BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM
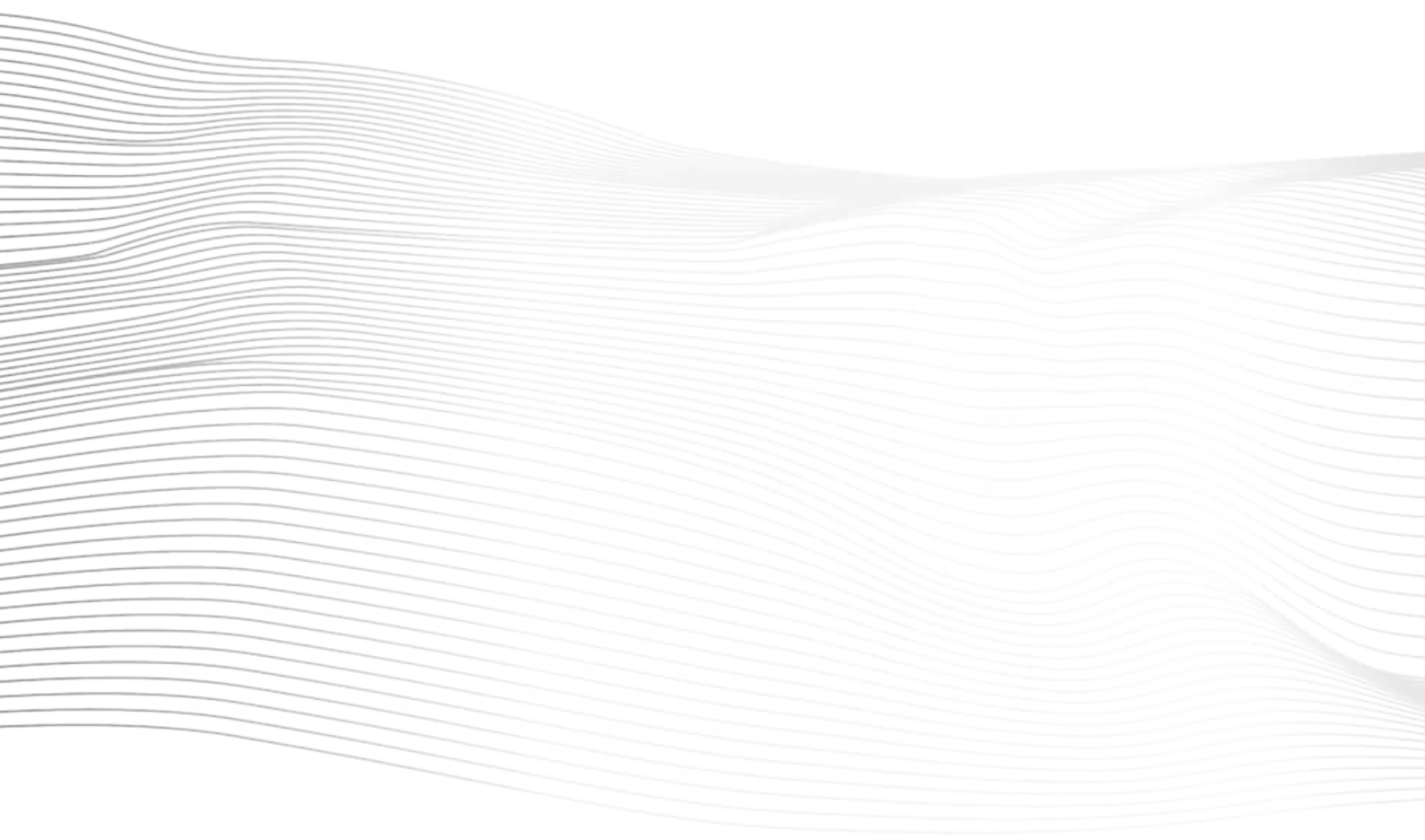
BNWAS

sm electrics

BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM

BNWAS le guardian [2025]

The bridge navigational watch alarm system (BNWAS) monitors bridge activity and detects operator disability that could lead to marine accidents. The system monitors the awareness of the Officer Of the Watch (OOW) and automatically alerts the Master or another qualified person if for any reason the OOW becomes incapable of performing the OOW's duties. This process is subdivided in different alarm stages which primarily try to alert the OOW via visual and audible alerts.

made
in
Germany

safety on board.

APPLICATION

The bridge navigational watch alarm system (BNWAS) monitors bridge activity and detects operator disability that could lead to marine accidents. The system monitors the awareness of the Officer Of the Watch (OOW) and automatically alerts the Master or another qualified person if for any reason the OOW becomes incapable of performing the OOW's duties. This process is subdivided in different alarm stages which primarily try to alert the OOW via visual and audible alerts.

In case the BNWAS does not receive any evidence of life, the alert will be transferred to the selected backup Officer Of the Watch (OOW) cabin(s). Assuming that no acknowledgement has been triggered either, the ultimate alert stage will activate alarm devices in public area. Additionally, the BNWAS provides the OOW with a means of calling for immediate assistance if required (emergency call).

compact connecting module
intuitive control philosophy
easy to install

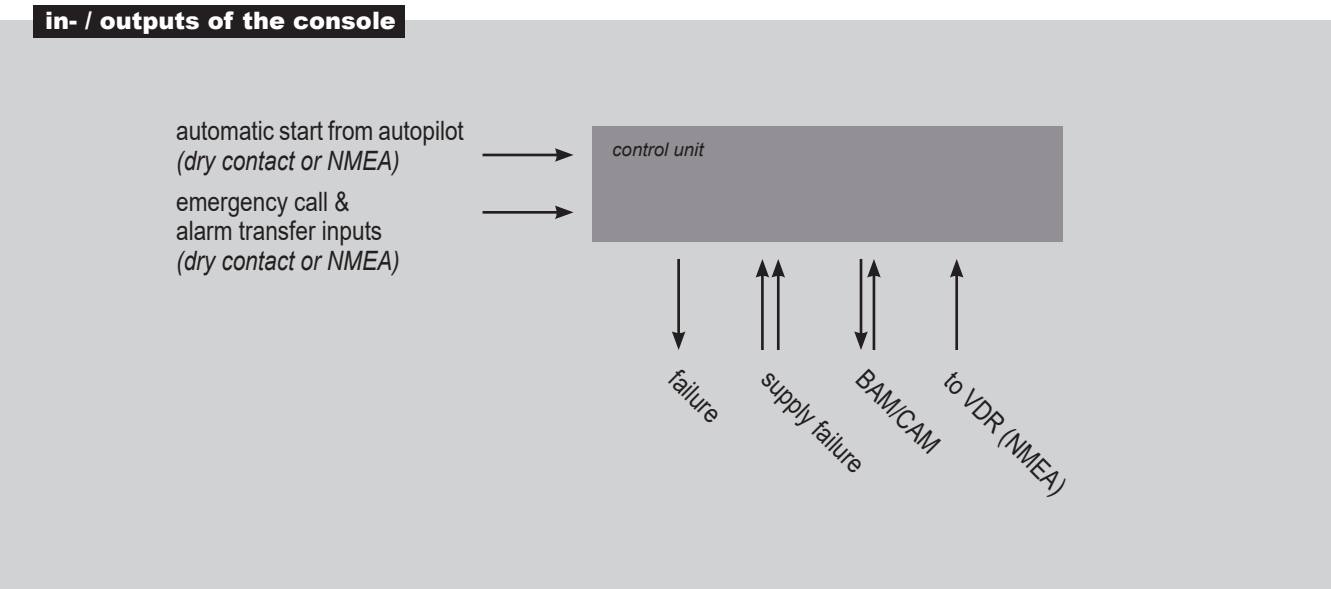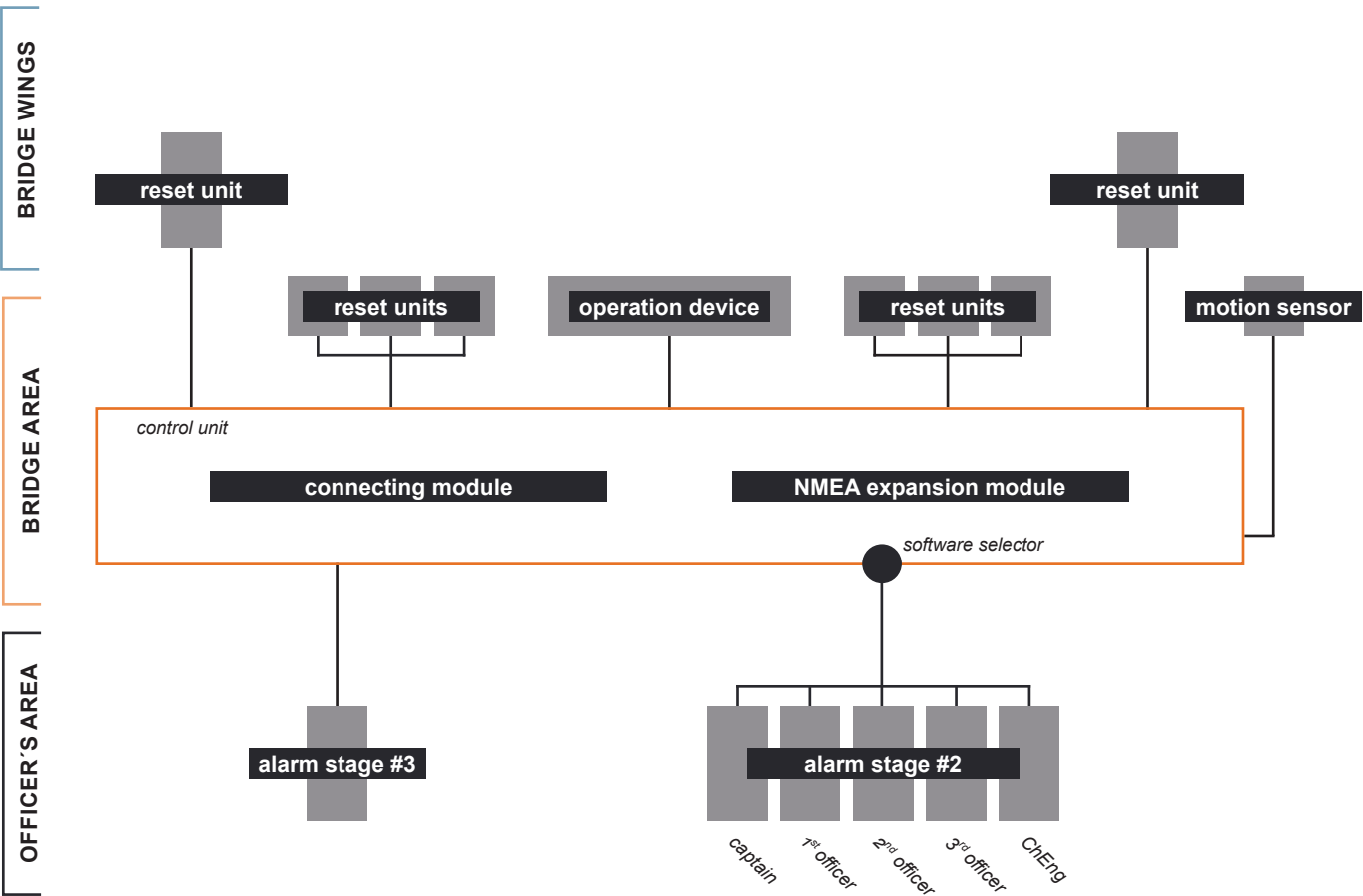dimmable key-switch MED type approved system voltage: 24 DCV nominal (18 ... 31,2V) IEC 62616
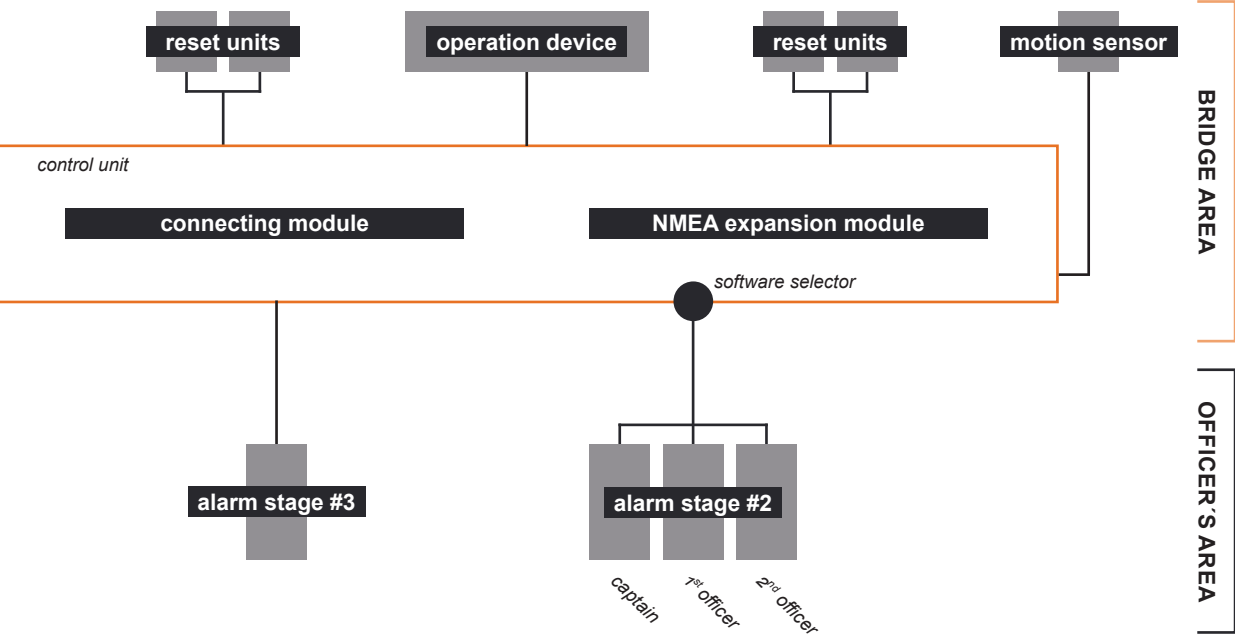
DATA & FEATURES

- 2 x 16 character coloured light display shows all relevant device and alarm states
- rotary encoder with integrated push button - simple but effective for user
- integrated buzzer, eight individual sound characteristics & volume adjustment
- main supply / back-up supply failure indication
- connecting module designed for TS 35 terminal rail
- emergency call facility (manual release & alarm transfer)
- NMEA bi-directional serial interface (e.g. for VDR link or alarm transfer from BAM/CAM)
- MED Type Approved (wheel marked) certificate no.: DNV-GL MEDB000034A
- MED Type Approved (wheel marked)
  - IEC 62288 Ed. 2.0 (2014-07)
  - IEC 62616(2010) incl. IEC 62616 Corr. 1 (2012)
  - IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008)
  - IEC 61162-1 ed4.0 (2010-11) and ed5.0 (2016-08)
  - IEC 61162-2 ed1.0 (1998-09)
  - IEC 62923-1/2

SAMPLE SYSTEM large vessels

SAMPLE SYSTEM medium vessels

BRIDGE AREA

reset units · operation device · reset units · motion sensor

control unit

connecting module · NMEA expansion module

software selector

OFFICER'S AREA

alarm stage #3 · alarm stage #2

captain · 1ST officer · 2ND officer

SAMPLE SYSTEM small vessels

BRIDGE AREA

reset unit · operation device

control unit

connecting module · NMEA expansion module

software selector

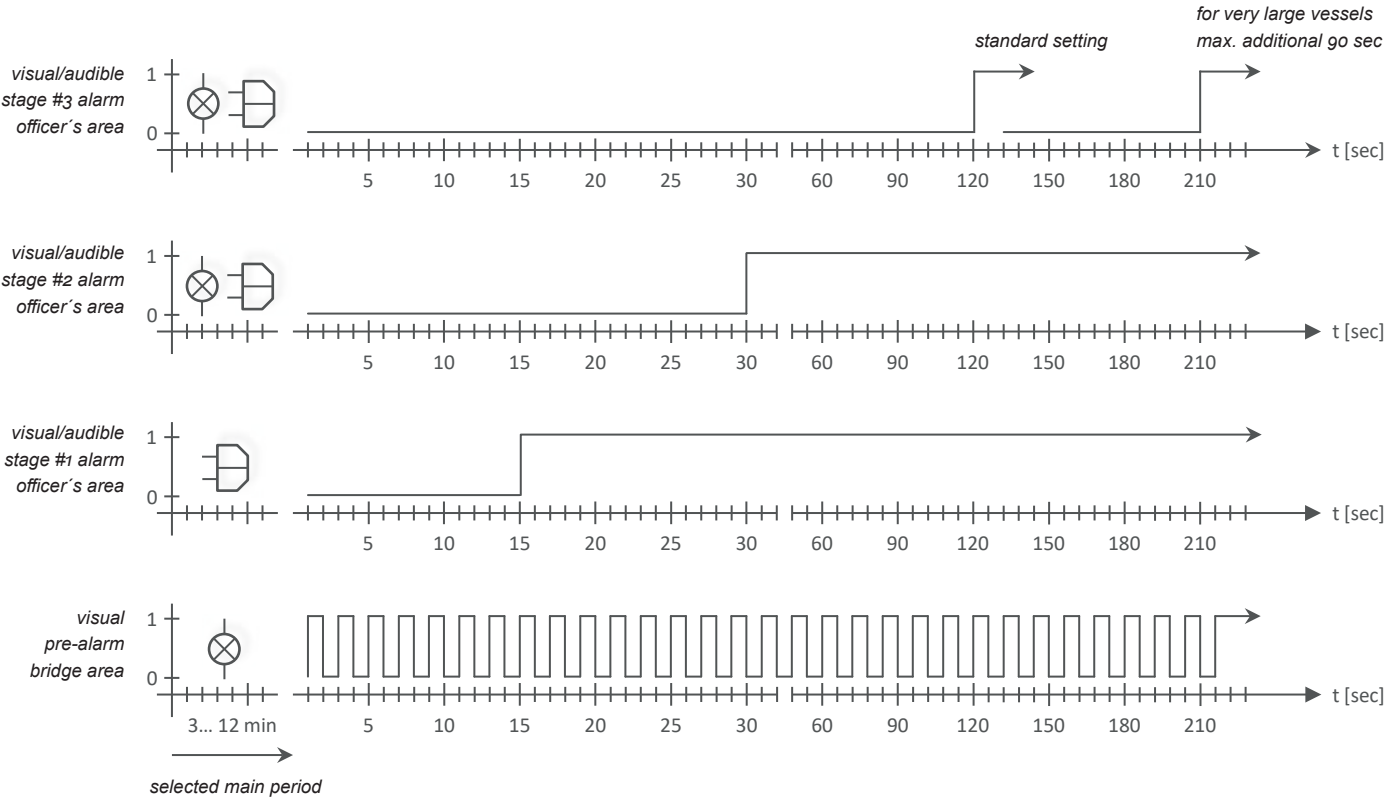**OFFICER'S AREA**

alarm stage #2
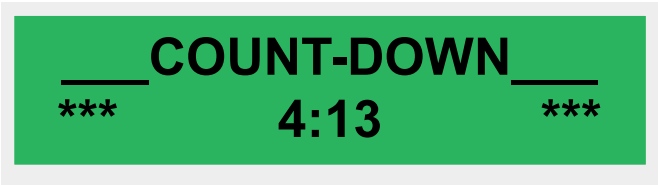
captain · 1ST officer
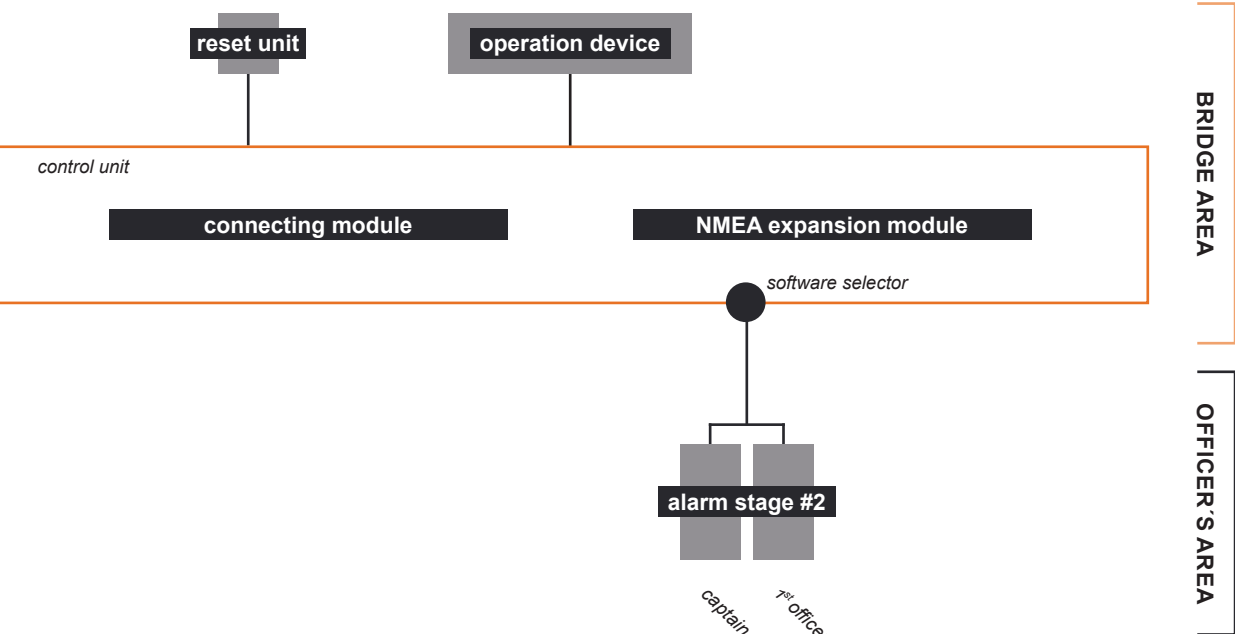
ADDITIONAL INFORMATION

MSC 86
legal background

A Bridge Navigational Watch Alarm System (BNWAS) has to be installed as follows:

- Ships of 150 gross tonnage and upwards and passenger ships irrespective of size constructed on or after 1st July 2011;

- Passenger ships irrespective of size constructed 1st July 2011, not later than first survey after 1st July 2011;

- Ships of 3,000 gross tonnage and upwards constructed before 1st July 2011, not later than the first survey after 1st July 2012;

- Ships of 500 gross tonnage and upwards but less than 3,000 gross tonnage constructed before 1st July 2011, not later than the first survey after 1st July 2013;

- Ships of 150 gross tonnage and upwards but less than 500 gross tonnage constructed before 1st July 2011, not later than the first survey after 1st July 2014;

TIME TABLE

for very large vessels max. additional 90 sec

standard setting

visual/audible stage #3 alarm officer´s area

visual/audible stage #2 alarm officer´s area

visual/audible stage #1 alarm officer´s area

visual pre-alarm bridge area

3... 12 min

selected main period

t [sec]

ALARM STATES

```
____COUNT-DOWN____
***        4:13        ***
```

non alarm condition

PERIPHERY EQUIPMENT

WATCH ALARM SYSTEM *basic*   *771170*

BNWAS | le guardian 2025

- le guardian 2025 connecting module LCM 210.24.0.0
- le guardian 2025 operating device LOD 210.24.0.0
- 15 pole system cable, l=3m

NMEA EXPANSION MODULE   *771172*

BNWAS | NMEA 210.24.0.0

- incl. software selector switch for selectable stage #2 alarm
- NMEA interface to VDR
- NMEA interface to BAM/CAM

WATCH ALARM RESET   *770040*

BNWAS | WAR 220.1.0.0

- illuminated (dimmable)
- push button
- 24 VDC power supply
- IP 67

ALARM PANEL STAGE #2   *770107*

BNWAS | WAP 220.2.0.0

- alarm for officer´s cabin with buzzer
- flush mounted
- 24 VDC power supply
- IP 23; 80 dB(A)

PERIPHERY EQUIPMENT

ALARM PANEL STAGE #3   *770106*

BNWAS | WAP 220.4.0.0

- for officer´s area (corridor)
- triangle light & sounder 64-111 dB(A)
- 24 VDC power supply
- IP 65

STAGE #1 ALARM EXTERNAL BUZZER   *770117*

BNWAS | WAB 220.2.0.0

- 85 dB(A)
- 24 VDC power supply
- IP 65
- installation hole 22,5mm

WATCH ALARM RESET WALL BOX   *770041*

BNWAS | WAR.220.2.0.0

- 24 VDC power supply
- IP 65
- dimension 122 x 122 x 90mm
- M32 x 1,5 cable gland

STAGE #1 ALARM RESET WALL BOX *with buzzer*   *770045*

BNWAS | WAR 220.2.1.0

- 24 VDC power supply
- IP 65; 85 dB(A)
- dimension 122 x 122 x 90mm
- M32 x 1,5 cable gland

FAILURE ALARM PANEL   *770423*

BNWAS | FAP 220.1.0.0

- incl. test/reset facility
- 24 VDC power supply
- buzzer 85 dB(A)

ILLUMINATED RESET P/B *with wall box*   *770429*

BNWAS | WAR 220.3.0.0

- IP 23 (indoor)
- connecting type: terminal block

PERIPHERY EQUIPMENT

WALL BOX FOR LCM   *770317*

BNWAS | WBC 210.1.0.0

- 360 x 250 x 165mm
- IP 23
- 16ea M25 cable glands

WATCH ALARM BOX *with buzzer*   *770051*

BNWAS | WAB 220.1.0.0

- 24 VDC
- IP 65
- 85 dB(A)

WATCH ALARM RESET *illuminated push button*   *770119*

BNWAS | WNAR 220.1.0.1

- 24 VDC
- IP 23
- connecting type: screws

PIR MOTION SENSOR   *770305*

BNWAS | WMS 220.2.0.0

- with swivel bracket
- incl. electronic module

STAGE #2 ALARM PANEL   *770318*

BNWAS | WAP 220.5.0.0

- for officer´s cabin with buzzer
- 85 dB(A)
- bulkhead mounted
- 24 VDC + IP 23

SWIVEL MOUNTING BRACKET   *770309*

BNWAS | WMB 210.1.0.0

- for operating device
- attachment on desk/wall/ceiling

CONTACT

+49 4344 819 23 10
info@sm-electrics.de
www.sm-electrics.de

POSTAL ADDRESS
Am Wulfsbarg 17
24217 Stakendorf
Germany

OPERATIVE LOCATION
Eichkamp 30
24217 Schoenberg
Germany