

AHD-EOP / AHD-DEOP

Start-stop unit for marine diesel engines



- ***Start-stop unit for marine diesel engines***
- ***Increased safety and comfort with advanced transponder technology***
- ***Illuminated and dimmed control buttons***
- ***Integrated emergency stop button***
- ***Expandable with dual module AHD-DEOP for twin-engine systems***
- ***Transponder in patented design (to be connected in pairs when carried)***
- ***AHD-EOP adapter available for easy connection of alternative engines***

With the AHD-EOP start-stop unit, marine diesel engines can be conveniently started and stopped.

Instead of a conventional ignition lock with start-stop buttons and the associated complex cabling, the AHD-EOP comes with integrated control buttons and transponder technology. This simplifies the cabling and significantly increases protection against unauthorized use.

In the case of twin engine systems, the engine drives are individually activated by transponder, with a key being inserted into the corresponding AHD-EOP. In this position, the engines are ready for operation and can be operated via the respective start-stop unit.

As long as the transponder is in the slot, the engine remains ready for operation and can be started and stopped with any panel in the system. The activation is displayed on all panels.

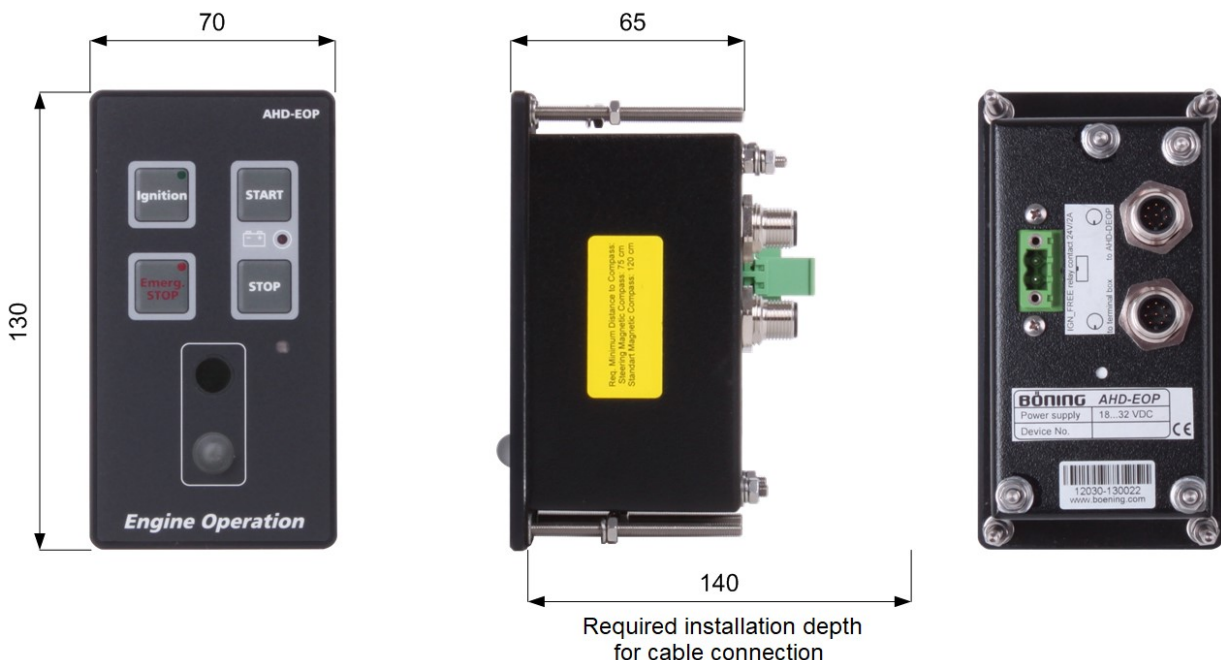
Pressing a button on the corresponding AHD-EOP or on the group panel starts or stops the engines. If the transponder is removed from its slot, the corresponding motor stops immediately.

If several control panels are present, the system can be equipped with the expansion module AHD-DEOP. All devices are cascable, i.e. additional panels can be installed with low cabling effort on board as needed. The connection is pluggable and is implemented via pre-assembled cables.

With AHD-DEOP, two engines can be started and stopped, provided that operation via AHD-EOP and a plugged-in transponder is activated.

The system was optimized for MAN marine diesel engines (direct connection to engine terminal box via plug X7), but can also be used with engines from other manufacturers or engine variants by using an "AHD-EOP adapter".

Dimensions / Connections AHD-EOP

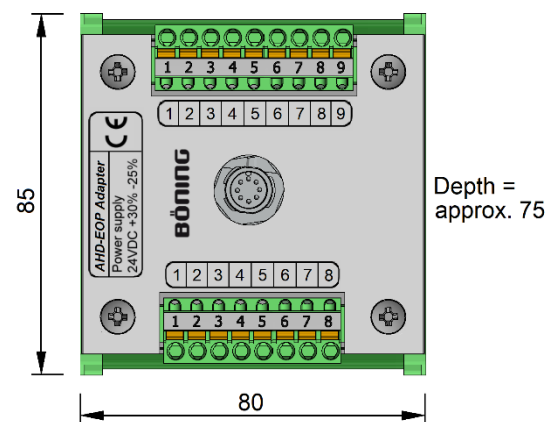


Warning: The transponder keys for the AHD-EOP are equipped with magnets and must not be stored near the standard or steering compass nor other sensitive electronic components. It is essential to observe the required minimum distance (see technical data)!

Connections AHD-EOP

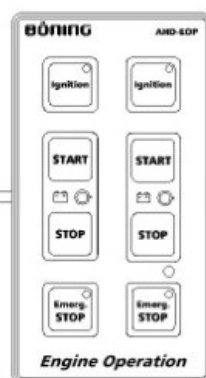


Dimensions / Connections AHD-EOP Adapter

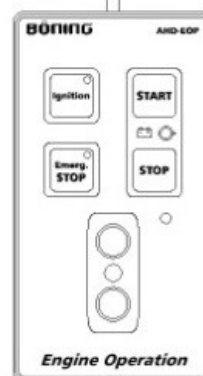
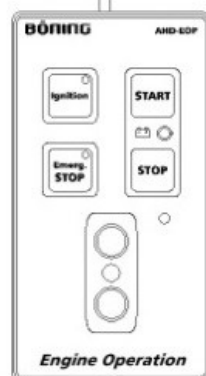


Wiring diagram

Flybridge



Bridge



Engine Room

Engine terminal box
Engine port

Motor terminal box
Starboard engine

Technical Data AHD-EOP

Power supply	24 V DC (+30% / -25%)
Current consumption	approx. 60 mA
Ambient temperature	-10°C...65°C
Storage temperature	-30°C...85°C
Weight	approx. 0,5 kg
Protection class	front IP 65, back IP 54
Dimensions	70 x 130 x 65 mm
Panel cutout	60 mm x 113 mm
Required minimum distance to compass	Steering magn. compass: 75 cm Standard magn. compass: 120 cm
Interfaces	2 plug-in connectors

Part numbers (Variants)

12479	AHD-EOP G2 for MAN V-Neu
12030	AHD-EOP for MAN V-Classic
13013	AHD-EOP for MAN Engines with MDCP (V-Classic)
15354	AHD-EOP for MAN Engines (without emergency stop)
12836	AHD-EOP for Caterpillar
13495	AHD-EOP for Caterpillar (without emergency stop)
12837	AHD-EOP for MTU
13494	AHD-EOP for MTU (without emergency stop)
21734	AHD-EOP for Yanmar
12216BS	VMMDS-EOP for MAN (OEM / MAN-Part 51.27720-7042)

Technical Data AHD-EOP Adapter

Power supply	24 VDC (+30%-25%) Versions for MAN, MTU Caterpillar 12 VDC (+30%-25%) Version for Yanmar
Current consumption	max. 4 W
Ambient temperature	-10°C...65°C
Storage temperature	-30°C...85°C
Weight	0,25 kg
Protection class	IP 10
Dimensions	80 x 85x 75 mm

Part numbers (Variants)

11823	AHD-EOP Adapter for MAN (V-Neu or Common Rail)
12366	AHD-EOP Adapter for MAN (EDC)
13130	AHD-EOP Adapter for MAN mit MDCP
12367	AHD-EOP Adapter for MTU
12368	AHD-EOP Adapter for Caterpillar
21733	AHD-EOP Adapter for Yanmar (12V)

Technical Data AHD-DEOP

Power supply	24 V DC (+30% / -25%)
Current consumption	approx. 50 mA
Ambient temperature	-10°C...65°C
Storage temperature	-30°C...85°C
Weight	approx. 0,5 kg
Protection class	front IP 65, back IP 54
Dimensions	70 x 130 x 65 mm
Panel cutout	60 mm x 113 mm
Required minimum distance to compass	Steering magn. compass: 75 cm Standard magn. compass: 120 cm
Interfaces	2 plug-in connectors

Part numbers (Variants)

12480	AHD-DEOP G2 for MAN V-Neu
22968	AHD-DEOP G2 for MAN V-Neu (Landscape Design)
11479	AHD-DEOP for MAN V-Classic
13014	AHD-DEOP for MAN Engines with MDCP (V-Classic)
15390	AHD-DEOP for MAN Engines (without emergency stop)
12838	AHD-DEOP for Caterpillar
13498	AHD-DEOP for Caterpillar (without emergency stop)
12839	AHD-DEOP for MTU
13499	AHD-DEOP for MTU (without emergency stop)
13625	AHD-DEOP K for MAN (2 x key switch)
16459	AHD-DEOP K for MTU or Caterpillar (2 x key switch)
12221	VMMDS-DEOP for MAN (OEM / MAN-Part 51.27720-7043)

Zubehör

Part numbers

11746BS	18 kOhm terminal resistance (8 pol. Lumberg plug)
12007	connecting cable 2m (2x8 pol. Pl.)
11579	connecting cable 15m (2x8 pol. Pl.)
12006	connecting cable 25m (2x8 pol. Pl.)
13023	connecting cable 40m (2x8 pol. Pl.)
12214	Transponder Double Key Stainless Steel Böning
12215V02	Transponder Double Key plastic Böning
11759V02	Transponder Double Key plastic for AHD-EOP / MAN (OEM / MAN-Part 51.27720-0036)

Further OEM key variants are available on request