# Safety System with combined Emergency Stop System



- Compact safety system with combined emergency stop system for ship Diesel Engines and stationary installations
- Operation as stand-alone device or as part of higher-level ship monitoring systems
- Approved and reliable technology

The safety system with combined emergency stop system AHD 514 S1 is a compact system with profile module housing for console, panel or switchbox installation on profile rails TS32/TS35.

All safety functions, predetermined by classification societies for monitoring systems for Diesel engines are available.

The device provides two separated 24VDC power supplies for emergency stop circuit and safety system. The emergency stop function operates independently from the safety function.

The processing of emergency stop inputs and stop criteria is carried out seperately. An initiated emergency stop is routed directly to the emergency stop output. On breakdown of safety system or its power supply, the own power supply ensures the emergency stop function.

The safety relevant sensors activate the stop circuit n case of alarm. The emergency stop system is provided with 2 independent and wire-breakage monitored circuits.

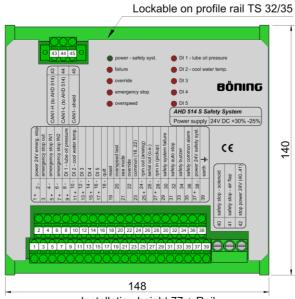
Data is transmitted to higher-level systems over the CAN-Bus.

When designing the components, a high value was set on easy connection and maintenance and service. Connection is available as far as possible directly at terminal lists of system components and reduces by that significantly the demand of material and installation with resulting reduction of costs.

The configuration is created by means of an included PC-Software, which allows setting of required parameter with different authorization levels.



### **Dimension**



# Installation height 77 + Rail

#### **Technical Data AHD 514-S**

Dimension W x H x D:	148 mm x 140 mm x 77 mm
Weight:	appr. 0.50 kg
Operating temperature:	-25°C +70°C
Storage temperature:	-50°C +85°C
Degree of protection:	IP 20
Power supply:	24VDC (+30%/-25%) Safety system 24VDC (+30%/-25%) Emergency stop system
Current consumption:	max. 110mA (24VDC)
Inputs:	2 x binary, wire-breakage monitored (Emergency Stop) 5 x binary, wire-breakage monitored (Stop criteria) 5 x binary ( Control inputs) 1 x Speed input, galv. isolated
Outputs:	4 x Relay 6 A, potential free (i.e. for Horn, Common Alarm) 2 x Transistor, 8 A, wire-breakage monitored, short-circuit proof (Solenoid, Air Flaps; Stop from Safe- ty System) 1 x Transistor, 8 A, wire-breakage monitored, short-circuit proof (Stop from Emerg. Stop System) 1 x Current output 4-20mA (for external speed indication) 10 x LED- indication
Interfaces:	1 x CAN Bus (Communication) 1 x serial Output (Optocoupler)
Installation:	Profile module housing, installation on profile rail TS 32/TS 35
Compass Safe Distance	Steering Magn. Compass: 40cm Satndard Magn. Compass: 45cm

## **Approvals**

Classification society:	Germanischer Lloyd Lloyd 's Register American Bureau of Shipping
	Bureau Veritas
	Det Norske Veritas
	Russian Maritime Register of
	Shipping
	Registro Italiano Navale
	Croatian Register of Shipping