant Speed mode