# AHD-DAC Door access control



- Door monitoring that can be integrated flexibly into the Böning ship alarm system
- Acquisition of all relevant door contacts
- Logging of all important events
- Access via code or transponder card (user programmable)

AHD-DAC monitors all relevant contacts of doors of the vessel. For each monitored door, the door control unit AHD-DAC and a card reader AHD-DAR or a keypad AHD-DAK must be installed.

AHD-DAC monitors the door contacts and unlocks the door for a defined time or permanently as soon as the user enters the pre-programmed code via the keypad AHD-DAK or holds a transponder card with corresponding authorization over the card reader AHD-DAR.

In emergencies, the doors can be unlocked with an optional override button.

The rights for the individual user cards can be easily programmed using a special Mastercard. A maximum of 250 user cards can be used per door.

A project-specific ship code ensures that the transponder cards are only valid for the associated ship.

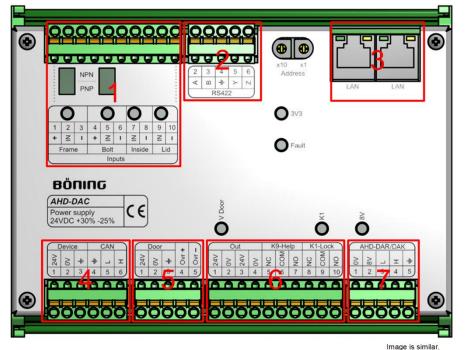
Through integration into the Böning ship alarm system, the status of all monitored doors can be shown on the displays. If configured accordingly, the doors can also be unlocked via visualized buttons on a touch display. Unauthorized attempts to open a door or door openings that are too long can be signaled as alarms, depending on the programming.

If an AHD-DPU 9 is installed in the system, door openings and possible alarm states can be logged. The data can then be recalled via a panel PC (e.g. AHD 1219 G).

The AHD-DAC door control unit has two separate power supplies for device electronics and for door electrics with electromagnetic door interlock. When using this option, complete function is ensured even if the electronics supply fails. If a second supply is not available, both feeds can be supplied in parallel.



## **Connections of AHD-DAC**



- 1) Door contacts, select switch for contact type (Open Collector NPN / PNP)
- 2) RS422: for future uses
- 3) LAN: for future use
- 4) Main supply for AHD-DAC device electronics and CAN connection
- 5) Separate voltage input for supplying the door electrics, override input for emergency opening
- Output for voltage supply of the door electrics, auxiliary relay for potentialfree controlled doors, Relay for voltage-controlled doors
- Power supply and data communication for access control via AHD-DAR (card reader) or AHD-DAK (keyboard)

#### **Technical data AHD-DAC**

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Outer dimensions (mm)	167 x 126 x 64	C
Weight	approx. 0.4 kg	
Power supply	24 V DC (+30% /-25%) for device	
	12 - 24 V DC for the door	
Current consumption	approx. 0.15A (24 V DC) for device	
Ambient temperature	-30°C~+70°C	V
Storage temperature	-50°C~+85°C	P
Protection class	IP 20	C
Interfaces	1 x CAN (terminal strip)	F
	4 x door contacts (frame, bolt,	C
	inner door handle, lid. NPN/PNP	
	selectable for OC contacts)	P
	1 x door unlocling and override for	
	emergency opening	_
	1 x serial data connection for	Те
	AHD-DAK or AHD-DAR incl. power	
	supply (8 V DC)	k
	2 x LAN (use optional)	E
	1 x RS422 (use optional)	e
Relay	1 x door unlocking	\
	maximum load 30V/2A (60W)	F
	1 auxiliary relay for potential-free	(
	controlled door locks	
	maximum load 30V/2A (60W)	F
Part number	15923	

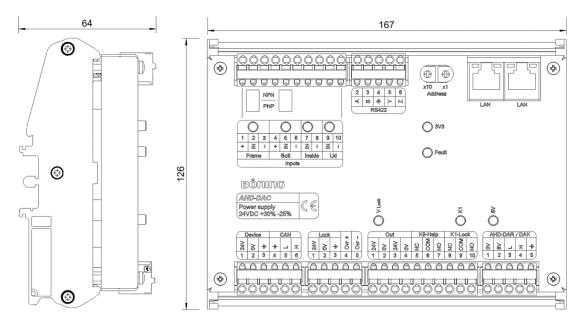
### Technical data AHD-DAR

Outer dimensions (mm)	39 x 39 x 37 or 39 x 39 x 32 (depth depending on LED type), for installation in flush-mounted box, housing not included in scope of delivery
Weight	Approx. 0.05 kg without housing
Power supply	8 V DC
Operating frequency	13.56 MHz
Read distance	Max. 80 mm
Connection	4-wire twin cable or CAT6 network cable, max. length = $30 \text{ m}$
Part number	11586

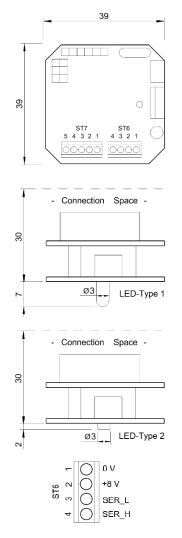
#### Technical data AHD-DAK

Outer dimensions	115 x 96 x 12 (keyboard without
keyboard (mm)	electronics to screw on)
External dimensions rear	approx. 40 x 50 x 32, for installation
electronic module (mm)	in flush-mounted box
Weight	Approx. 0.25 kg
Power supply	8 V DC
Connection	4-wire twin cable or CAT6 network
	cable, max. length $=$ 30 m
Part number	11889 (blue key illumination)
	16710 (yellow key illumination)

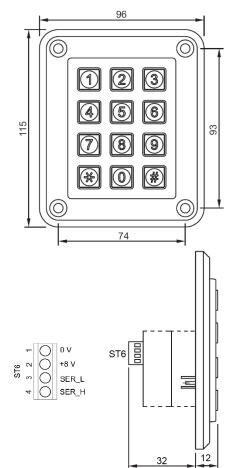
## **Dimensions of AHD-DAC**

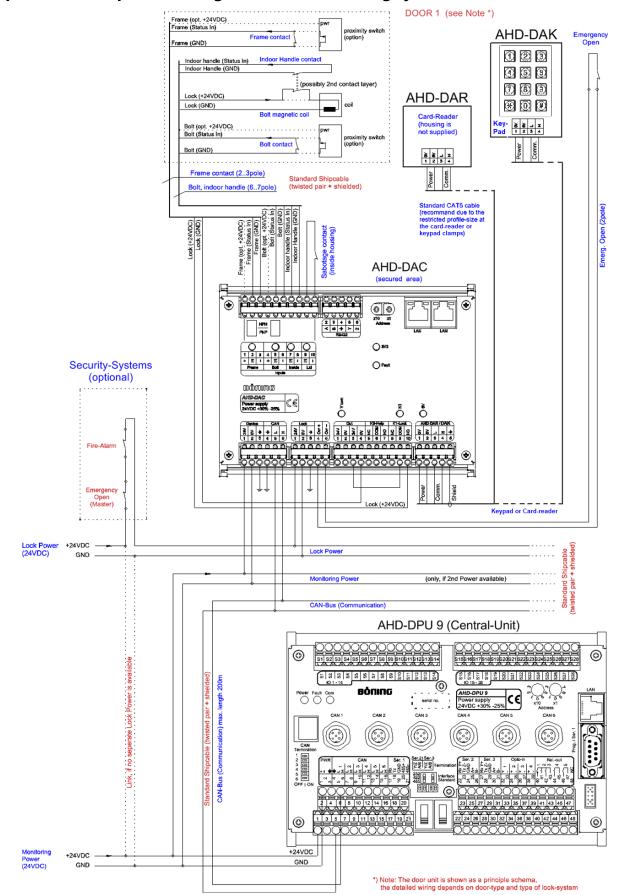


## **AHD-DAR Dimensions and Connections**



## **AHD-DAK Dimensions and Connections**





Application example with integration into the Böning system via AHD-DPU 9

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