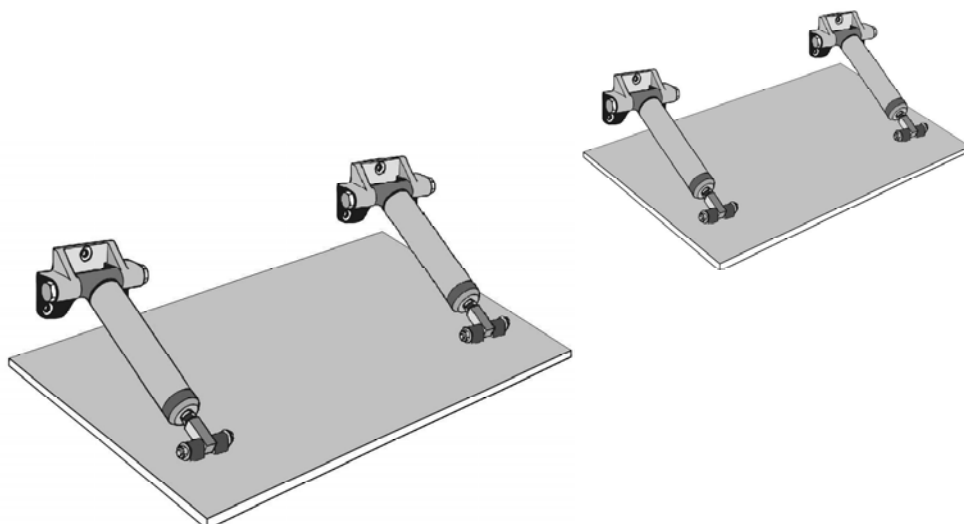
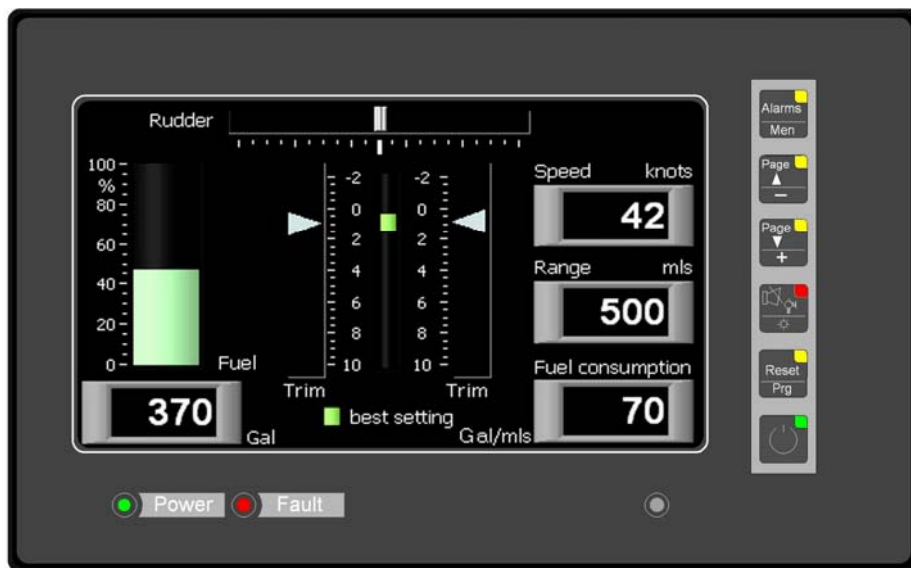
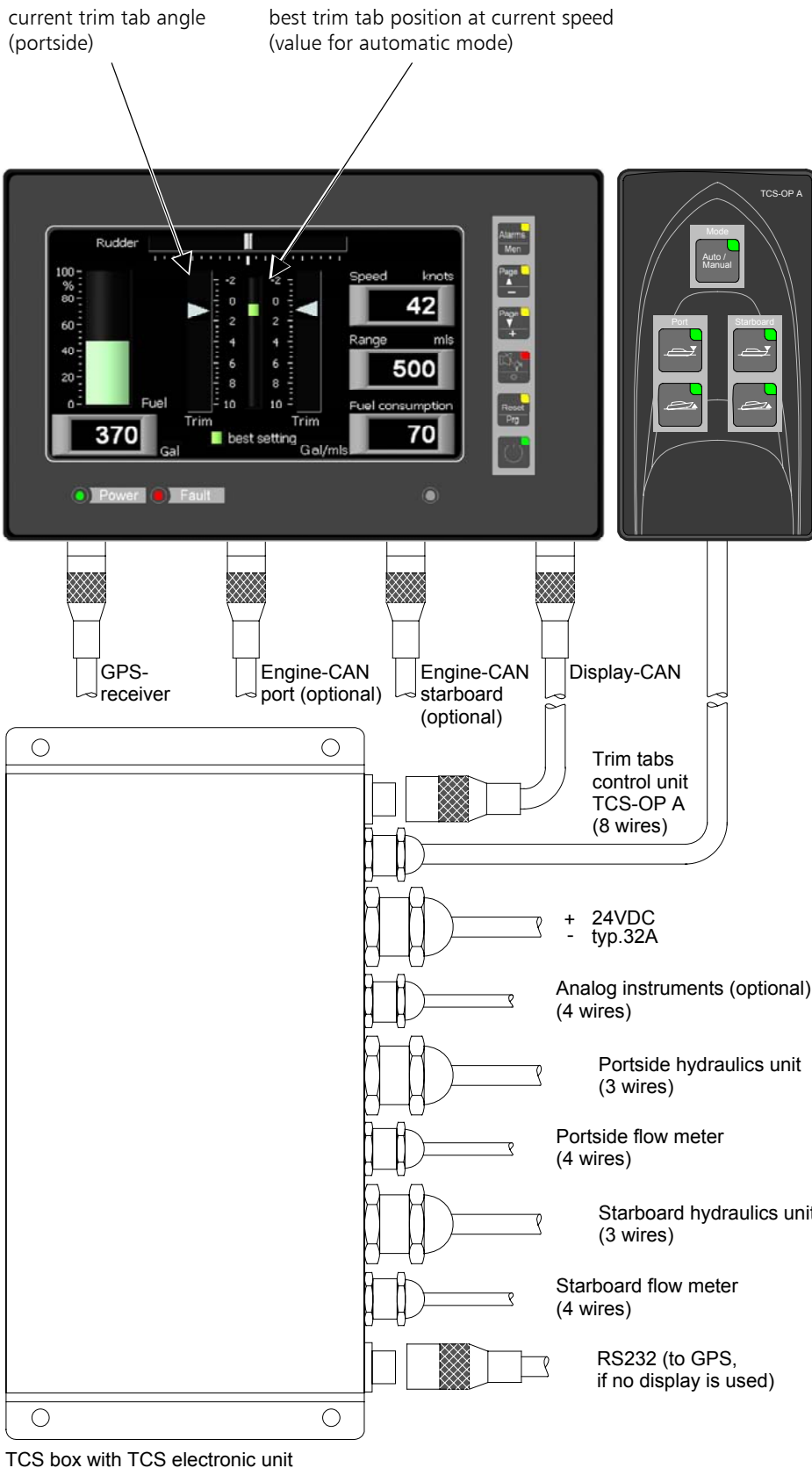


Trim tabs control system AHD-TCS

- Manual / automatic control
- Monitoring
- Visualization



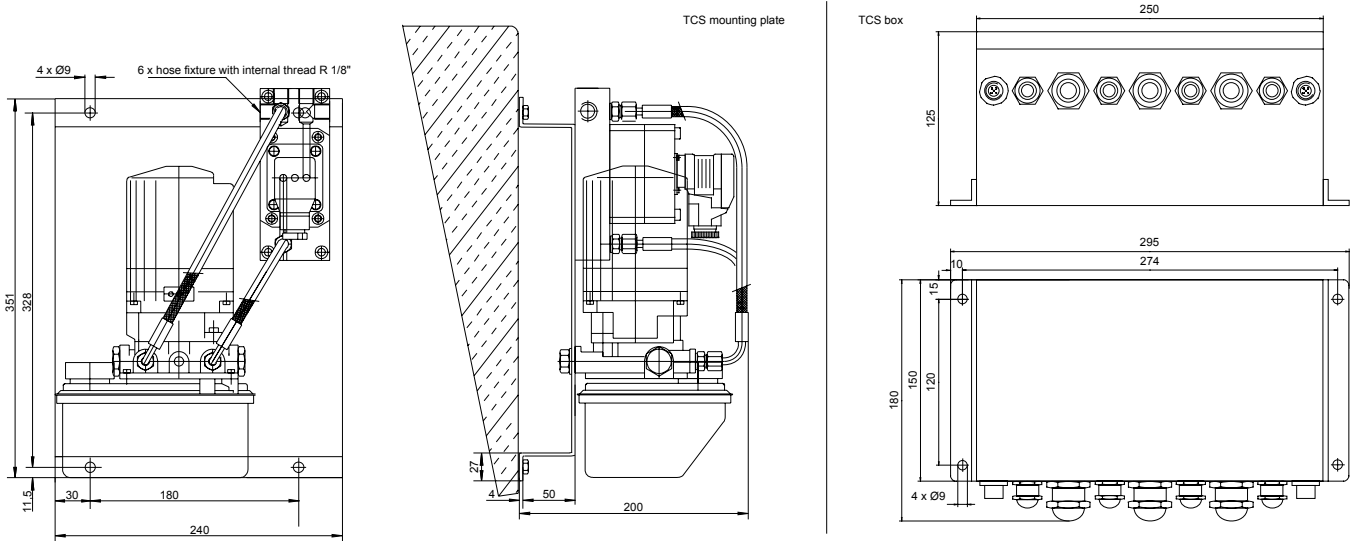


Where a ship alarm system, including colour display has been installed on the yacht then the trim position can be displayed graphically. The electronic device furthermore provides one analogue output (0-10V) per tab to which analog instruments can be connected.

Where the aforementioned colour display is utilised and connected to a GPS device, the trim control system can also operate in automatic mode. The trim tabs are then driven to the optimal speed dependent trim position which is obtained on the commissioning drive. The manual control function is maintained and has priority over the automatic mode.

The operation panel features four control keys for port and starboard trim tabs and one key for toggle automatic mode. Pushing of „▲“ or „▼“ keys on port or starboard side also cancels automatic mode. Operation panel, display and optional display devices can be concatenated for flybridge use. The control unit buttons are backlit while the activated automatic mode is signaled by an extra-bright LED. In the case of TCS electronics failure, appropriate error messages are released on CAN bus and displayed on-screen while the trim tabs remain fully operational via „▲“ and „▼“ keys.

Dimensional drawings



Technical data

TCS mounting plate (2 pieces required)	
Power supply:	24VDC through TCS electronic
Power consumption:	typ. 16 A
Storage temperature:	-30°C...85°C
Operating temperature:	-10°C...65°C
Weight:	11 kg
Degree of Protection:	IP 65
External dimensions:	240 mm x 351 mm x 200 mm
Hydraulic oil quantity:	min. 0.75 l (container)
Inputs:	Hydraulic unit R, L, -
Outputs:	Flowmeter re, li, +, -

TCS electronic (in TCS box)	
Power supply:	24VDC
Power consumption:	150 mA
Storage temperature:	-30°C...85°C
Operating temperature:	-10°C...65°C
Weight:	3 kg (without cable)
Degree of Protection:	IP 65
External dimensions:	295 mm x 180 mm x 125 mm
Interface:	1 x CAN, 1 x RS232
Inputs:	2 flow meters, 1 operation panel
Outputs:	2 hydraulics units, 3 analog. instruments

Colour display	
Power supply:	9...32 VDC
Power consumption:	450 mA
Resolution:	400 x 240 Pixel
Visible range:	6.5", 143.64 mm x 79.326 mm
Color depth:	65536
Luminous intensity:	200 cd/m ² , transfective
Operating temperature:	-10°C...85°C
Storage temperature:	-30°C...85°C
Ambient temperature:	-10°C...65°C
Weight:	1.5 kg
Degree of protection:	front side IP 67, back side IP 65
External dimensions:	210 mm x 130 mm x 95 mm
Panel cutout:	190 mm x 118 mm
Interfaces:	1 x CAN, 1 x RS 232
Inputs:	1 x binary (optocouplers)
Outputs:	2 x relay contact 40 VDC/1 A



Systems and Devices for Automation of Ships,
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