

Honeywell

MORLEY IAS
FIRE SYSTEMS



MA1000

MA2000

MA8000

**Manual
Installation**

Fire detection system

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PLEASE NOTE:

Do not attempt to install the control unit and connected devices without reading this manual.

1. LIMITATIONS OF DETECTION SYSTEMS

An alarm or fire detection system can be very useful for early warning of any dangerous event, such as a fire, a robbery, or a simple theft. In some cases, it can manage events automatically (transmission of messages for the evacuation of premises, automatic fire extinguishing, interfacing with the CCTV system, blocking of access routes or doors, automatic notification of authorities, etc.).

Furthermore, any system may not function properly if it is not installed and maintained according to the manufacturer's instructions.

2. PRECAUTIONS



- These instructions contain procedures to be followed to avoid damage to equipment. It is assumed that the user of this manual has undergone training and is familiar with the applicable regulations.
- The system and all its components must be installed in an environment with the following characteristics:
 - Temperature: $-5\text{ }^{\circ}\text{C}$, $+40\text{ }^{\circ}\text{C}$.
 - Humidity: max. 95 % (without condensation).
- Peripheral devices (sensors, etc.) that are not fully compatible with the control unit can cause damage to the control unit and malfunction of the system at any time. Therefore, it is essential to use only material guaranteed by Honeywell and compatible with your control unit. If in doubt, please consult Honeywell Technical Service.



- This system, like all solid-state components, can be damaged by induced electrostatic voltages: handle the boards by holding them between the edges and avoid touching the electronic components.
- Adequate earthing guarantees, in any case, a reduction in susceptibility to disturbances.
- If installation problems cannot be solved, please contact Honeywell Technical Service.
- Any electronic system will not work if it is not powered. If the power supply from the mains fails, the system ensures battery operation, but only for a limited time.
- During the planning phase of the system, take into account the range required to adequately size the power supply and batteries.
- Specialised personnel must periodically check the condition of the batteries.
- Disconnect the mains and batteries BEFORE removing or inserting any cards.
- Disconnect ALL power sources from the control unit BEFORE carrying out any maintenance work.
- The control unit and connected devices (sensors, modules, repeaters, etc.) can be damaged if a new board is inserted or removed, or if powered cables are connected.
- The most common cause of malfunctioning is inadequate maintenance.
- Pay particular attention to these aspects from the very beginning of the system design phase; this will facilitate future maintenance and reduce costs.



EN 54-2:1997
EN 54-2:1997/AC:1999
EN 54-2:1997/A1 :2006
EN 54-4:1997
EN 54-4:1997/AC:1999
EN 54-4:1997/A1 :2002
EN 54-4:1997/A2 :2006
No. 0370 - CPR - 0694

This control unit is **CE 0370** marked to certify compliance with the requirements of the European Community Directives

This product is certified according to EN 54.2 and EN 54.4

3. GENERAL DESCRIPTION

The **MA-1000**, **MA-2000** and **MA-8000** are fire alarm control panels made in accordance with **EN.54.2** and **EN.54.4**.

3.1 Technical characteristics:

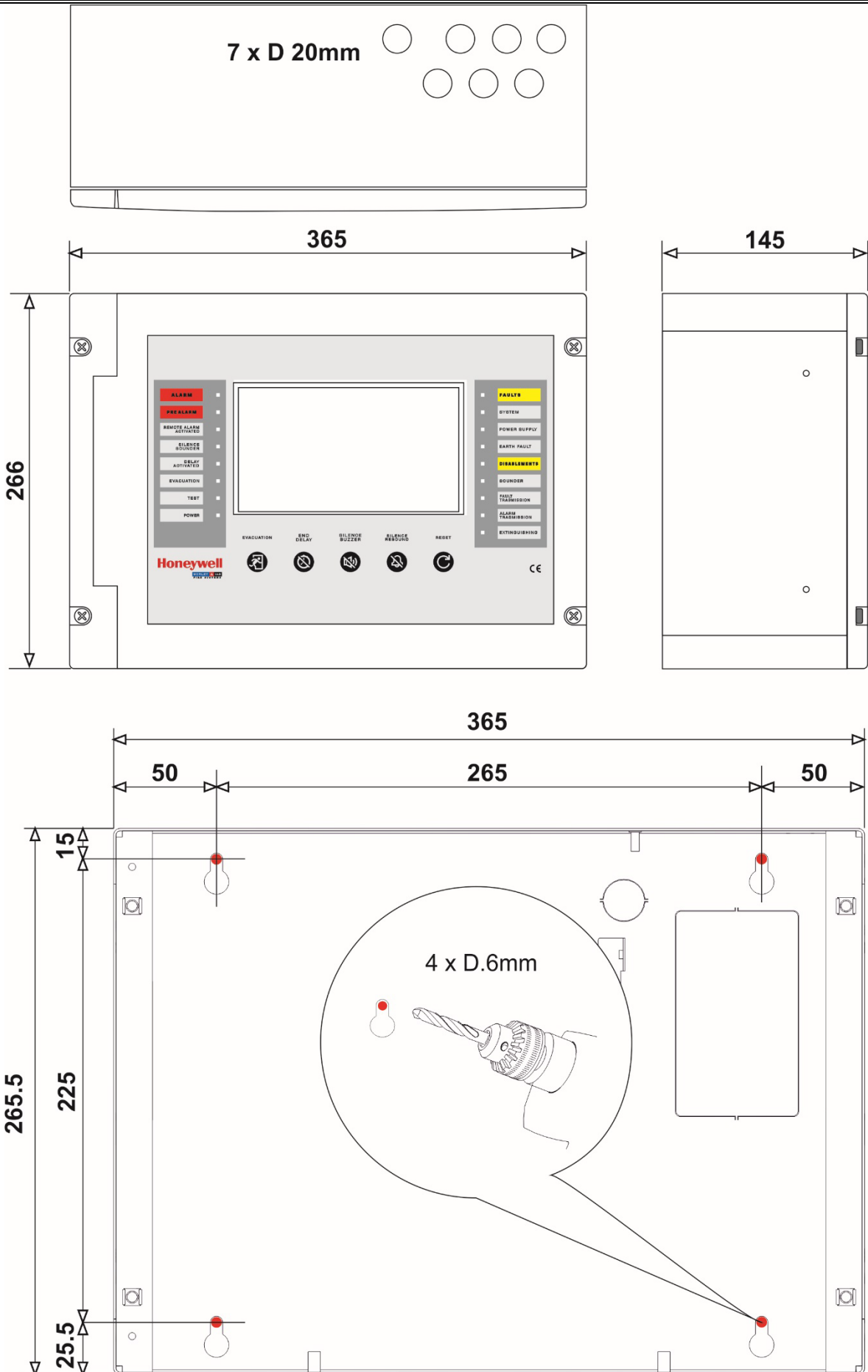
- Multi-microprocessor system with 7" TFT display (800 x 480 with backlight), 256-colour touchscreen with keyboard simulation for programming and configuring the system and the following specific functions: Reset Delay, Buzzer Mute, Sound Mute/Reset, Reset, Evacuation.
- **DETECTION LINES:**
 - Programmable closed or open analogue loops for connecting field elements.
Each loop can drive 99 sensors + 99 input and output modules with Morley-IAS and System Sensor protocols, based on the panel version.
 - **MA-1000** > 1 Loop Default.
 - **MA-2000** > 2 Loop Default.
 - **MA-8000** > 4 loops default (2 on-board MCB + 1 MA-LIB02), Optional 2 additional MA-LIB02 (Total 8 loops Max)
- **FEEDING:**
 - MA-1000**
 - Input: 110÷230Vac ±15% 50÷60Hz
 - Voltage: 28.8Vdc - 2.3A total.
 - Battery charger: 27.5 Vdc - 0.79A (with temperature compensation).
 - User Output: Min.23.80 Max 28.85 Vdc 1A, to supply external loads such as: sirens, etc.
 - MA-2000**
 - Input: 110Vac / 230Vac (selectable by Switch) ±15% 50÷60Hz
 - Voltage: 28.8Vdc - 2.7A total.
 - Battery charger: 27.5 Vdc - 0.79A (with temperature compensation).
 - User Output: Min.23.80 Max 28.85 Vdc 1A, to supply external loads such as: sirens, etc.
 - MA-8000**
 - Input: 110÷230Vac ±15% 50÷60Hz
 - Voltage: 28.8Vdc - 4.6A total.
 - Battery charger: 27.5 Vdc - 1.67A (with temperature compensation).
 - User Output: Min.23.80 Max 28.85 Vdc 1A, to supply external loads such as: sirens, etc.
- **OUTPUTS:**
 - 1 Supervised siren output (End-of-line diode 1N4007)
 - 1 General alarm output with potential-free contacts / supervised
 - 1 General fault output with potential-free contacts
 - 1 USER1 potential-free contact / supervised output
 - 1 USER2 output with potential-free contacts / supervised
- **MECHANICS:**

The mechanics of the control unit are suitable for wall installation.
For the dimensions of the cabinet, please refer to the drawing below "Dimensions MA-2000 and MA-8000".

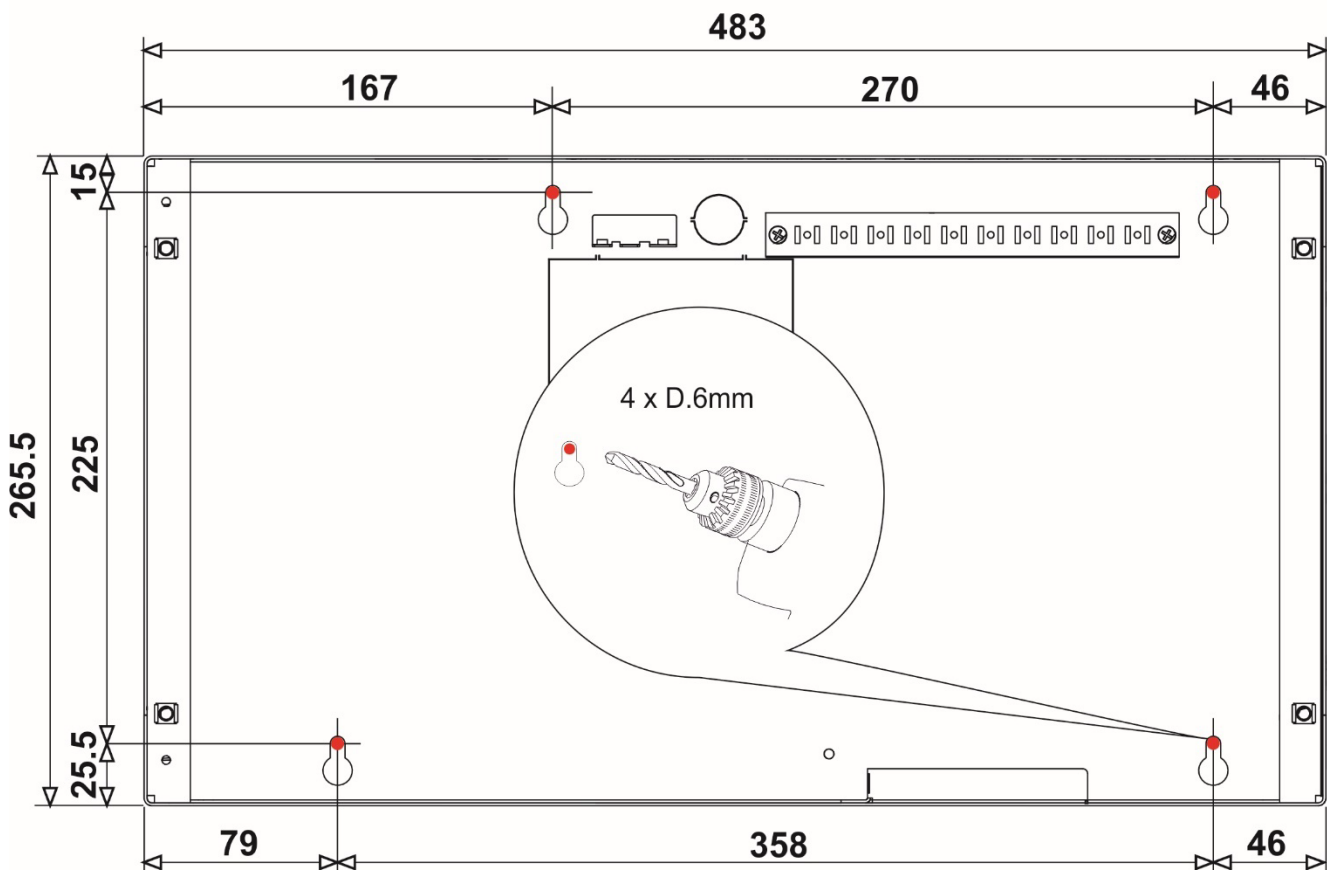
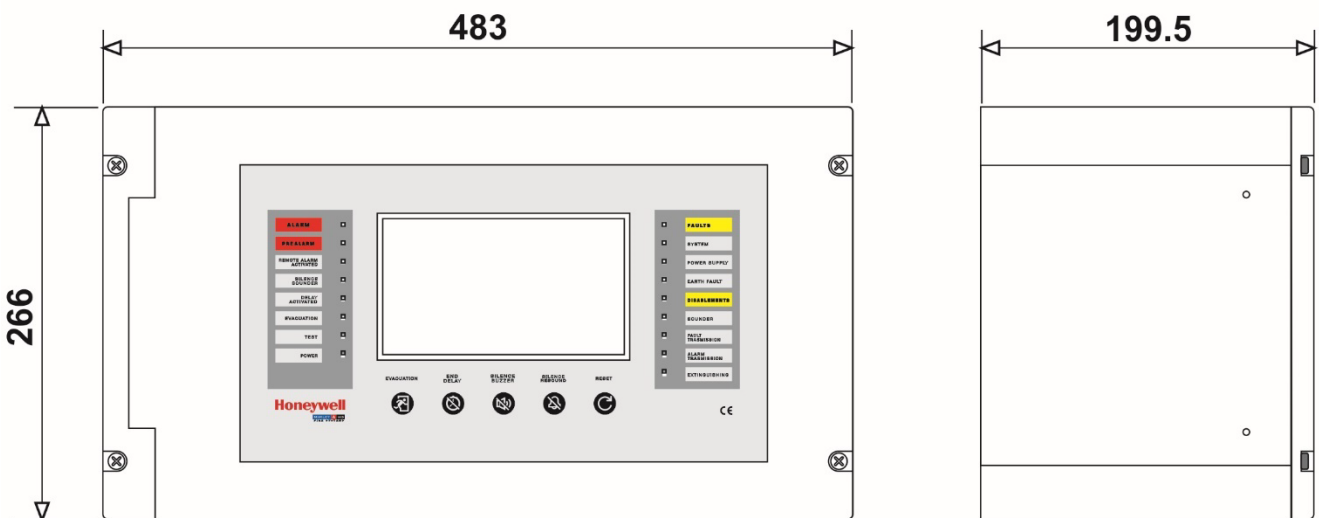
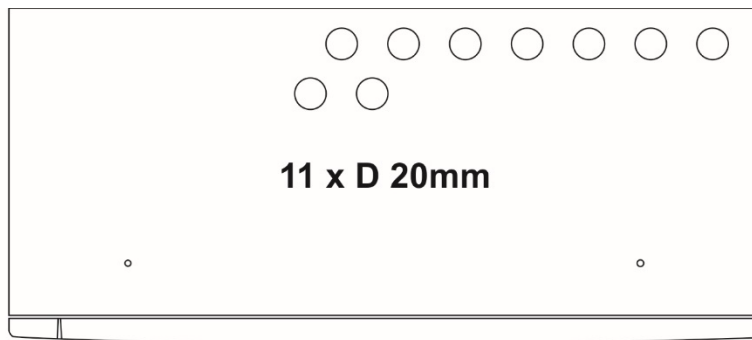
 - Degree of protection: IP 30
 - Operating temperature: - 5 °C to +40 °C
 - Storage temperature: -10 °C to +70 °C
 - Weight **MA-1000**: 6.2 kg >Excluding Batteries
 - Weight **MA-2000**: 8.2 kg >Excluding Batteries
 - Weight **MA-8000**: 9.8 kg >Excluding Batteries
- **MAIN FUNCTIONS:**
 - 3 password levels (Operator - Maintenance - Configuration)
 - 4 total access levels in accordance with EN.54.
 - Programmable text: point description up to 32 characters; zone description up to 32 characters.
 - 150 physical zones and 400 logical groups.
 - CBE (Control-by-event) control equations for activation with logical operators (AND, OR, DEL etc.).
 - Event file history with the last 10,000 events in non-volatile memory
 - Real-time clock
 - Autoprogramming of the line with automatic recognition of the type of devices connected.
 - Automatic recognition of points with the same address.
 - Decision-making algorithms for alarm and failure criteria.
 - Automatic Day/Night sensitivity changeover.
 - Signalling the need to clean the sensor.
 - Low sensor sensitivity warning.
 - Programmable alarm threshold for sensors.
 - Programming of predefined software functions for the various devices used.

- Walk-Test function for zones.

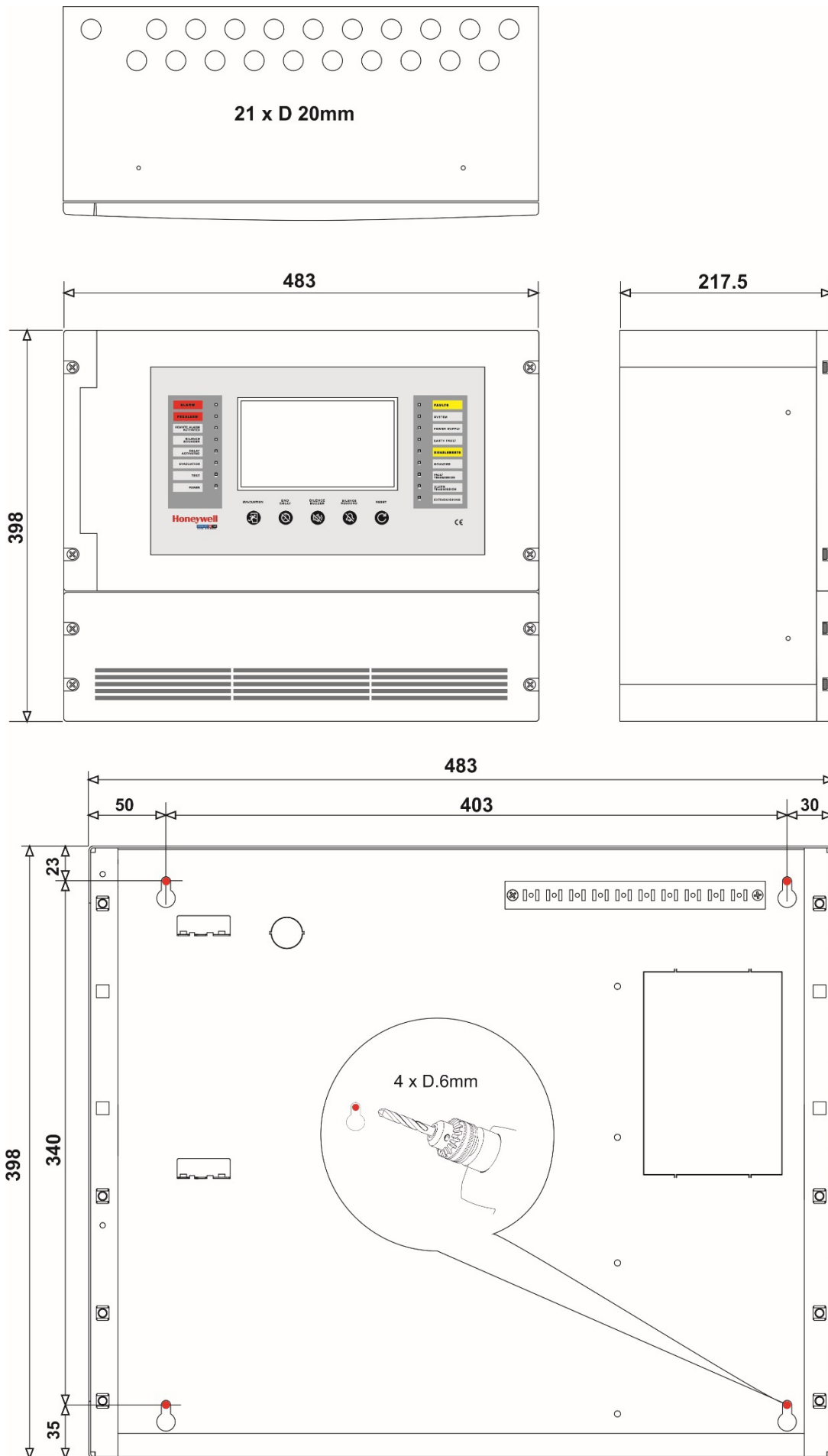
3.2 Dimensions and Fixing MA-1000



3.3 Dimensions and Fixing MA-2000

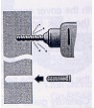


3.4 Dimensions and Fixing MA-8000





The control unit must be installed on a wall so that the display is clearly visible and easy for the operator to access. For example, a height of approx. 1.5 m allows an optimal view of the display.



The control unit is designed to be installed on the wall using 4 self-locking plugs (masonry walls) or self-tapping screws (prefabricated panels, etc.)

The diameter of the screws used must be 5 mm max.

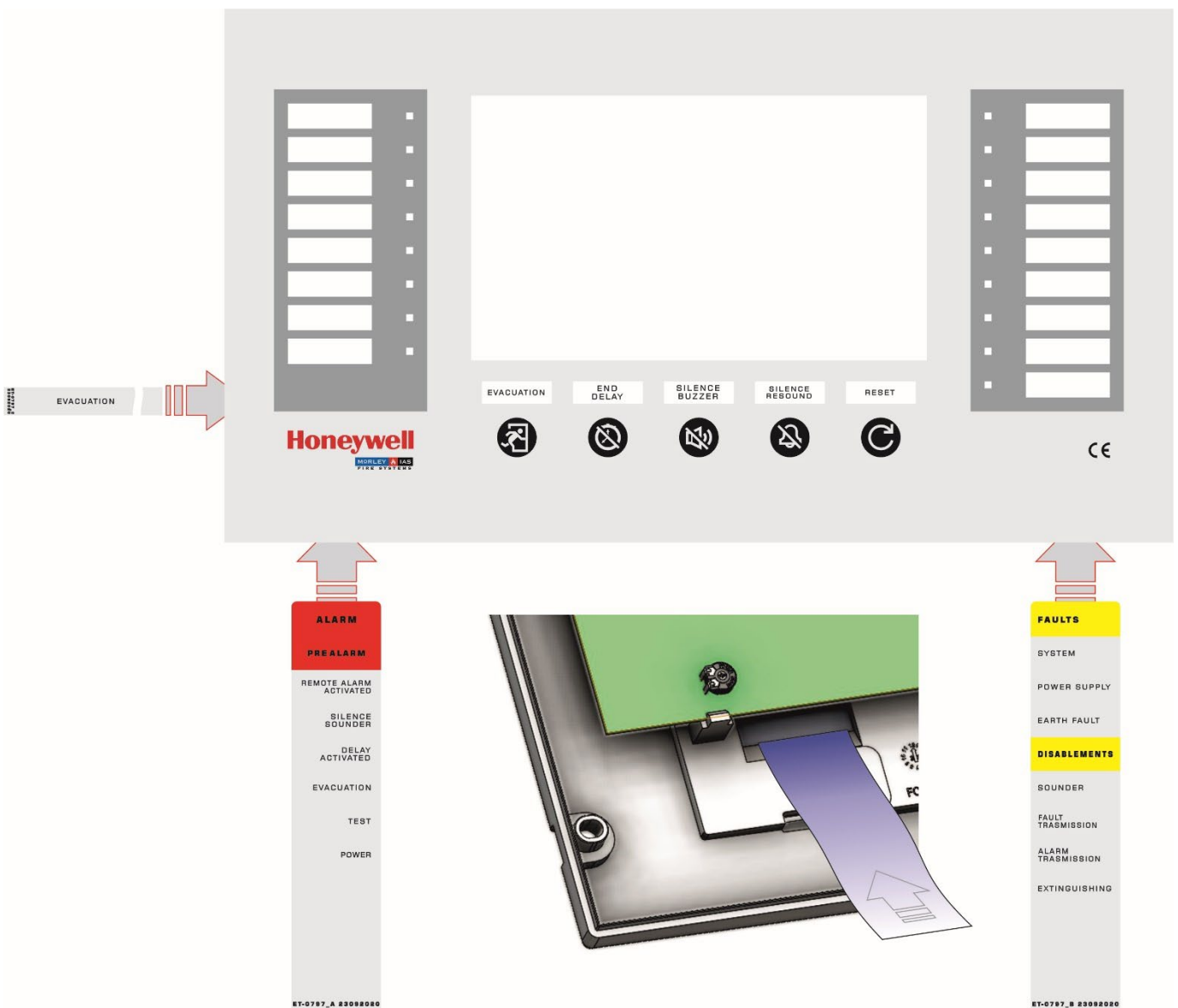
It is recommended not to install the control unit near heat sources (radiators, radiators, etc.).



Furthermore, if the control unit is to be installed on a wall next to a corner wall, the minimum distance from the latter must be 200 mm, so that the front panel can be opened.

3.5 Removable labels on the front panel

The panel is equipped with removable labels to indicate the status of LED functions and buttons.



4. ELECTRICAL CHARACTERISTICS

- Operating temperature: - 5° C ÷ + 40° C
- Relative humidity: 10 % to 95 % (non-condensing)
- Storage temperature: - 10°C÷ + 50°C

4.1 Earthing system

The earthing installation must be carried out in accordance with CEI and ISPELS standards or the standards valid in the country where the panel is installed.

In any case, it must have a resistance of less than 10 Ohm (measured at the manhole with the consumers disconnected).

This is in accordance with IEC 68-12 for TN installations.

The earth connection of the control unit is mandatory and must be made on terminal block CN1 (AW80PPx power supply board)

4.2 Main power supply

The control unit is powered by the mains voltage and, in the event of a mains failure, can continue to operate normally thanks to the rechargeable batteries contained in the control unit itself.

The characteristics required for the mains supply are:

▪ MA-1000

- Voltage: 110Vac / 230Vac single-phase ±15%.
- Frequency: 50 / 60Hz
- Power consumption: Max 2.3A

The power supply unit has the following outputs:

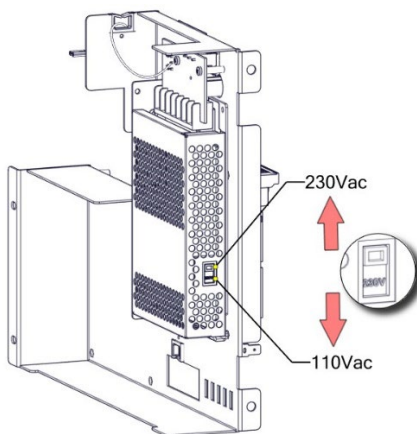
- Regulated power supply for control unit and charger: 28.6Vdc - 28.85Vdc, 2.30 A ripple max. 500mVpp
- User output: 23.8Vdc - 28.85Vdc, 1A with resettable fuse.

▪ MA-2000

- Voltage: 110Vac / 230Vac (selectable by Switch) single-phase ±15%.
- Frequency: 50 / 60Hz
- Power consumption: Max 3A @110Vdc / Max 1.7A @230Vdc

The power supply unit has the following outputs:

- Regulated power supply for control unit and charger: 28.6Vdc - 28.85Vdc, 2.70 A ripple max. 500mVpp
- User output: 23.8Vdc - 28.85Vdc, 1A with resettable fuse.



▪ MA-8000

- Voltage: 110Vac / 230Vac single-phase ±15%.
- Frequency: 50 / 60Hz.
- Power consumption: Max. 2.2A

The power supply unit has the following outputs:

- Regulated power supply for control unit and charger: 28.6Vdc - 28.85Vdc, 4.60 A ripple max. 500mVpp
- User output: 23.8Vdc - 28.85Vdc, 1A with resettable fuse.

1. N.B.: Particular care must be taken when installing near powerful electromagnetic sources (e.g. repeaters, radio relays, motors, etc.).

4.3 Battery charging section

- Output voltage = 26.5 VDC to 28.5 VDC (temperature compensation)
- Output current **MA-1000** = 0.54A ~ 500mVpp max.
- Output current **MA-2000** = 0.79A ~ 500mVpp max.
- Output current **MA-8000** = 1.67A ~ 500mVpp max.
- Number of housed batteries **MA-1000** = 2 x 12V 7÷12Ah
- Number of housed batteries **MA-2000** = 2 x 12V 17.2÷18Ah
- Number of housed **MA-8000** batteries = 2 x 12V 17.2-18-24-27-38Ah
- The charger section has the following signaling thresholds:
 - Low battery threshold = 21.5 Vdc
 - Charging error threshold = 3.4 Vdc (voltage difference between the two batteries)
 - Battery release threshold = 19.5 Vdc
 - Internal battery resistance threshold = 0.6 ohm

4.4 Batteries

The average service life stated by the manufacturer is 3-5 years at an environmental temperature of 20°C
N.B. The service life decreases as a function of a higher operating temperature and possible discharge-recharge cycles.

Installed batteries must comply with:

- ✓ **IEC 60896-21, IEC 60896-22.**
- ✓ **Container material V2 or higher V0**

Recommended batteries:

MA-1000

12V 12Ah Dimensions: L151xW98xH97.5

Brand: Yuasa type NP12-12 capacity = 20 hours.

MA-2000

12V 18Ah Dimensions: W181xD77xH167

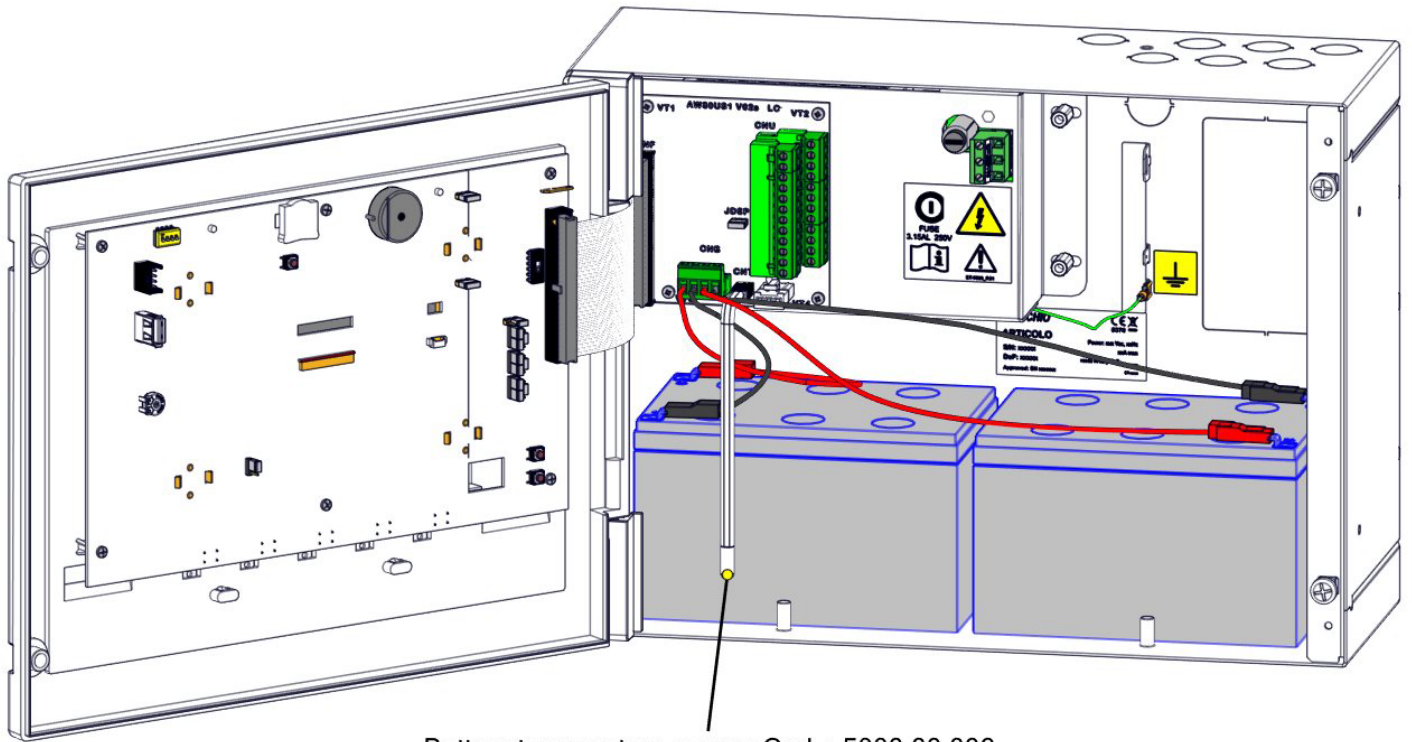
Brand: Yuasa type NP18-12B or NP18-12BFR capacity = 20 hours.

MA-8000

12V 38Ah Dimensions: W197xD165xH170

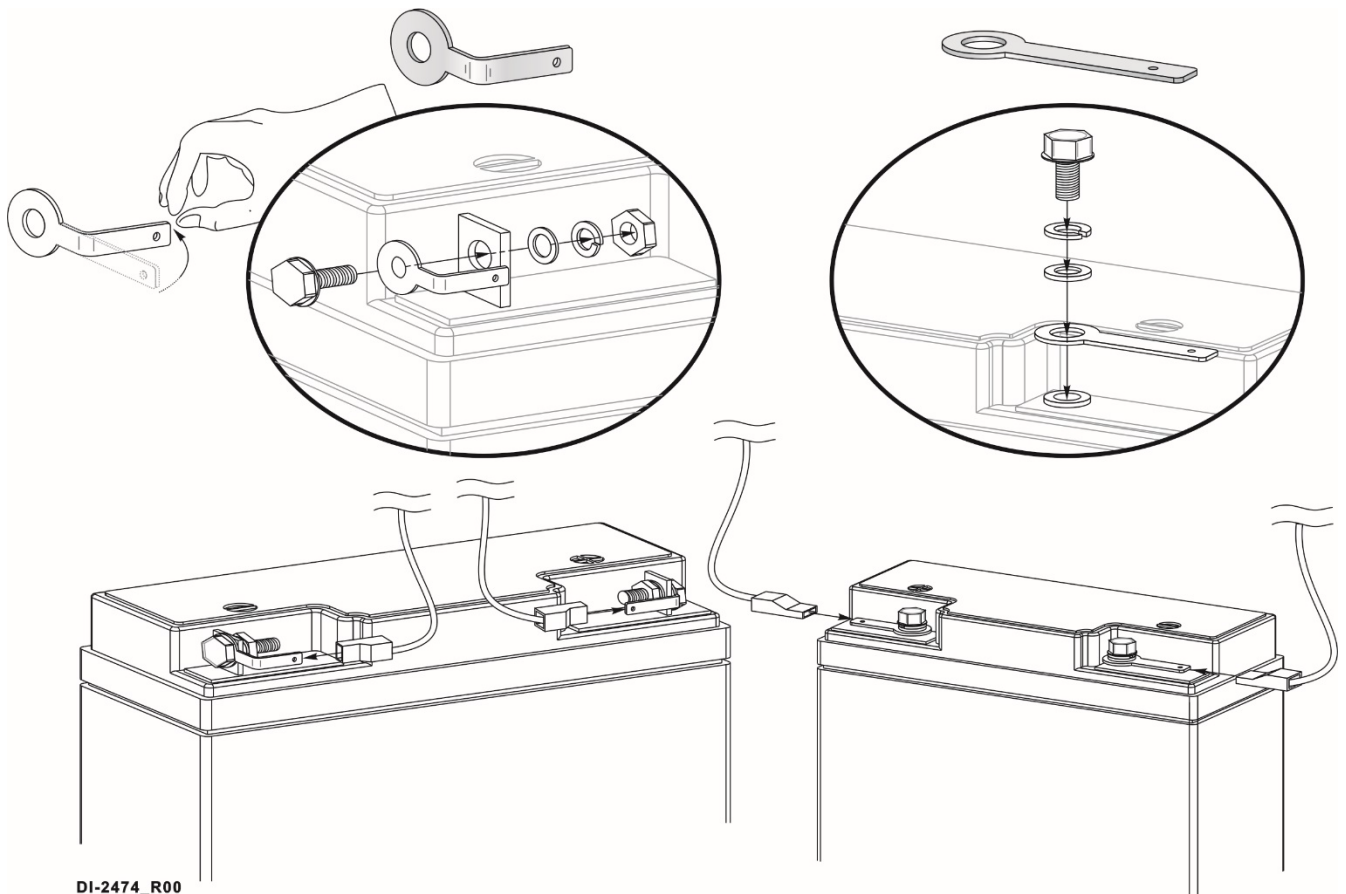
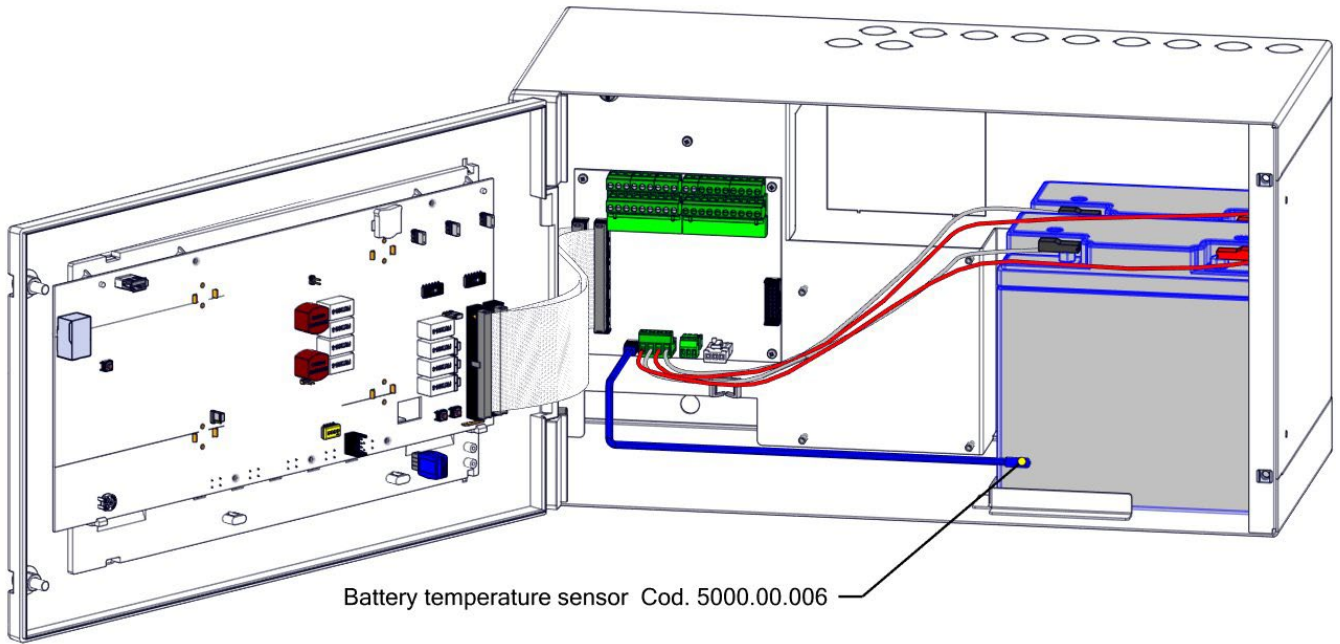
Brand: Yuasa type NP38-12 or NP38-12FR capacity = 20 hours.

4.4.1 MA-1000 batteries installation



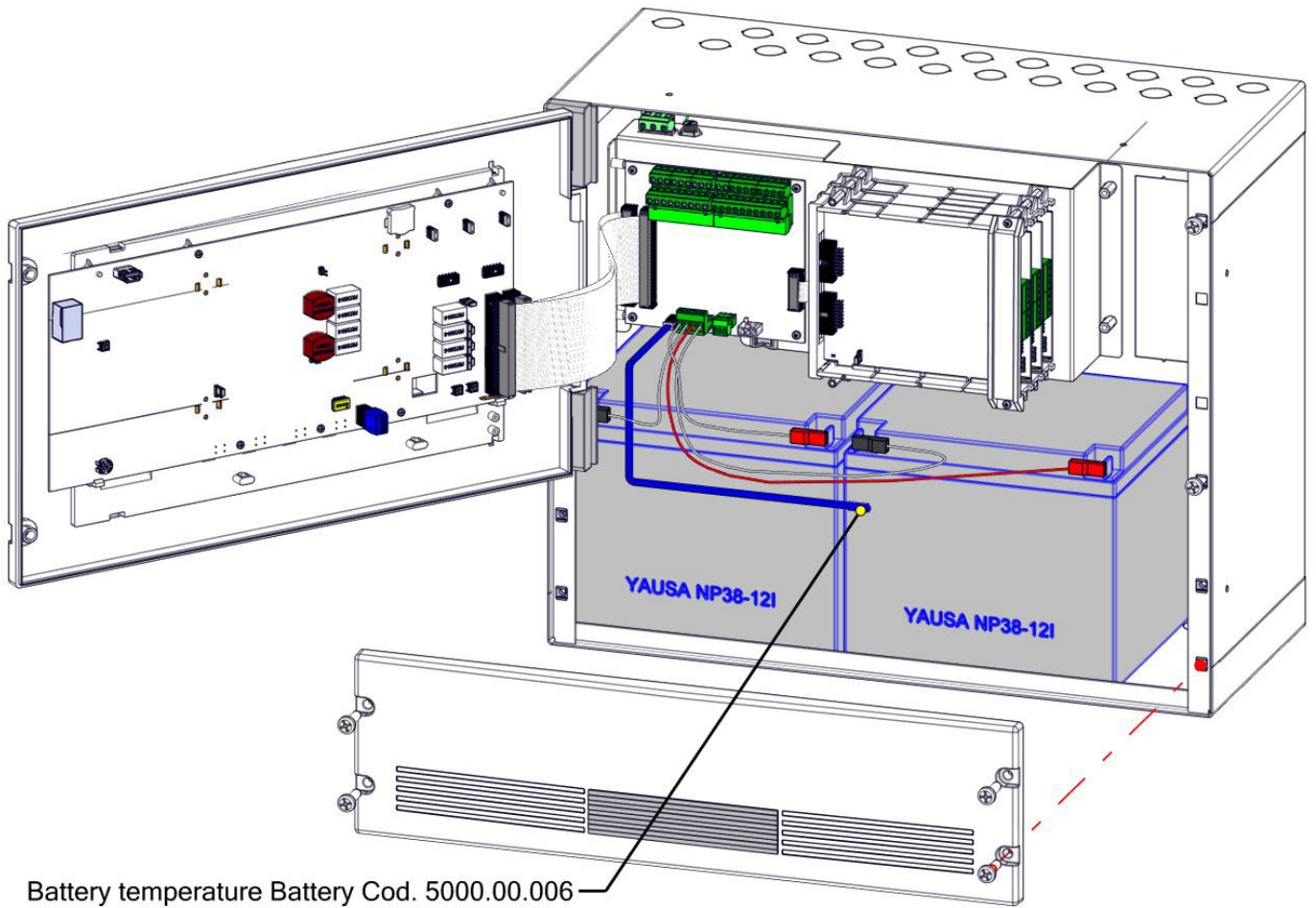
Battery temperature sensor Cod. : 5000.00.006

4.4.2 MA-2000 batteries installation

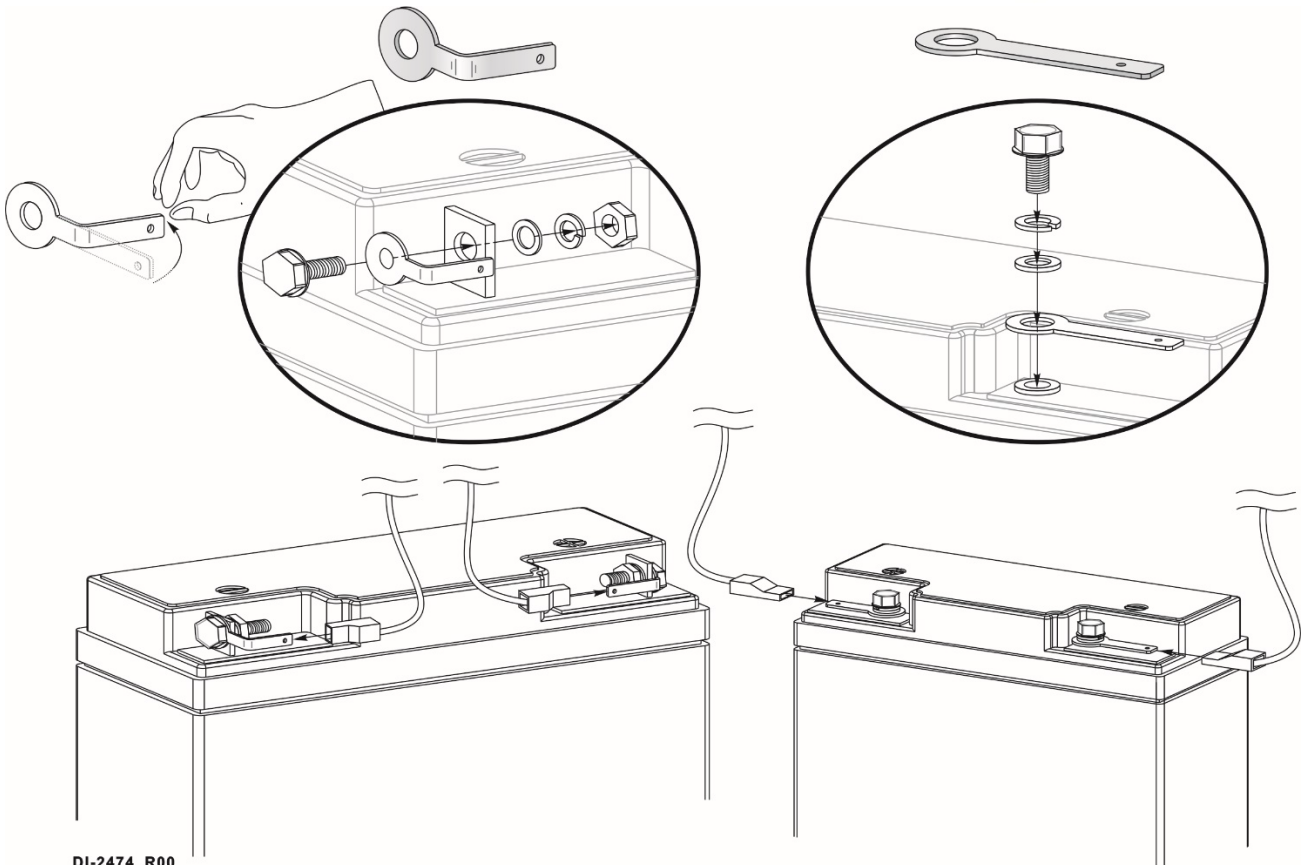


DI-2474_R00

4.4.3 MA-8000 batteries installation



Battery temperature Battery Cod. 5000.00.006



DI-2474_R00

4.5 Operation Power supply and batteries

The control unit's main microprocessor periodically checks the status of the main AC power source, the batteries, and the charging circuit. The control unit automatically activates the backup battery in the event of an AC power failure.

When the control unit is operating on AC mains, the main microprocessor checks the charger output and its presence. To perform this test, the charger output is temporarily switched off and the battery voltage is read (missing battery warning <15.0V).

When the control unit operates on battery power (in the absence of mains power), the 'Low Battery' fault is reported when the battery voltage is <21.5 V and, to prevent irreversible damage, the voltage is automatically switched off, by disconnecting the batteries, when the voltage is <19.5 V.



All wiring MUST be checked BEFORE being connected to the control unit.

At least the following checks are recommended:

- ✓ Check the continuity of all cables used (including shields).
- ✓ Ensure that, in an alarm condition, any voltage drops introduced do not impair the functionality of the various devices.
- ✓ Ensure that the electrical characteristics of all cables used are within the manufacturer's specifications (refer to the various sections of this manual).
- ✓ Check the insulation between all cables and between cables, shields, and system earth. A minimum of 2M Ω insulation is required.
- ✓ Check that the shield of all signal cables is not grounded in other than the prescribed positions. Check that signal cables do not run together with power lines.

4.6 Mains Power Connection

The connection to the 230Vac mains supply must be made with a three-core cable (phase - neutral - earth). The earth conductor coming from the mains must be identified on the terminal block CN1 of the AW80PPx power supply board and must be fixed to the cabinet using a cable clamp so that it cannot be accidentally disconnected from the terminal block.

The 230 Vac power cable must be fixed inside the control unit using a cable fixing device.

N.B.: The cable-holding sleeves must have a flammability class of HB.

Mains supply conductors must not be consolidated by soft soldering.

A disconnection device external to the control unit must be provided for the 230 Vac power cable (contact separation: 3 mm min.) The disconnection device must be omni-polar or must disconnect the line phase.

The power supply connection must be made according to the following polarity:

4.6.1 Power Supply Board CN1 Terminal Block

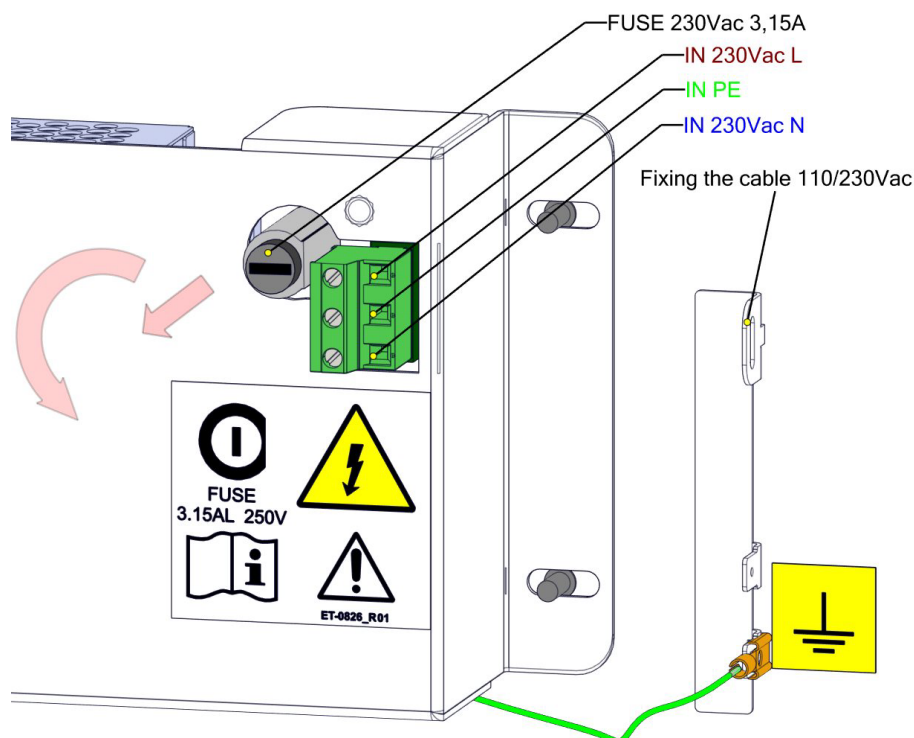
| | Description | Notes |
|---|-------------|--|
| L | Phase | 110 / 230VAC mains input with 3.15 AL protection fuse |
| ⊕ | Earth | |
| N | Neutral | |

- 1 - Turn off the 230 Vac mains switch
- 2 - Disconnect terminal block CN1 from the control unit
- 3 - Connect the network cable
- 4 - Reconnect terminal block CN1
- 5 - Turn on the mains switch
- 6 - Install and connect the batteries as indicated in this manual

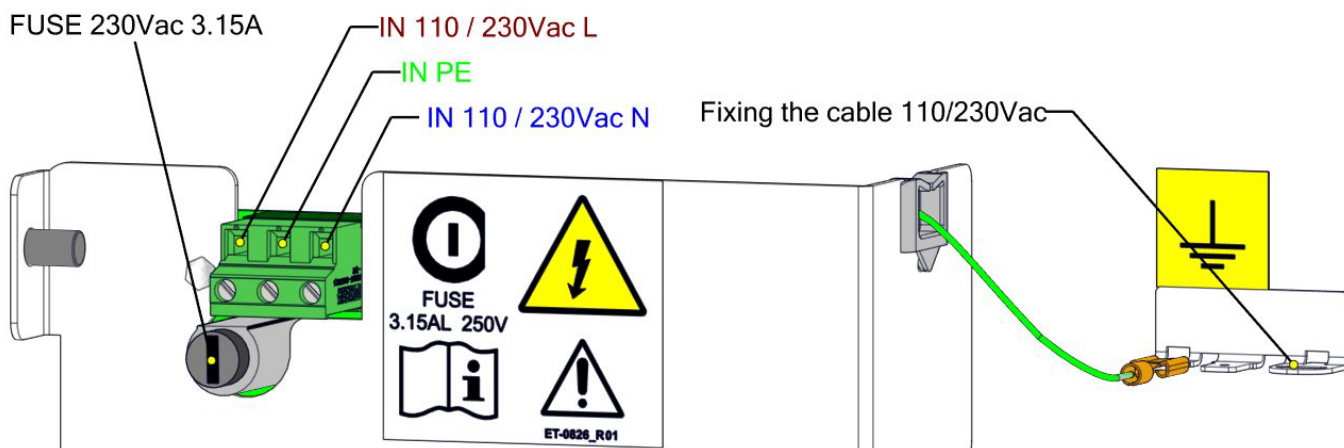
N.B.: Once powered up, the control unit starts operating automatically. However, depending on the storage period of the batteries, it is necessary to wait a few hours before the batteries are fully recharged.

- 7 - Check the operation of the LED indicators on the panel, as indicated in section " TEST AND START-UP OPERATION ".
- 8 - Close the central unit

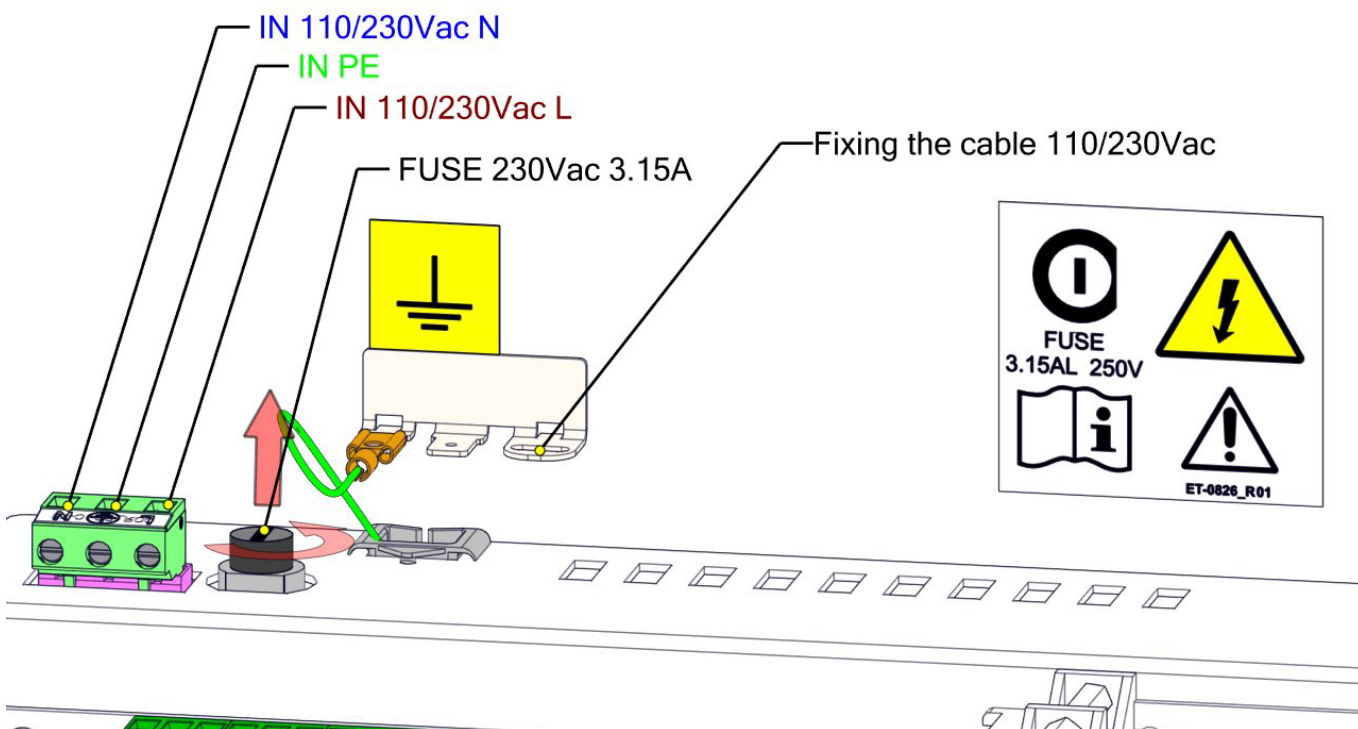
4.6.2 MA-1000 Main Connection



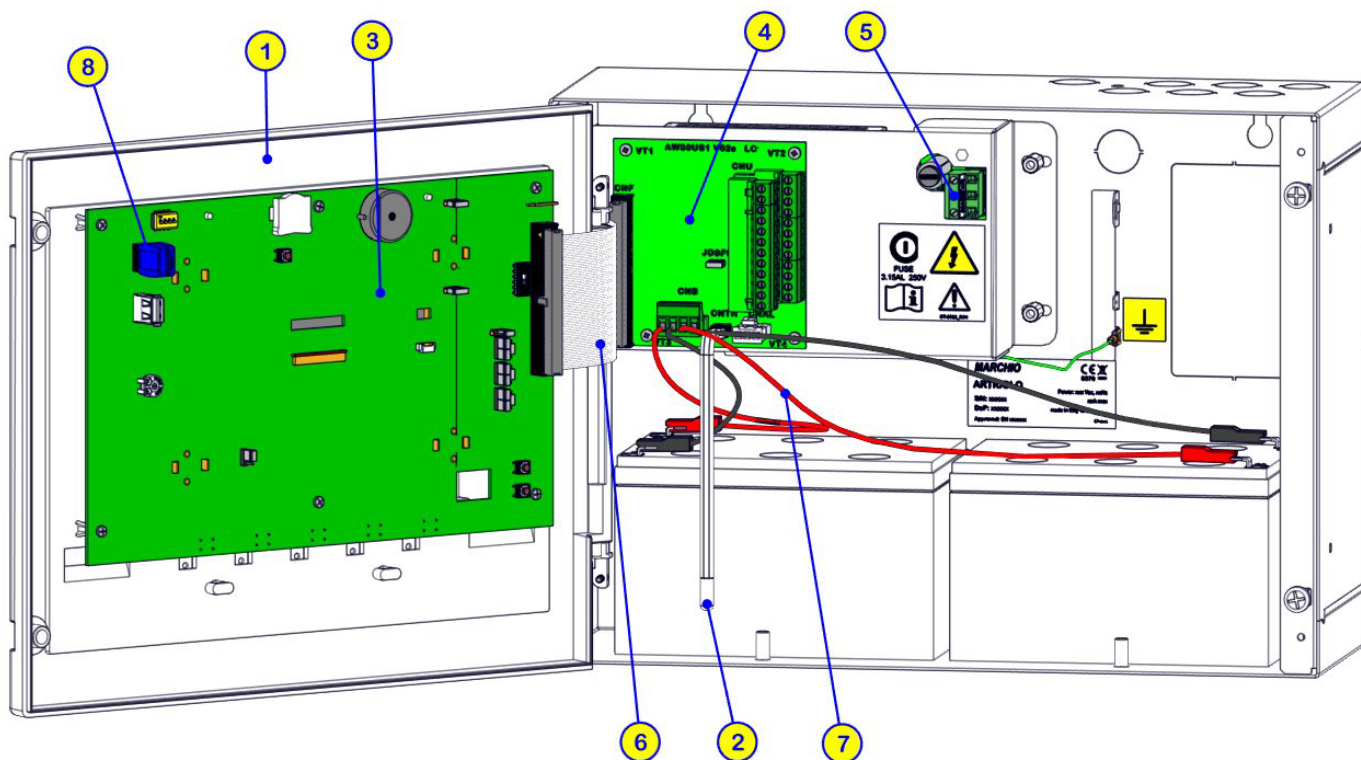
4.6.3 MA-2000 Main Connection



4.6.4 MA-8000 Main Connection



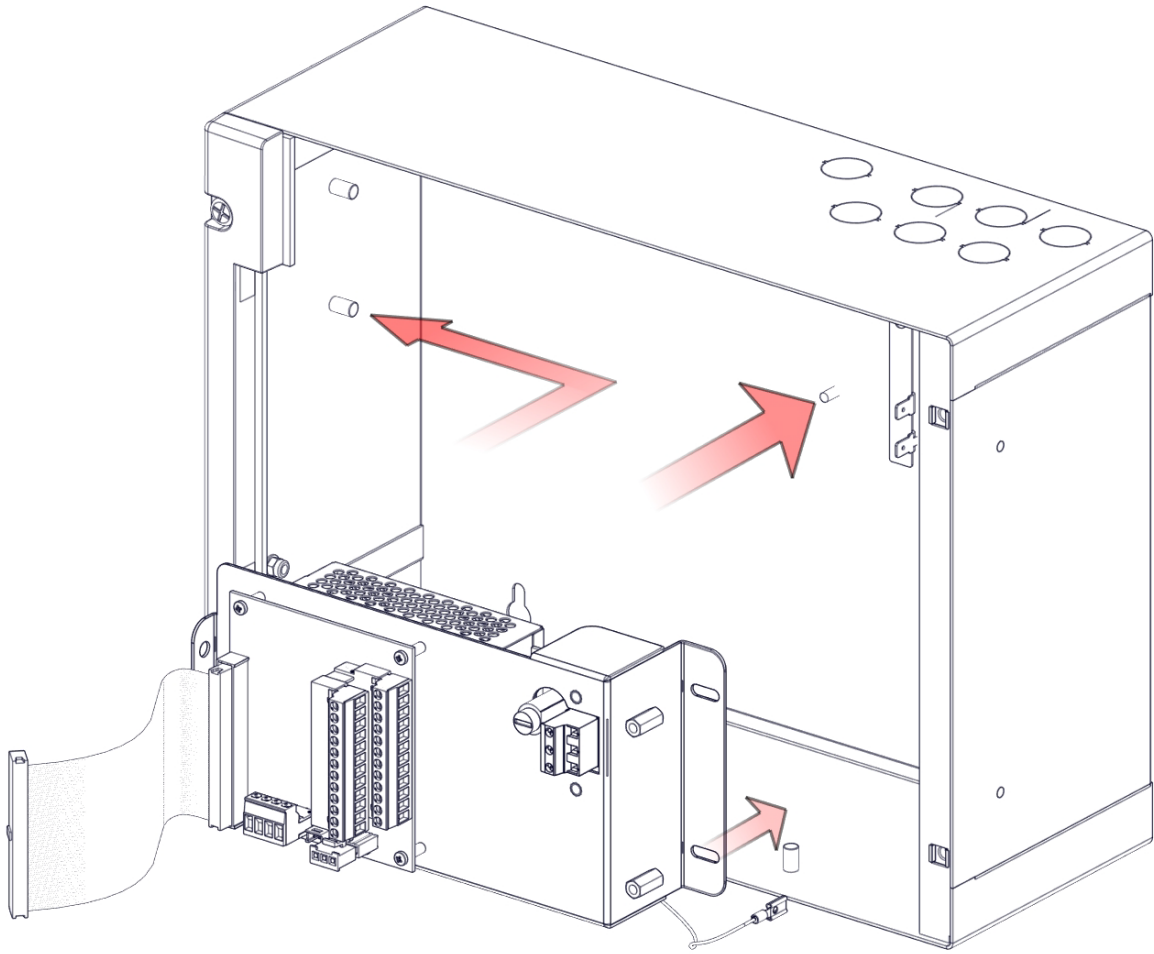
5. MA-1000 system components



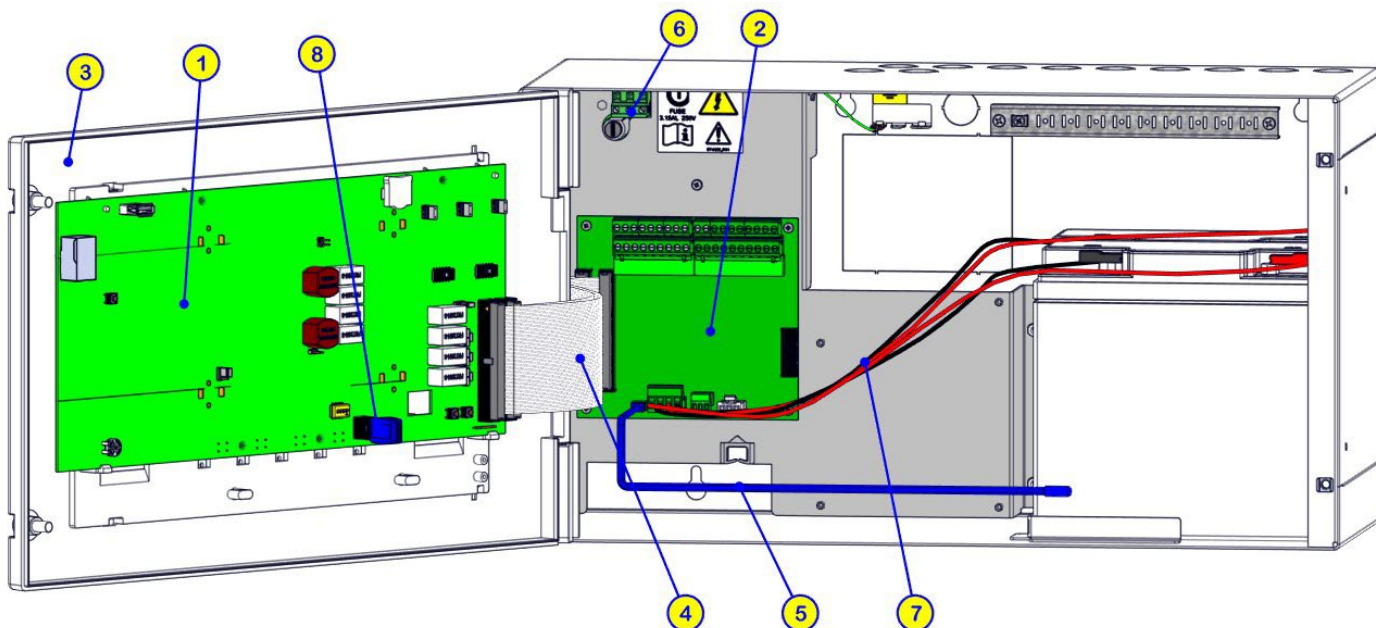
5.1 Spare Parts Codes:

- | | | |
|-----------|--------------------|--|
| 1. | 5000.00.026 | Spare part MA-1000. Front door |
| 2. | 5000.00.006 | Spare part AM-MA, Battery Temperature Probe (L340) |
| 3. | 5000.00.022 | Spare part MA-1000-01, main board + LCD (Region 1) |
| | 5000.00.023 | Spare part MA-1000-02, main board + LCD (Region 2) |
| | 5000.00.024 | Spare part MA-1000-03, main board + LCD (Region 3) |
| 4. | 5000.00.019 | Spare part AM-MA 1000, Basic Board |
| 5. | 5000.00.021 | Spare part AM-MA 1000, Power Supply + Board |
| 6. | 5000.00.025 | Spare part AM-MA 1000, Flat cable |
| 7. | 5000.00.042 | Spare part AM-MA 1/6/8000, Battery Cables |
| 8. | E-SIB-X | Communication Enable Key (optional) |

5.2 MA-1000 Base Unit Removal



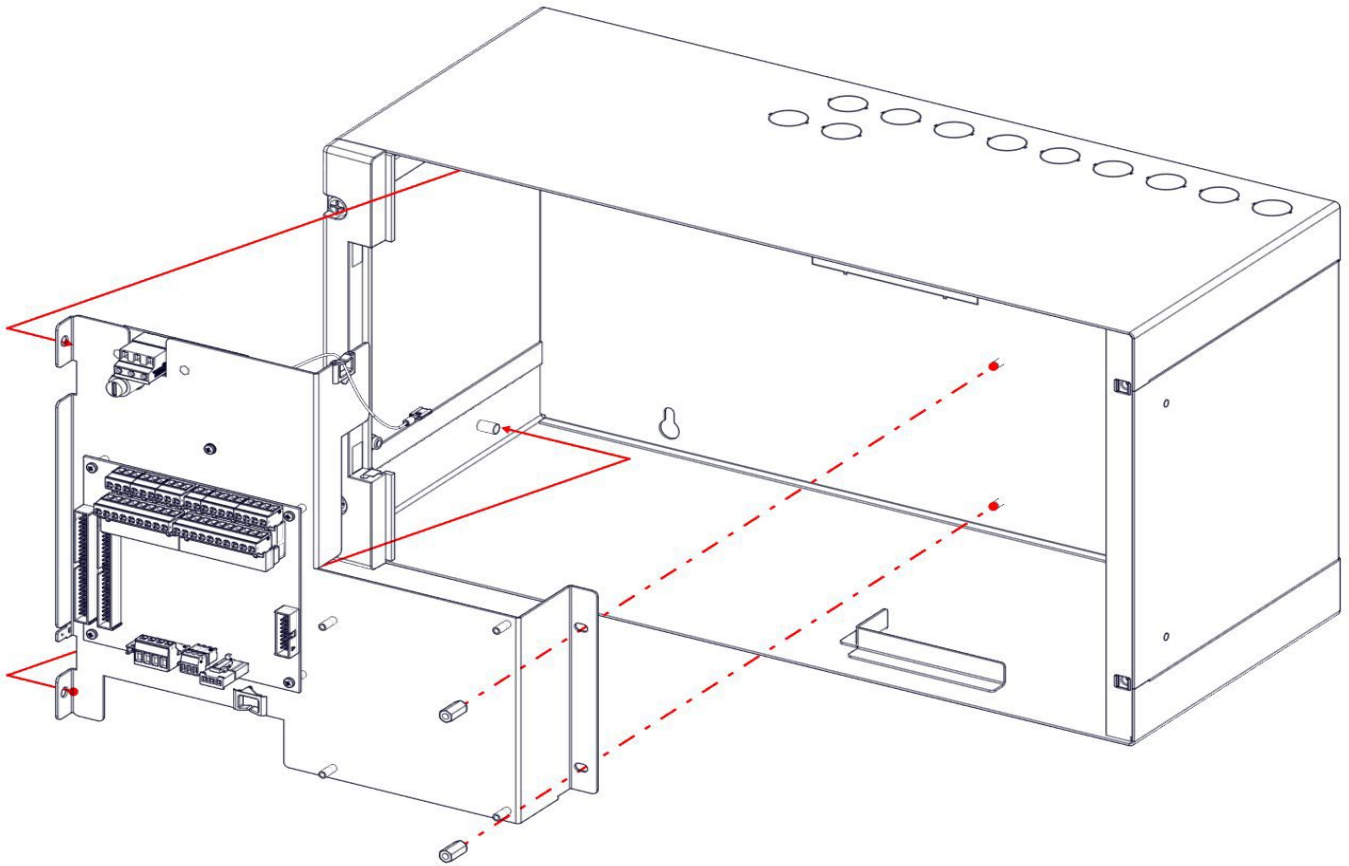
6. MA-2000 system components



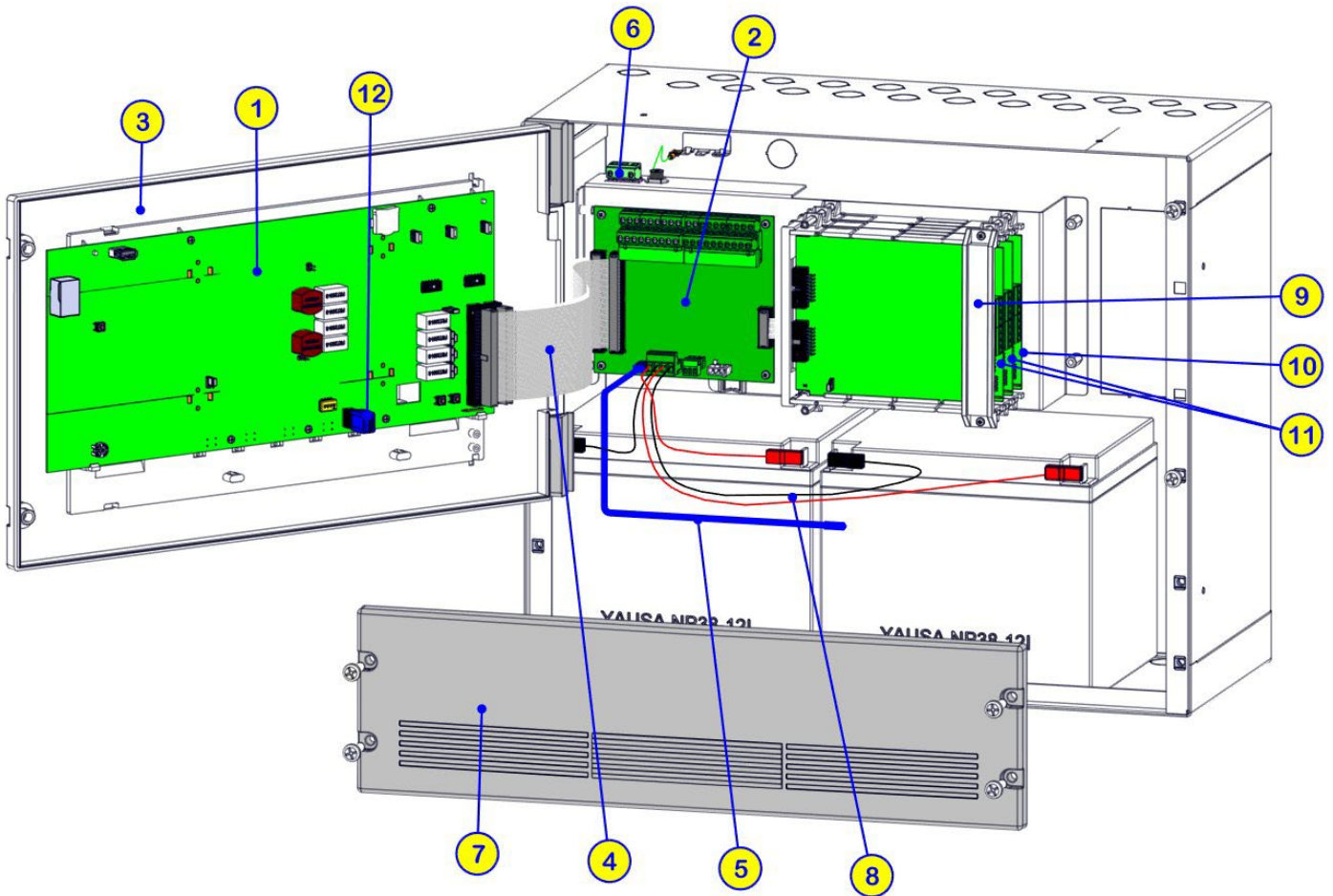
6.1 Spare Parts Codes:

- | | |
|-----------------------|--|
| 1. 5000.00.010 | Spare part MA-2000-01, main board + LCD (Region 1) |
| 5000.00.011 | Spare part MA-2000-02, main board + LCD (Region 2) |
| 5000.00.012 | Spare part MA-2000-03, main board + LCD (Region 3) |
| 2. 5000.00.003 | Spare part AM-MA-2000 / 6000 / 8000, Basic Board |
| 3. 5000.00.017 | Spare part MA 2/8000. Front door |
| 4. 5000.00.005 | Spare part AM-MA, Flat Cables |
| 5. 5000.00.006 | Spare part AM-MA, Battery Temperature Probe (L340) |
| 6. 5000.00.007 | Spare part AM-MA 2000, Power Supply + Board |
| 7. 5000.00.043 | Spare part AM-MA 2000, Battery Cables |
| 8. E-SIB-X | Communication Enable Key (optional) |

6.2 MA-2000 Base Unit Removal



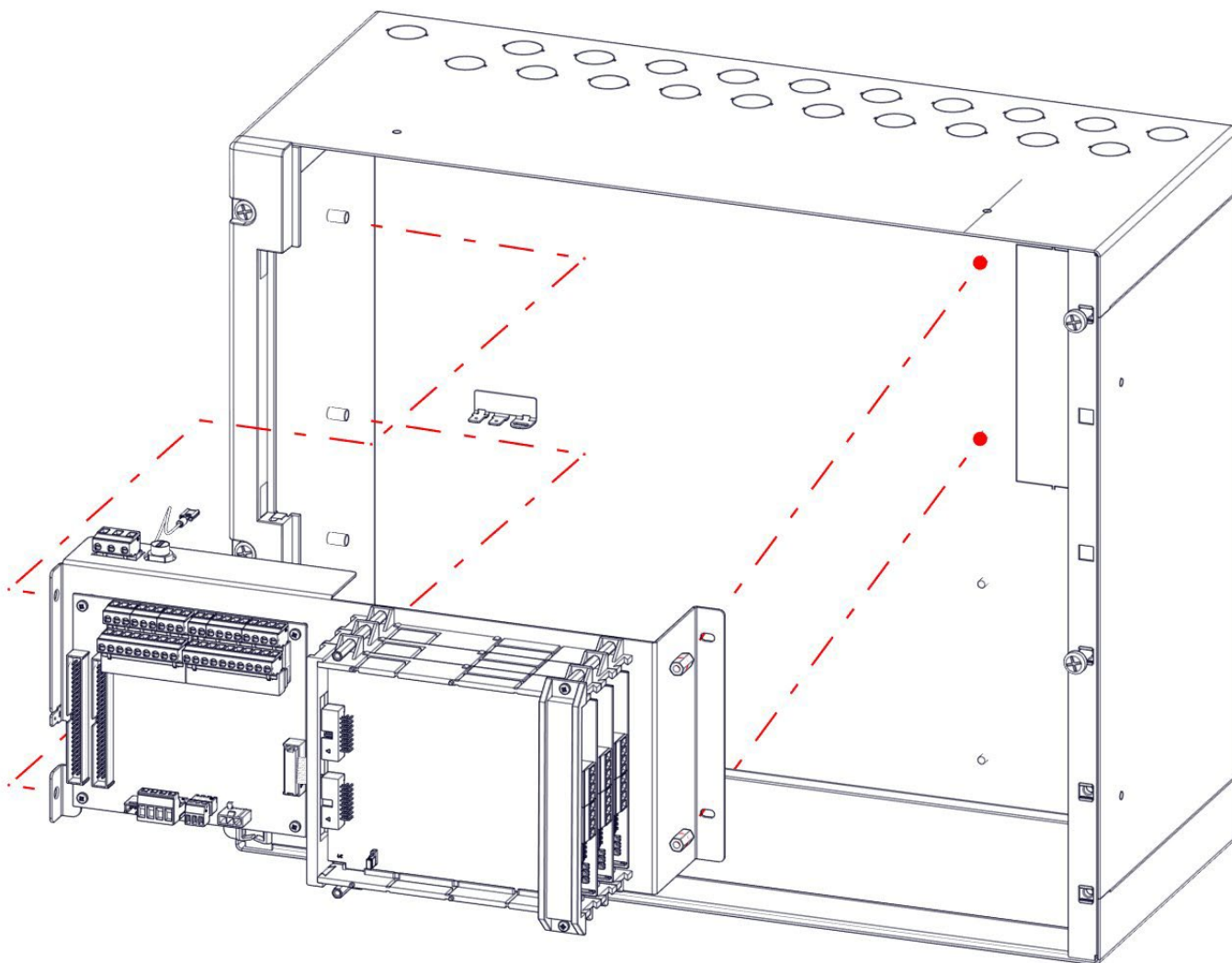
7. MA-8000 system components



7.1 Spare Parts Codes:

- | | |
|-----------------------|--|
| 1. 5000.00.013 | Spare part MA-8000-01, main board + LCD (Region 1) |
| 5000.00.014 | Spare part MA-8000-02, main board + LCD (Region 2) |
| 5000.00.015 | Spare part MA-8000-03, main board + LCD (Region 3) |
| 2. 5000.00.003 | Spare part AM-MA-2000 / 6000 / 8000, Basic Board |
| 3. 5000.00.017 | Spare part MA 2/8000, Front Door |
| 4. 5000.00.005 | Spare part AM-MA, Flat Cables |
| 5. 5000.00.006 | Spare part AM-MA, Battery Temperature Probe (L340) |
| 6. 5000.00.008 | Spare part AM-MA 6000, Power Supply + Board |
| 7. 5000.00.016 | Spare part MA-8000, 3U Blind Panel |
| 8. 5000.00.042 | Spare part AM-MA 1/6/8000, Battery Cables |
| 9. AMSUP1EXP | Spare part Kit Guide Boards (note: not available in spare part list) |
| 10. MA-LIB2-xx | 2 LOOP CARD MA-8000 (Region x) > Default |
| 11. MA-LIB2-01 | 2 LOOP CARD MA-8000 (Region 1) > Optional |
| MA-LIB2-02 | 2 LOOP CARD MA-8000 (Region 2) > Optional |
| 12. E-SIB-X | Communication Enable Key > optional |

7.2 MA-8000 Base Unit Removal



7.3 LOOP card expansion

- INSTALLATION Guide Card:

A -Unscrew the two 3x6TC screws

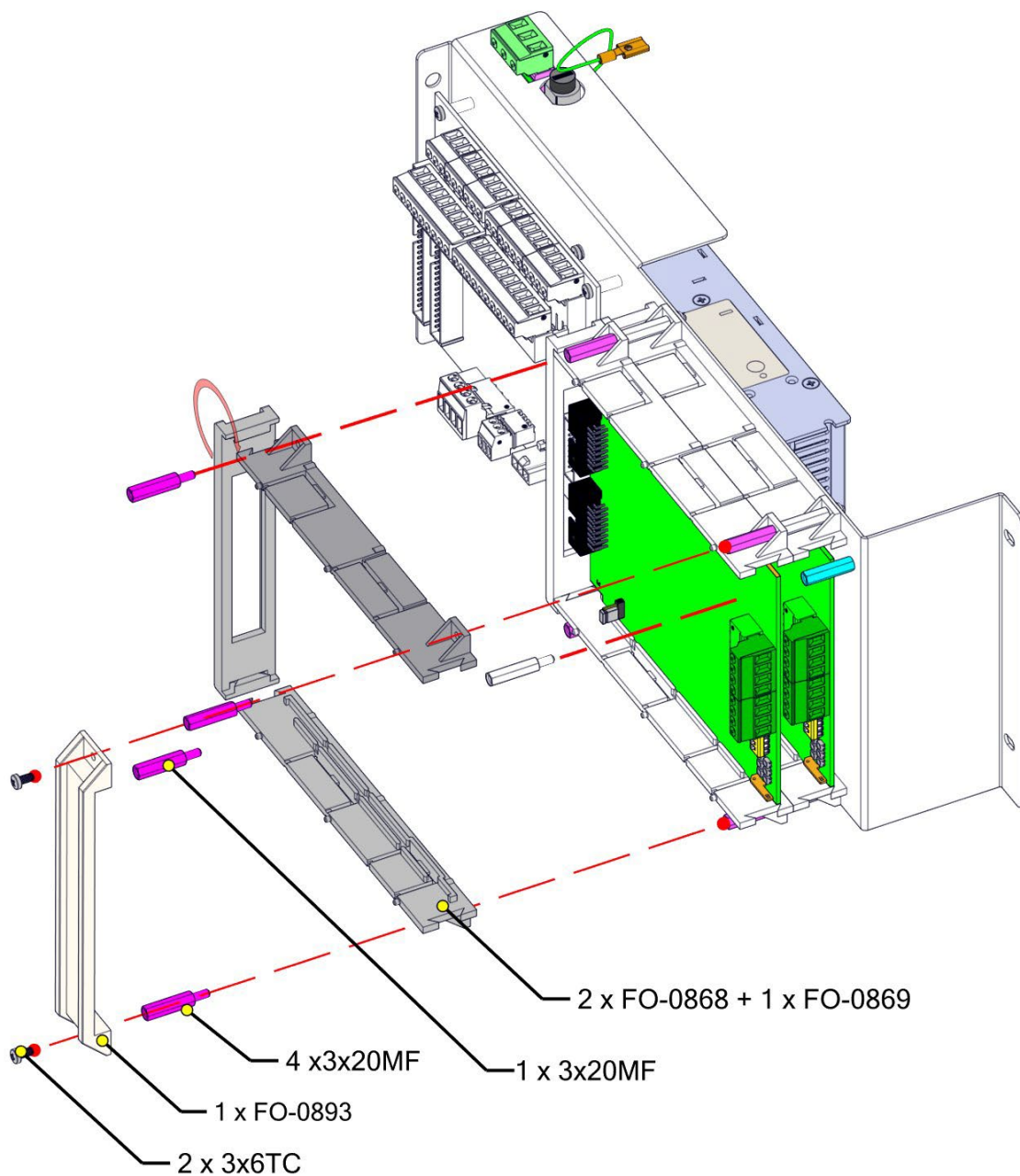
B -Removing the fixing bar FO-0893

C -Install the two side pieces FO-0868 with the back piece FO-0869

D -Tighten the 4 Dist. 3x20MF

E -Reposition of Traverse FO-0893

F -Tighten the two 3x6TC screws



- INSTALLATION Card:

A -Insert the card into the guide

B -Driving

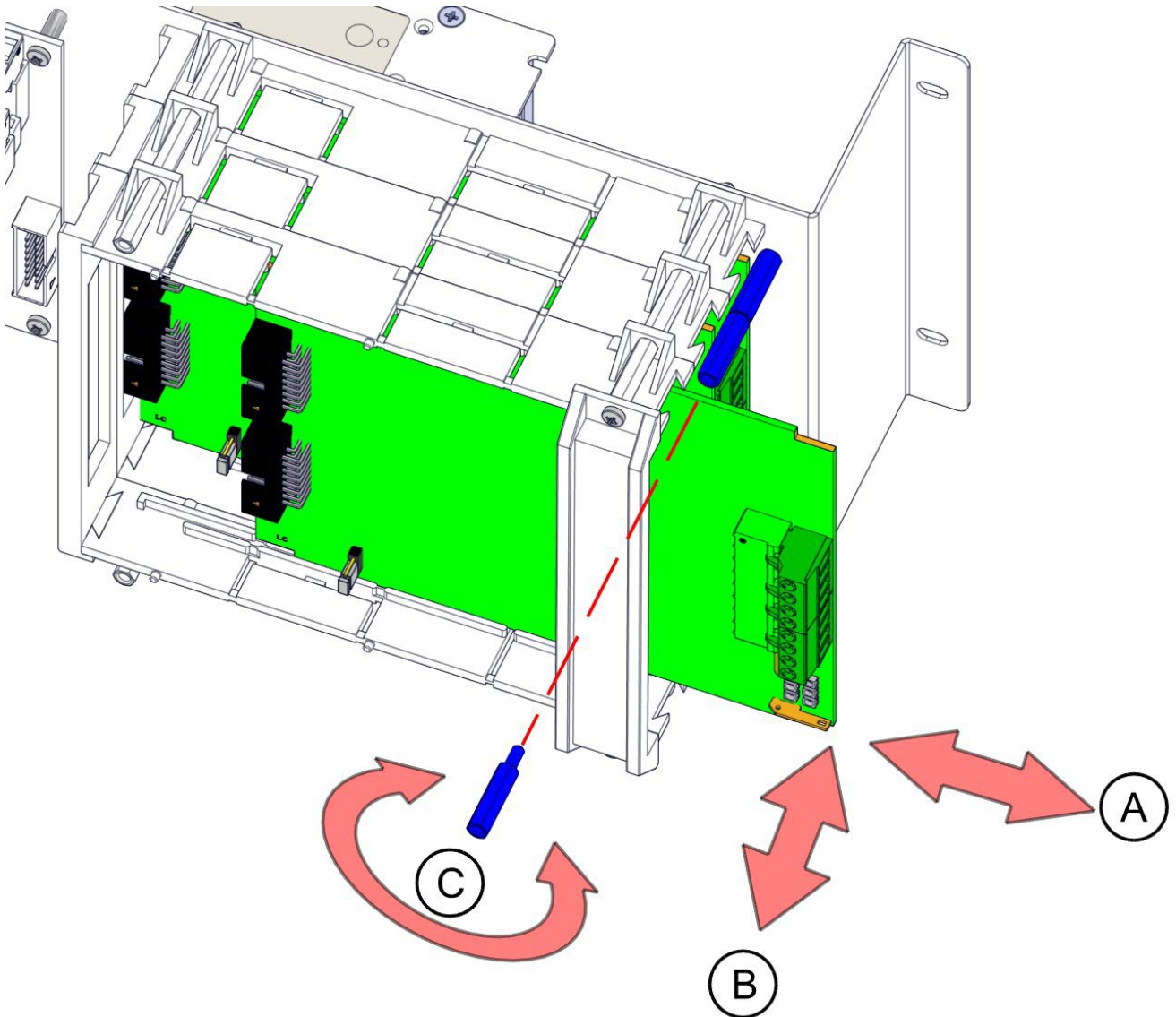
C -**Screw** spacer 3x20MF -Board lock

- DISINSTALLATION Card:

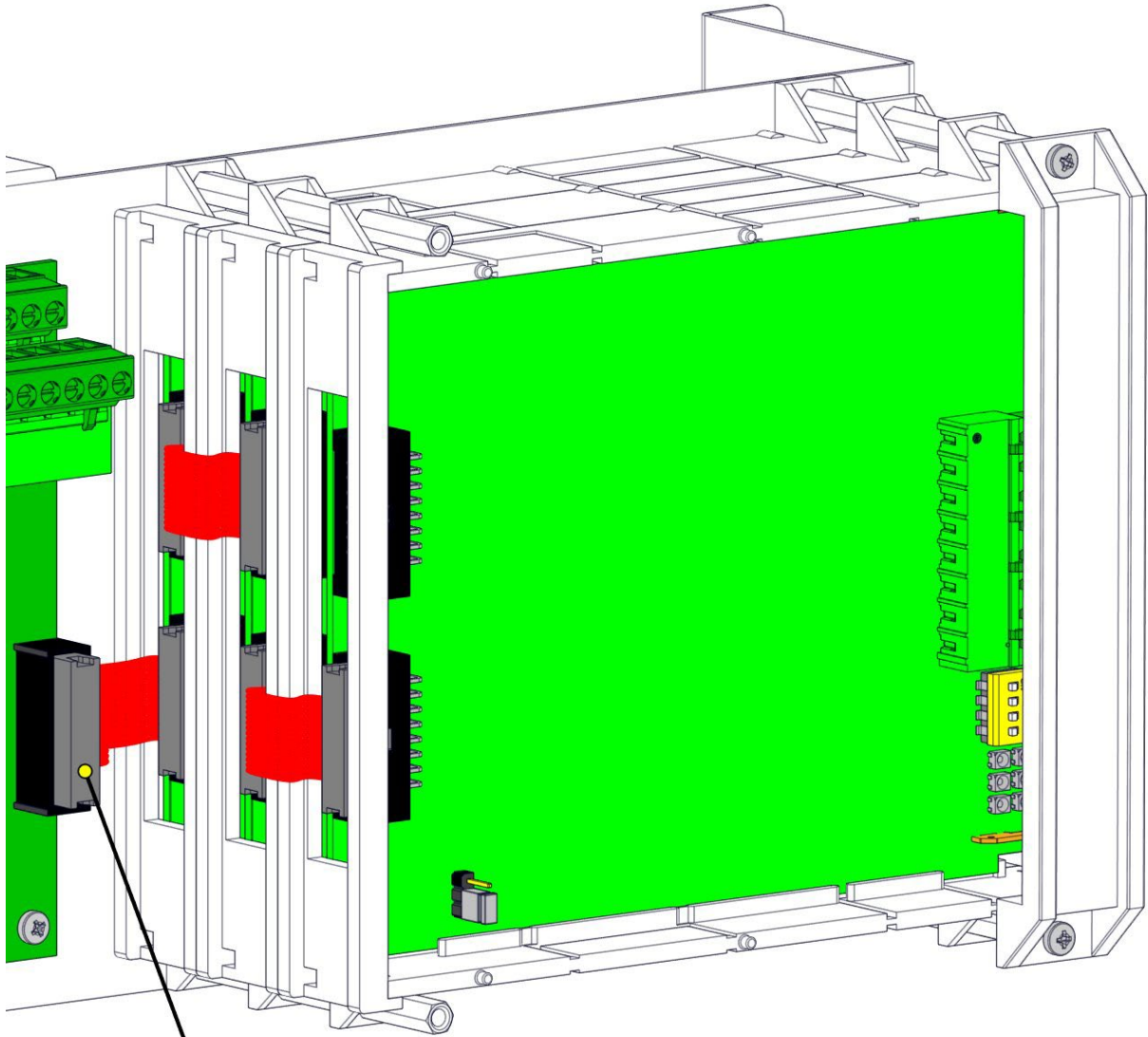
C -Unscrew spacer 3x20MF -Board lock

B -Remove the board from the guide

A -Pull the board out of the guide

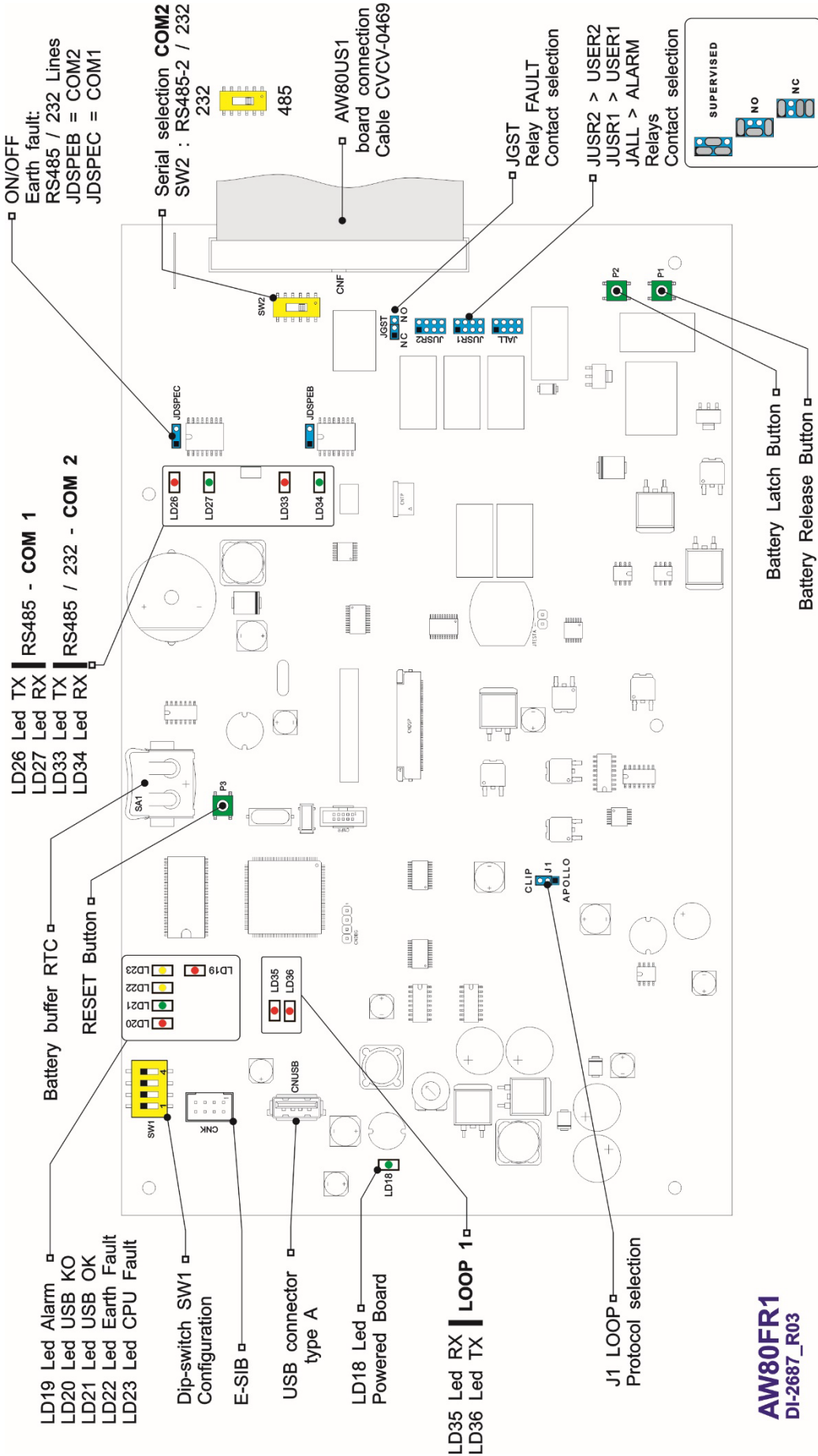


- Electrical connection via Flat cables code CVCV-0402 (supplied with the board)

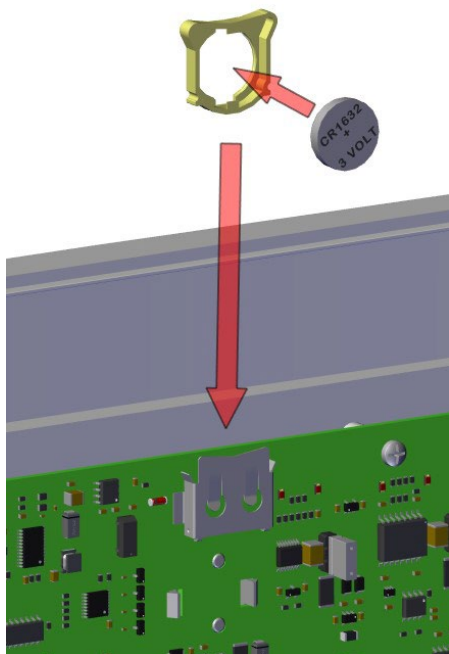


Flat Cable Cod. CVCV-0402

8. AW80FR1 Topographic CPU board MA-1000



9.1 AW80FRx CPU board RTC battery MA-1000 - MA-2000 - MA-8000



Place the button cell (model CR 1632 3V inside the package) on the AW80FRx board as shown. This battery is used as a buffer battery for the RTC (real time clock) circuit. The date and time must then be programmed (see programming manual).

9.2 CPU board DIP SWITCH setting MA-1000 - MA-2000 - MA-8000

- AW80FR1 >**SW1** card MA-1000
- AW80FR0 >**SW3** board MA-2000 - MA-8000

| 1 | 2 | 3 | 4 | FUNCTION |
|-----------|-----------|-----------|-----------|---|
| OFF | OFF | OFF | OFF | In normal operation |
| ON | OFF | OFF | OFF | Export the configuration in the central unit to a USB key |
| OFF | OFF | OFF | ON | Firmware Update |
| ON | OFF | OFF | ON | Factory configuration reset |
| ON | ON | ON | ON | Copy configuration from USB key to central unit (From PK SW Tool) |
| OFF | ON | OFF | OFF | Touchscreen Calibration |

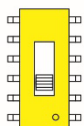
- AW80FR1 >**SW2** card MA-1000
- AW80FR0 card >SW4 - **SW5** MA-2000 - MA-8000

MA-1000

Serial Selection

232

^



v

485

SW2: RS485-2 / 232 COM2

MA-2000 MA-8000

Serial Selection

485 <  > 232

SW4: RS485 / 232 COM3

SW5: RS485 / 232 COM2

9.3 Setting Jumper Ground Dispersion Detection **MA-1000**

- **AW80FR1** CPU board

| | |
|---------------|--|
| JDSPEB | Removing the jumper causes the control unit to ignore a ground fault COM 2 RS485/232 (isolated) |
| JDSPEC | Removing the jumper causes the control unit to ignore a ground fault COM 1 RS485 (isolated) |

- **AW80US1** BASIC BOARD

| | |
|--------------|---|
| JDSPE | Removing the jumper causes the control unit to ignore a ground fault GENERAL |
|--------------|---|

9.4 Setting Jumper Ground Dispersion Detection **MA-2000 - MA-8000**

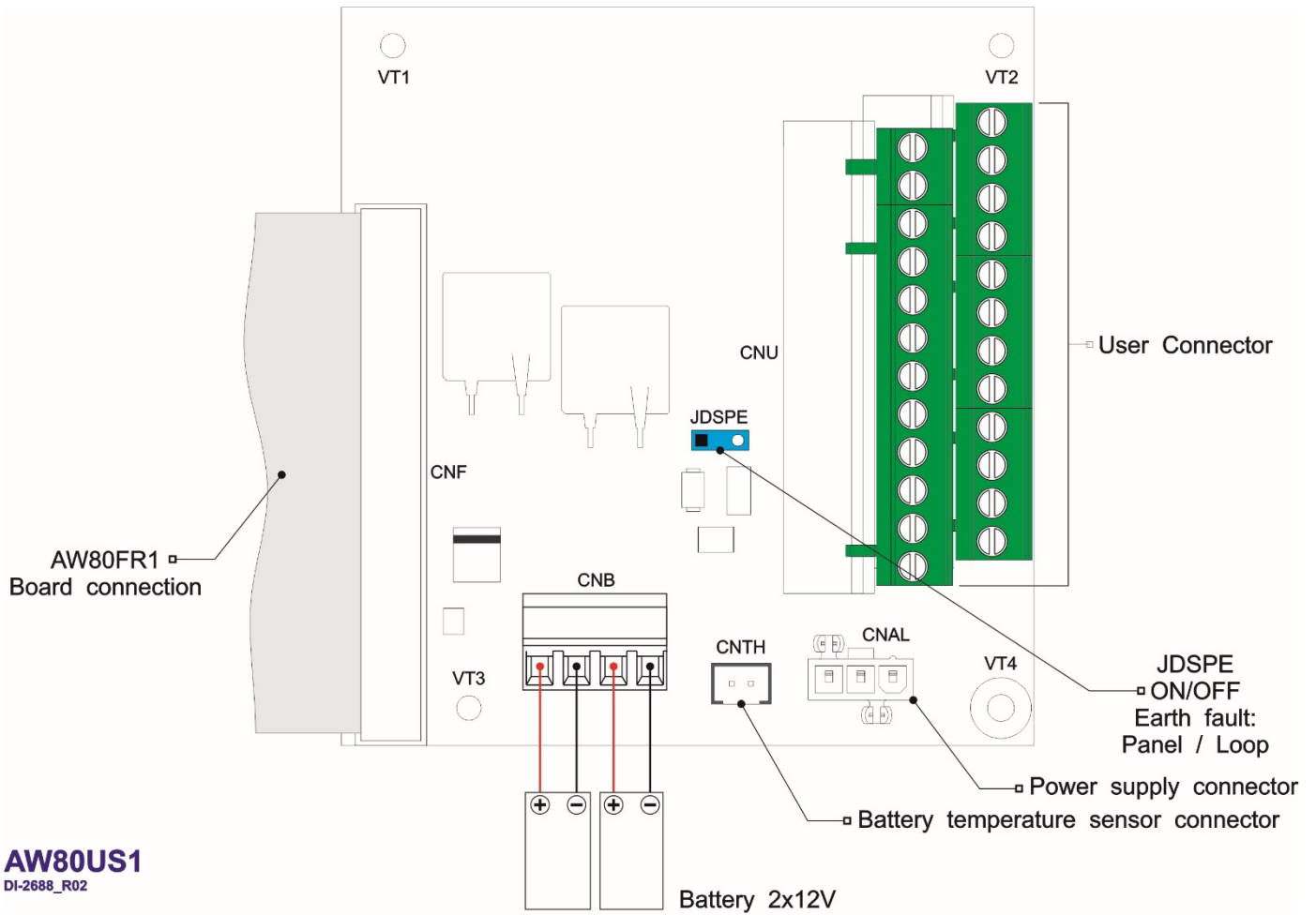
- **AW80FR0** CPU board

| | |
|---------------|--|
| JDSPEA | Removing the jumper causes the control unit to ignore a ground fault COM 1 RS485 (isolated) |
| JDSPEB | Removing the jumper causes the control unit to ignore a ground fault COM 3 RS485/232 (isolated) |
| JDSPEC | Removing the jumper causes the control unit to ignore a ground fault COM 2 RS485/232 (isolated) |
| JDSPA | Removing the jumper causes the control unit to ignore a CANBUS ground fault A |
| JDSPB | Removing the jumper causes the control unit to ignore a CANBUS B ground fault. |

- **AW80US0** BASIC BOARD

| | |
|--------------|---|
| JDSPE | Removing the jumper causes the control unit to ignore a ground fault GENERAL |
|--------------|---|

10. AW80US1 Topographic BASIC BOARD MA-1000



10.1 AW80US1 BASE board MA-1000 terminal blocks

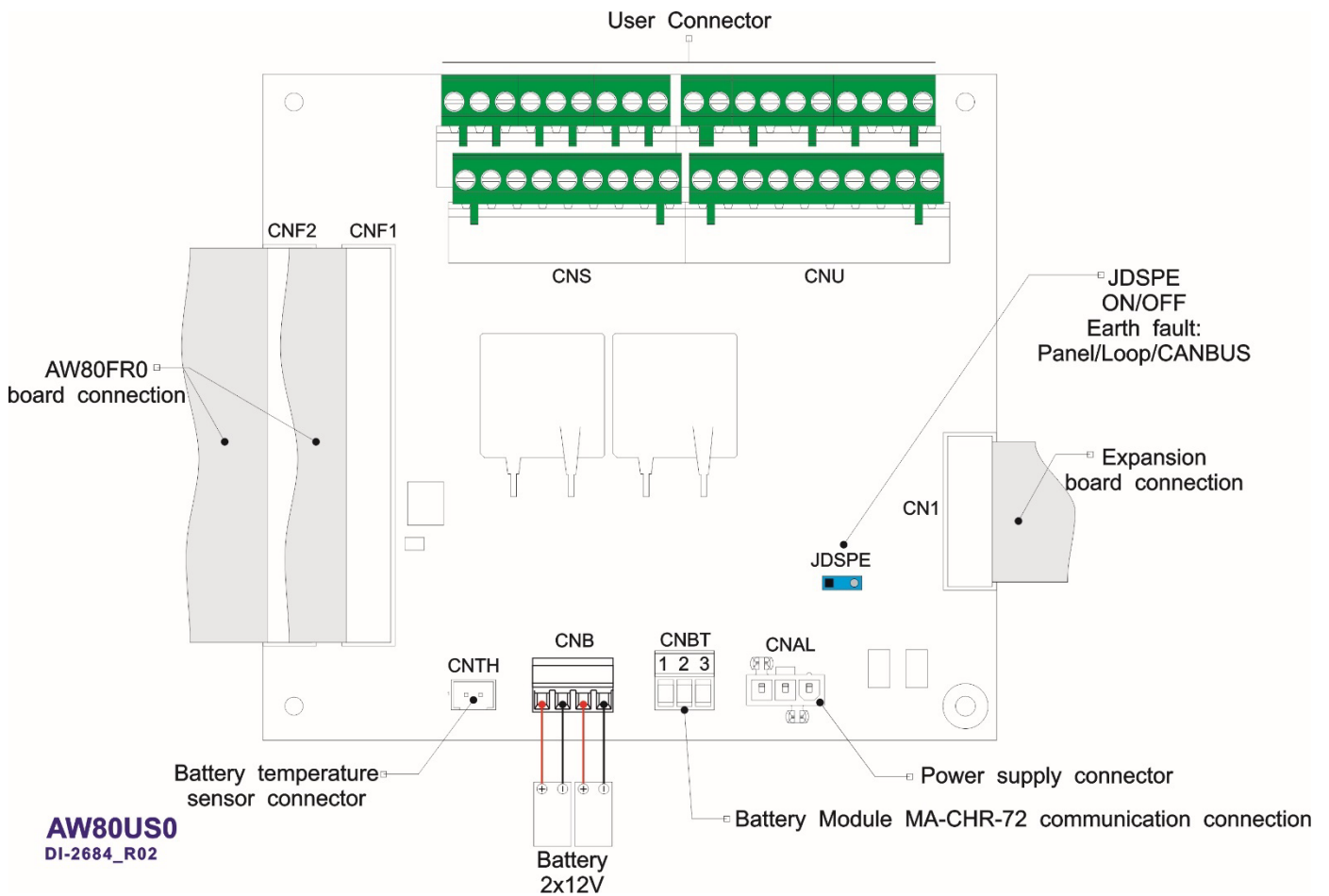
| CNB Batteries | | |
|---------------|--------------------|--|
| | Name | Description |
| 1 | Battery 1 Positive | MFR700 Series Resettable Fuse Protection |
| 2 | Battery 1 Negative | |
| 3 | Battery 2 Positive | |
| 4 | Battery 2 Negative | |

| CNTH Temperature probe | | |
|------------------------|------|-----------------------------|
| | Name | Description |
| 1 | NTC | Temperature probe Batteries |
| 2 | GND | |

| CNU Utilities | | | | |
|----------------------|---|--|-------------------------|--|
| | Description | | Features | Notes |
| 24 | - GND USER | | 1 A | Resettable fuse |
| 23 | + 24V USER MAX 1A | | | |
| 22 | General fault relay 'NO - NC' | | Contact Max 30V 2A | With JGST jumper for NA-NC selection |
| 21 | General fault relay 'Common' | | | |
| 20 | Siren - >Negative in non-alarm | | Reverse polarity output | EOL Diode = 1N4007 1 A resettable fuse |
| 19 | Siren + >Positive in non-alarm | | | |
| 18 | Relay User 2 / NO - NC / LC + | | Contact Max 30V 2A | With JUSR2 jumper for NO-NC selection or as supervised output 1A resettable fuse |
| 17 | Relay User 2 / Common / LC - | | | |
| 16 | Relay User 1 / NO - NC / LC + | | Contact Max 30V 2A | With Jumper JUSR1 for NO-NC selection or as supervised output 1A resettable fuse |
| 15 | Relay User 1 / Common / LC - | | | |
| 14 | General alarm relay / NO - NC / LC + | | Contact Max 30V 2A | With JALL jumper for NO-NC selection or as supervised output 1A resettable fuse |
| 13 | Relay General Alarm / Common / LC - | | | |

| CNU Sensor Lines + Serials | | | | |
|-----------------------------------|--------------------|--------|-----------------|--|
| | Description | | Features | Notes |
| 12 | LIN - 2 | RS 485 | RX 2 | COM 2 Selectable via SW2 |
| 11 | GNDIS 2 | | GNDIS 2 | |
| 10 | LIN + 2 | | TX 2 | |
| 9 | | | | |
| 8 | LIN - 1 | RS 485 | | COM 1 for MA-LCD7 |
| 7 | GNDIS 1 | | | |
| 6 | LIN + 1 | | | |
| 5 | | | | |
| 4 | Loop 1 B - IN | LOOP 1 | | |
| 3 | Loop 1 B + IN | | | |
| 2 | Loop 1 A - OUT | | | |
| 1 | Loop 1 A + OUT | | | |

11. AW80US0 Topographic BASIC BOARD MA-2000 - MA-8000



11.1 AW80US0 BASE Board MA-2000 - MA-8000 terminal blocks

| CNB Batteries | | |
|---------------|--------------------|--|
| | Name | Description |
| 1 | Battery 1 Positive | MFR700 Series Resettable Fuse Protection |
| 2 | Battery 1 Negative | |
| 3 | Battery 2 Positive | |
| 4 | Battery 2 Negative | |

| CNTH Temperature probe | | |
|------------------------|------|-----------------------------|
| | Name | Description |
| 1 | NTC | Temperature probe Batteries |
| 2 | GND | |

| CNU Utilities | | | | |
|----------------------|---|--------------------------------------|----------------------------|--|
| | Description | | Features | Notes |
| 20 | General fault relay 'NO - NC' | | Contact Max 30V 2A | With JGST jumper for NA-NC selection |
| 19 | General fault relay 'Common' | | | |
| 18 | Siren - >Negative in non-alarm | Polarity in NO Alarm Condition | Reverse polarity output | EOL Diode = 1N4007 1 A resettable fuse |
| 17 | Siren + >Positive in non-alarm | | | |
| 16 | Relay User 2 / NO - NC / LC + | | Contact Max 30V 2A | With JUSR2 jumper for NO-NC selection or as supervised output 1A resettable fuse |
| 15 | Relay User 2 / Common / LC - | | | |
| 14 | Relay User 1 / NO - NC / LC + | | Contact Max 30V 2A | With Jumper JUSR1 for NO-NC selection or as supervised output 1A resettable fuse |
| 13 | Relay User 1 / Common / LC - | | | |
| 12 | Relay General alarm / NO - NC / LC + | | Contact Max 30V 2A | With JALL jumper for NO-NC selection or as supervised output 1A resettable fuse |
| 11 | Relay General Alarm / Common / LC - | | | |

| CNU Sensor Lines | | | | |
|-------------------------|--------------------------|-----------------|-----------------|--|
| | Description | Features | Notes | |
| 10 | - GND USER | 1 A | Resettable fuse | |
| 9 | + 24V USER MAX 1A | | | |
| 8 | Loop 2 B - IN | LOOP 2 | | |
| 7 | Loop 2 B + IN | | | |
| 6 | Loop 2 A - OUT | | | |
| 5 | Loop 2 A + OUT | | | |
| 4 | Loop 1 B - IN | LOOP 1 | | |
| 3 | Loop 1 B + IN | | | |
| 2 | Loop 1 A - OUT | | | |
| 1 | Loop 1 A + OUT | | | |

| CNS Serial Lines | | | | |
|-------------------------|--------------------|---|--|--|
| | Description | Description 2 | Notes | |
| 18 | CDALB | Communication line CAN BUS (B-side) | Not enabled > see option E-SIB -X | |
| 17 | GNDISB | | | |
| 16 | CDAHB | | | |
| 15 | CDALA | Communication line CAN BUS (side A) | Not enabled > see option E-SIB -X | |
| 14 | GNDISA | | | |
| 13 | CDAHA | | | |
| 12 | NC | | | |
| 11 | NC | | | |
| 10 | NC | | | |

| CNS Serial Lines | | | | | |
|-------------------------|----------------------|--------|----------------------|--------|--|
| | Description 1 | | Description 2 | | Notes |
| 9 | LIN - 3 | RS 485 | RX 3 | RS 232 | COM 3 Selectable via SW4 |
| 8 | GNDIS 3 | | GNDIS 3 | | |
| 7 | LIN + 3 | | TX 3 | | |
| 6 | LIN - 2 | RS 485 | RX 2 | RS 232 | COM 2 Selectable via SW5 |
| 5 | GNDIS 2 | | GNDIS 2 | | |
| 4 | LIN + 2 | | TX 2 | | |
| 3 | LIN - 1 | RS 485 | | | COM 1 for MA-LCD7 |
| 2 | GNDIS 1 | | | | |
| 1 | LIN + 1 | | | | |

| CNBT Serial Line Battery Module Extension (optional) | | | | | |
|---|---------|--------|--|--|--|
| 1 | LIN + 1 | RS 485 | | | COM 1 for Battery Module Extension (optional) |
| 2 | GNDIS 1 | | | | |
| 3 | LIN - 1 | | | | |

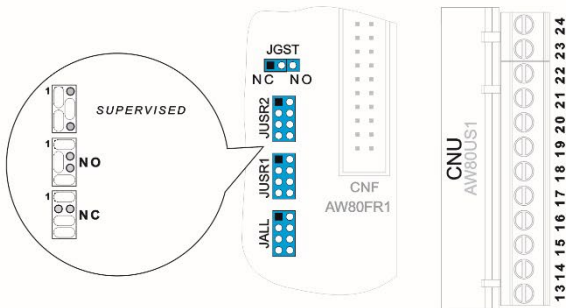
12. Relay outputs > connection examples

Instructions for setting relay outputs as voltage-free contacts or as supervised (LC)

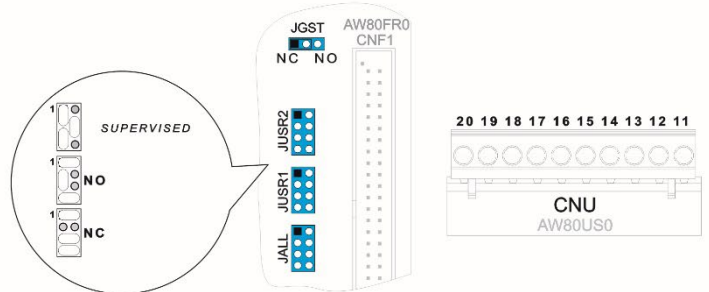
NOTES:

To configure the activation of these outputs, refer to 'MA-x000 Programming Manual'.

MA-1000



MA-2000 MA-8000



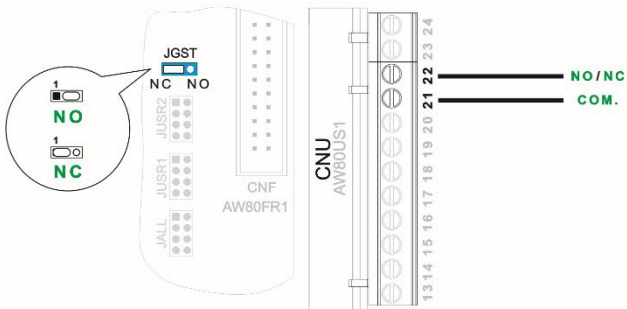
12.1 - General fault output

The general fault relay is normally energised. It is de-energised in a fault condition. This output is available with voltage-free contact.

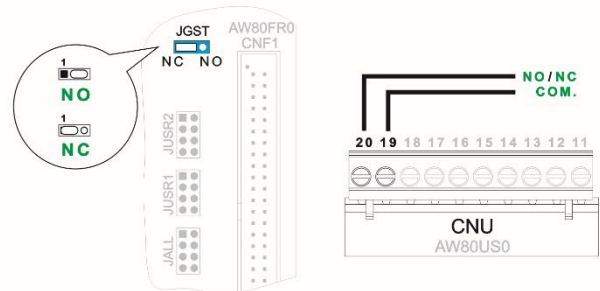
Contact rating: max. 30 Vac/dc 2A, non-inductive loads.

Default: **NO**

MA-1000



MA-2000 MA-8000

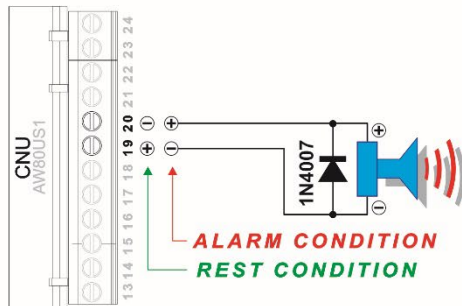


12.2 - Supervised Sounder Output

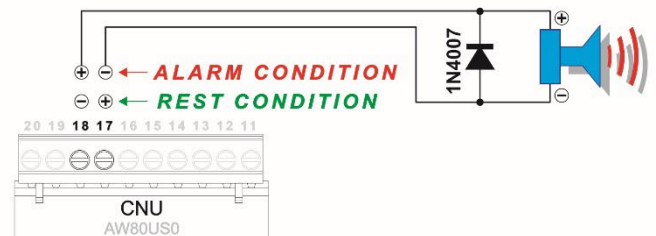
Sounder output connections.
1A resettable fuse

- Polarized devices (electronic sirens, etc.)

MA-1000



MA-2000 MA-8000



N.B.: Connect end-of-line diode 1N4007 only to the last device in the line.

WARNING: The polarities shown are in **ALARM CONDITION**, at rest, they are reversed.

12.3 - USR1 and USR2 outputs

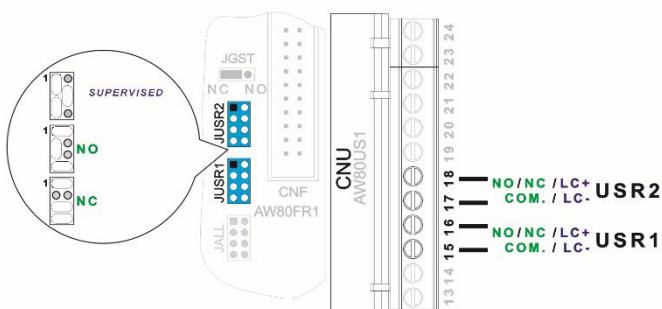
The USR1 and USR2 outputs are available with voltage-free contact or supervised output.
Contact rating: max. 30 Vac/dc 2A, Non-inductive loads

Default: **Supervised**

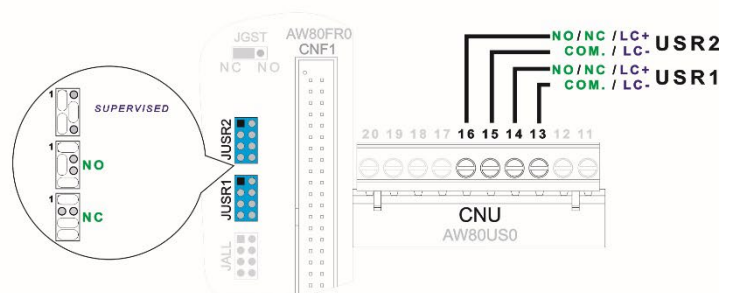
NOTE:

To programme the activation of these outputs, please refer to the MA-x000 Programming Manual.

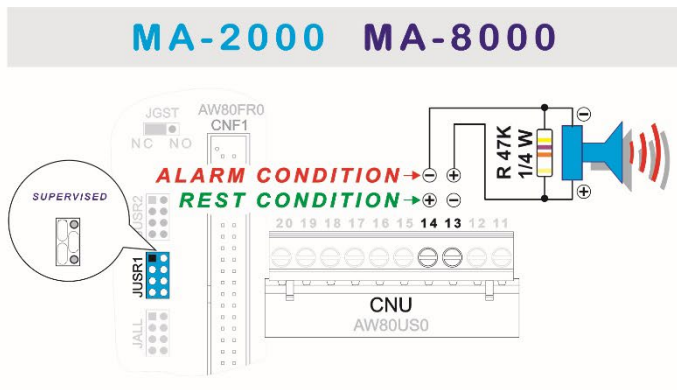
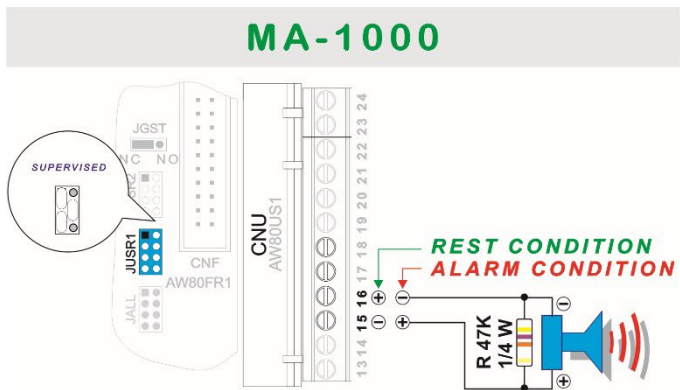
MA-1000



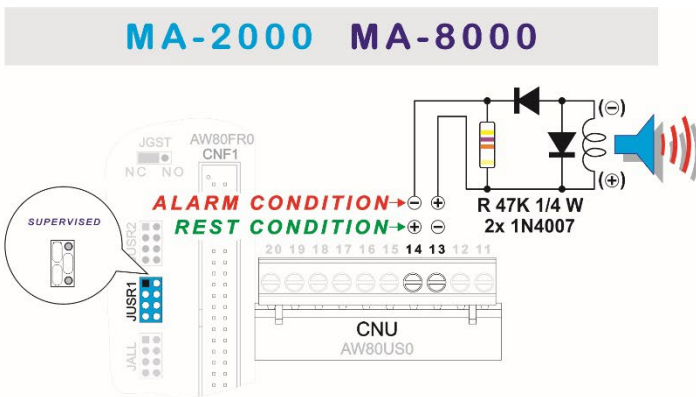
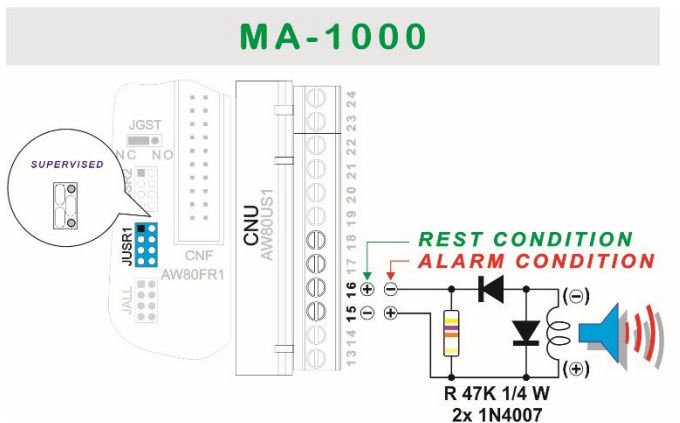
MA-2000 MA-8000



➤ **Polarized devices (electronic sirens, etc.) > End of line: RESISTOR**



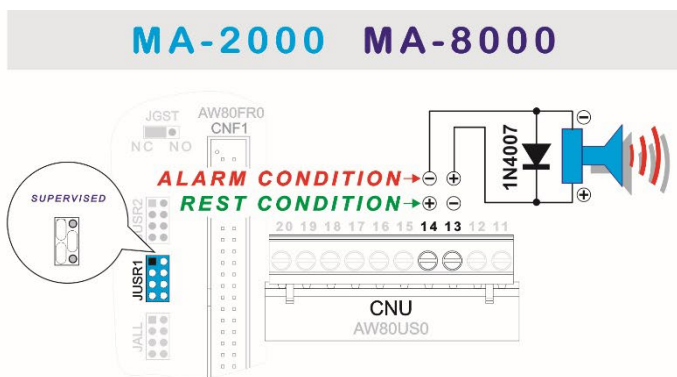
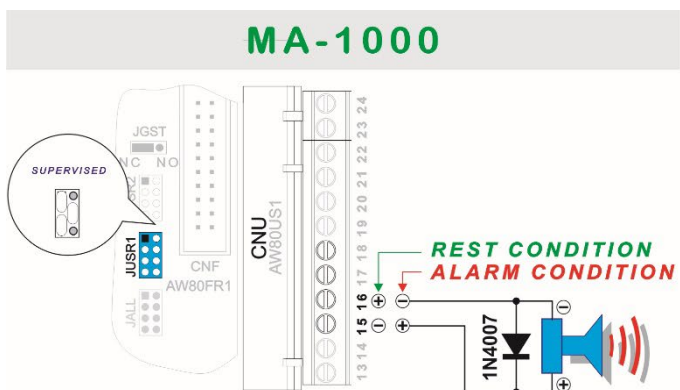
➤ **NON-polarized devices (Badenie, Relay, etc.) > End of line: RESISTOR**



N.B.: Connect the 47Kohm 1/4W end-of-line resistor to the last device in the line only.

WARNING: The polarities shown are in **ALARM CONDITION**, at rest they are reversed.

➤ **Polarised devices (electronic sirens, etc.) > End of line : DIODE**



N.B.: Connect end-of-line diode 1N4007 only to the last device in the line.

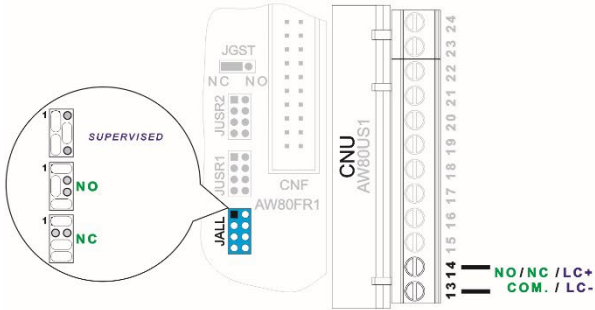
WARNING: The polarities shown are in **ALARM CONDITION**, at rest they are reversed.

12.4 - General alarm output

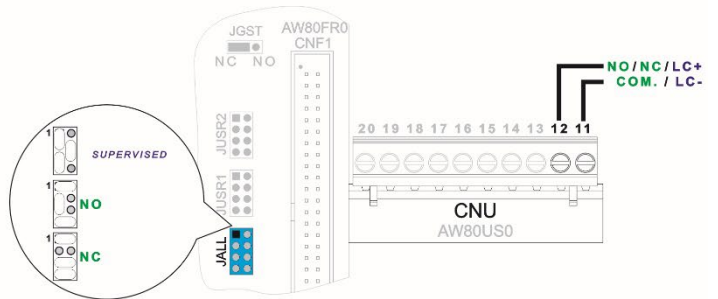
The general alarm output is available with voltage-free contact or supervised output. Contact rating: max. 30 Vac/dc 2A, Non-inductive loads

Default: **Supervised**

MA-1000

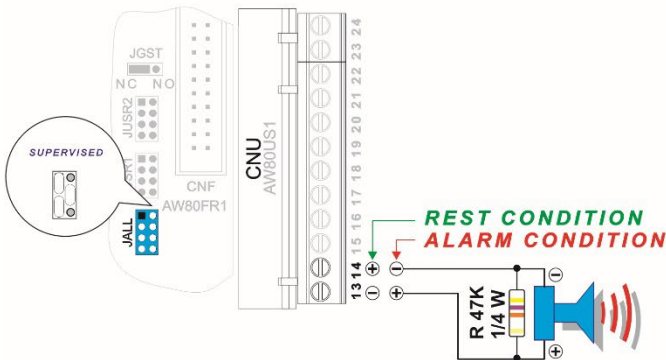


MA-2000 MA-8000

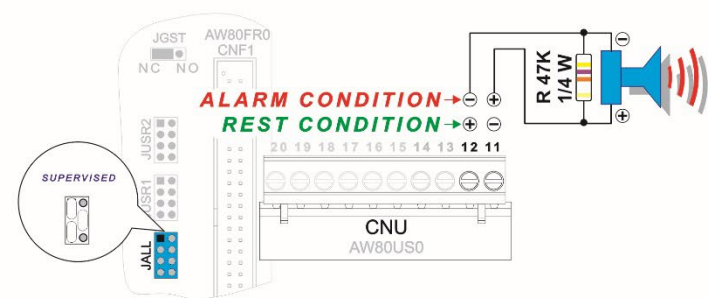


➤ Polarised devices (electronic sirens, etc.) > End of line: RESISTOR

MA-1000

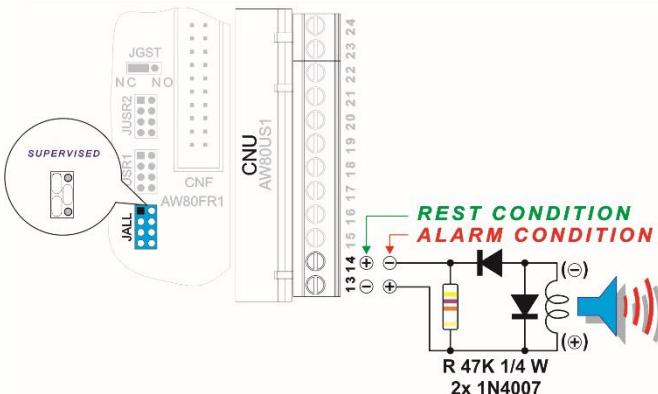


MA-2000 MA-8000

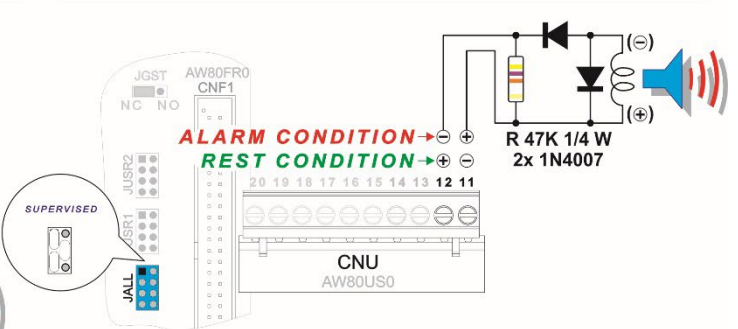


➤ NON-polarised devices (relay, etc.) > End of line: RESISTOR

MA-1000



MA-2000 MA-8000

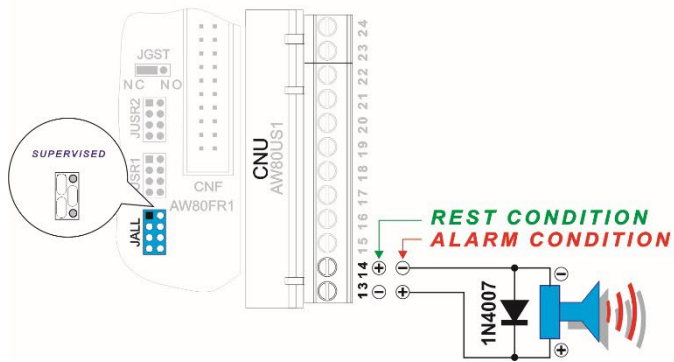


N.B. : Connect the 47Kohm 1/4W end-of-line resistor to the last device in the line only.

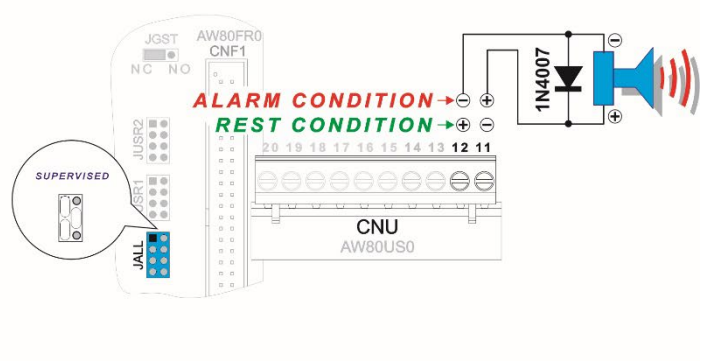
WARNING : The polarities shown are in **ALARM CONDITION**, at rest they are reversed.

➤ **Polarised devices (electronic sirens, etc.) > End of line: DIODE**

MA-1000



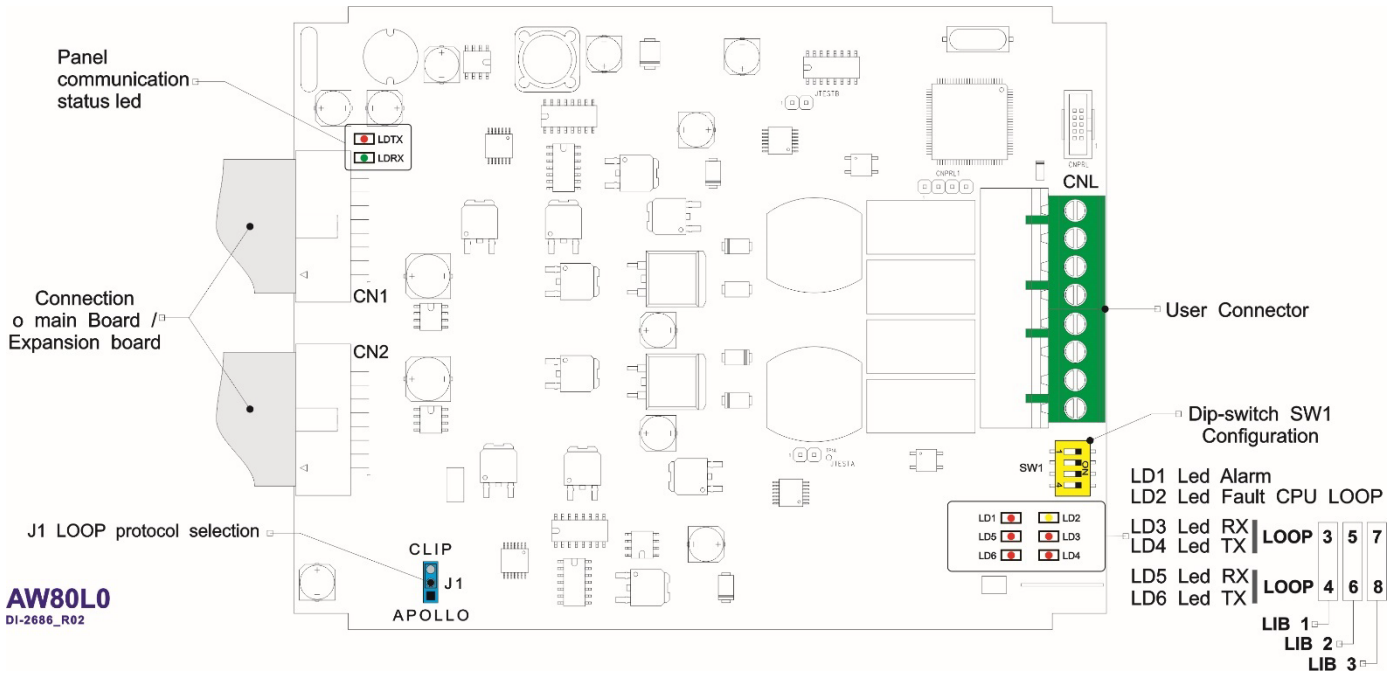
MA-2000 MA-8000



N.B.: Connect end-of-line diode 1N4007 only to the last device in the line.

WARNING: The polarities shown are in **ALARM CONDITION**, at rest they are reversed.

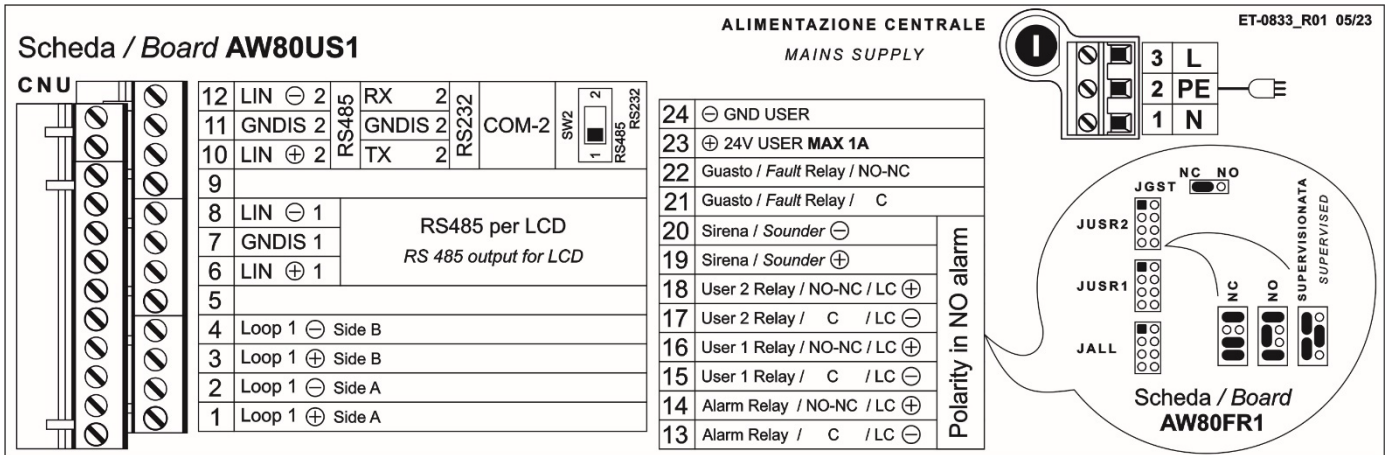
13. Expansion board AW80L0 Topographic Cod. MA-LIB2-xx (optional for MA-8000)



| CNL Sensor Lines | | | |
|------------------|----------------|--------|--|
| 1 | Loop 3 A + OUT | LOOP 3 | |
| 2 | Loop 3 A - OUT | | |
| 3 | Loop 3 B + IN | | |
| 4 | Loop 3 B - IN | | |
| 5 | Loop 4 A + OUT | LOOP 4 | |
| 6 | Loop 4 A - OUT | | |
| 7 | Loop 4 B + IN | | |
| 8 | Loop 4 B - IN | | |

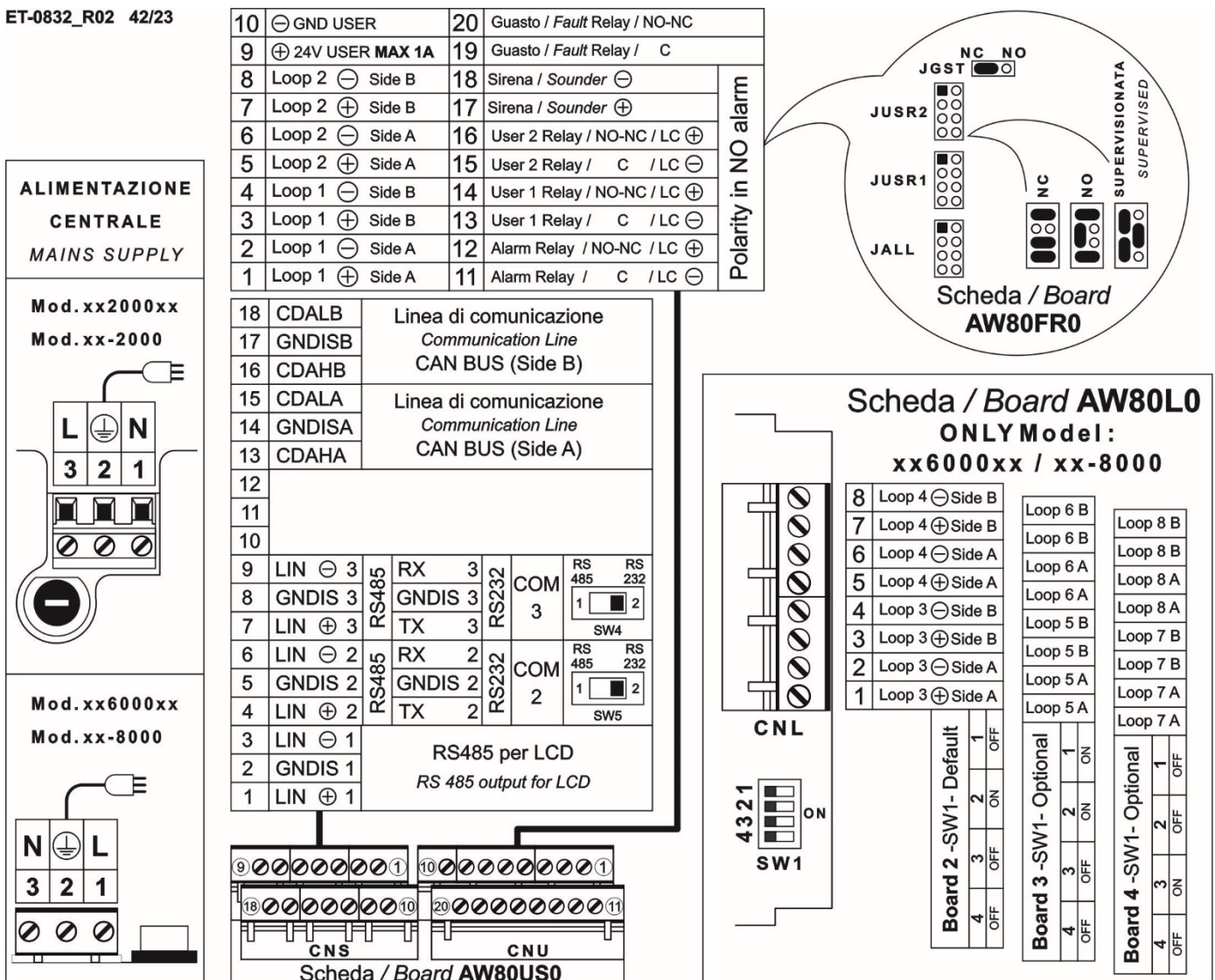
| SW1 Dip switch | | | | | |
|----------------|-----|-----|-----|-----------|------------|
| 1 | 2 | 3 | 4 | FUNCTION | POSITION |
| OFF | ON | OFF | OFF | Address 2 | LIB 1 card |
| ON | ON | OFF | OFF | Address 3 | LIB 2 card |
| OFF | OFF | ON | OFF | Address 4 | LIB 3 card |

14. Summary of MA-1000 connections



15. Summary of MA-2000 - MA-8000 connections

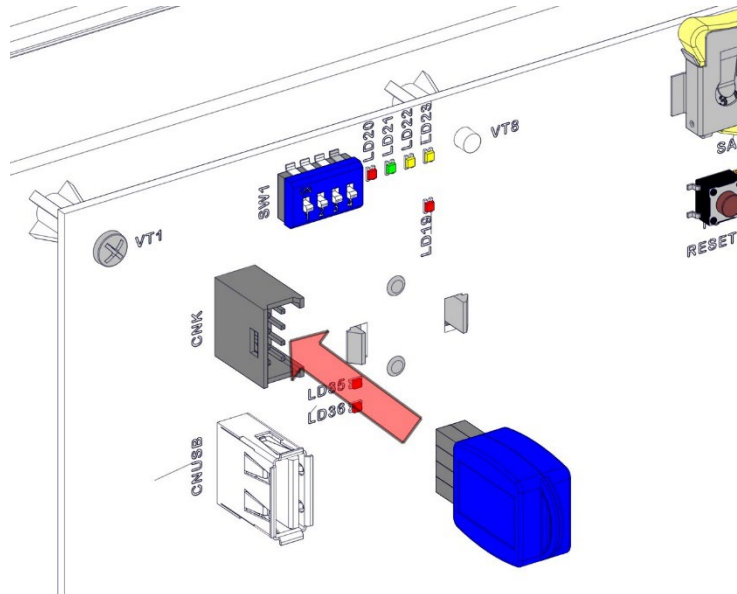
ET-0832_R02 42/23



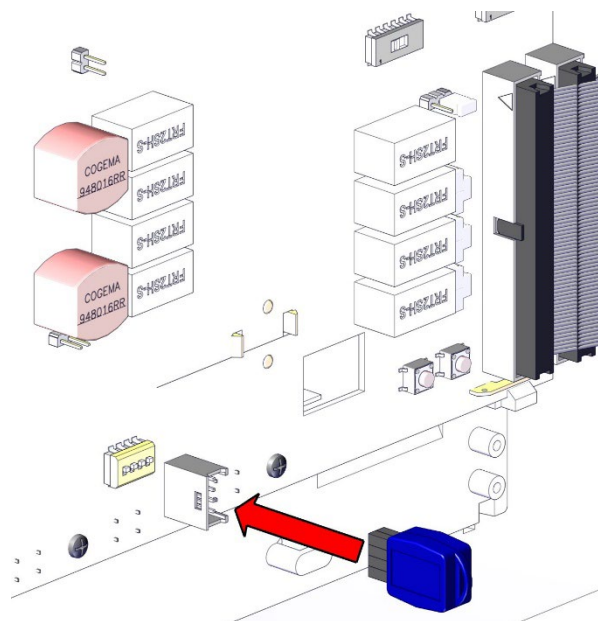
16. E-SIB - Serial Communications Enabling Key (optional)

Depending on the model, the **E-SIB-X** key enables different protocols and networking communication (MA-2000 and MA-8000 only).

MA-1000



MA-2000 - MA-8000



17. Communication Loop with Detectors and Modules

The control unit communicates with intelligent, addressable detection and control devices via a 2-wire line. The line can be connected in such a way as to comply with the specifications for signal circuit lines, which can be of the open and closed type (STYLE 4 open line and STYLE 6 closed line). The devices in the loop communicate and are powered by the line itself.



No more than 32 alarm points can be lost in the event of a short circuit

Please note: To comply with EN54.2 ("in the event of a short circuit from the line, no more than 32 alarm points can be lost"), it is necessary:

If the line is installed as 'Open LOOP' (Style 4), then the maximum number of connectable sensors and alarm buttons is 32 per line.

If the line is installed as 'LOOP Closed' (Style 6), an appropriate number of isolation modules must be installed along the line so that no more than 32 points (sensors or manual alarm buttons) are lost in the event of a short circuit of a section.

If a connection is made with a T-branch in a closed loop, no more than 32 devices must be installed on this branch, and the branch must be separated by an isolation module.

The detection circuit must be separated from other cables to minimize the risk of interference.

Use twisted cable as specified.

The Detection Loop circuit is supervised and current-limited.



Connection cables to detectors, auxiliary devices, and the power supply network can be routed inside the box by drilling holes, running the cables along the side walls of the box, and providing adequate length to allow for easy removal of the removable terminal blocks.

17.1 Technical specifications of the sensing line connection cables

Type of cable: 2 conductors (see table below for cable cross-section)

- Twisted narrow pitch (5 /10 cm)
- Screened
- Max. permissible capacity: 0.5µF

For these systems, a fire-resistant data cable is used, and in order to ensure the proper transit of the protocol, it is essential to employ:

➤ **FTE29ohm16 100/100V**

(Shielded data cable with E29cross-linked compound)

17.2 Cable Section

ADDRESSED SYSTEM / COMMUNICATION LOOP CABLE

Cable section

The sections are referred to the total length of the line (in case of "STYLE 6" loop and therefore when the loop is closed, it is considered the loop length) which, however, must not be longer than 3000 m and the total resistance of the line must be lower than 40 Ohm

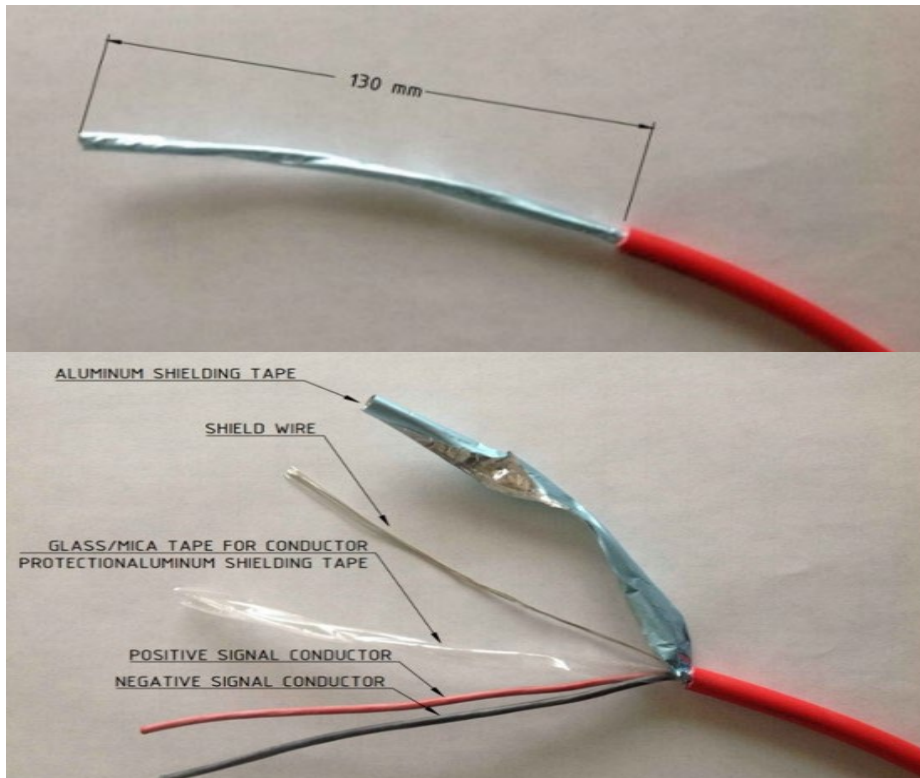


| Length max | Min. section recommended | Cable code | Euroclasse |
|----------------|--------------------------|-------------|---------------|
| Up to 500 mt. | 2x0.5 mmq | FRH RR 2050 | Cca s1b d1 a1 |
| Up to 1000 mt. | 2x1 mmq | FRH RR 2100 | Cca s1b d1 a1 |
| Up to 1500 mt. | 2x1.5 mmq | FRH RR 2150 | Cca s1b d1 a1 |
| Up to 3000 mt. | 2x2.5 mmq | FRH RR 2250 | Cca s1b d1 a1 |

The total length of the line max 3000m.

Total line resistance less than 40 Ohms

- It may be necessary to bypass some insulators to reduce line resistance.



17.3 Number of devices installed for the line

The maximum number of devices that can be installed for each of the four detection lines is as follows:

- 99 Sensors using the Clip protocol
- 99 input and/or output modules using the Clip protocol

17.4 Isolator modules

Isolator modules make it possible to electrically isolate a certain number of devices in the loop from the rest, allowing critical components in the loop to continue functioning even in the event of a short circuit in the communication line.

17.5 Input modules

Addressable input modules enable the MA-x000 to monitor contacts, manual alarm call points, conventional 4-wire sensors, and various other devices with alarm contact outputs.

17.6 Output modules

Through the addressable output modules, MA-x000 systems can, using programmable CBE equations, activate indication circuits or output relays via voltage-free contacts or class A supervised controls.

17.7 Intelligent sensors

The MA-x000 fire alarm control panels can only communicate with devices declared as compatible.

17.8 Screen termination

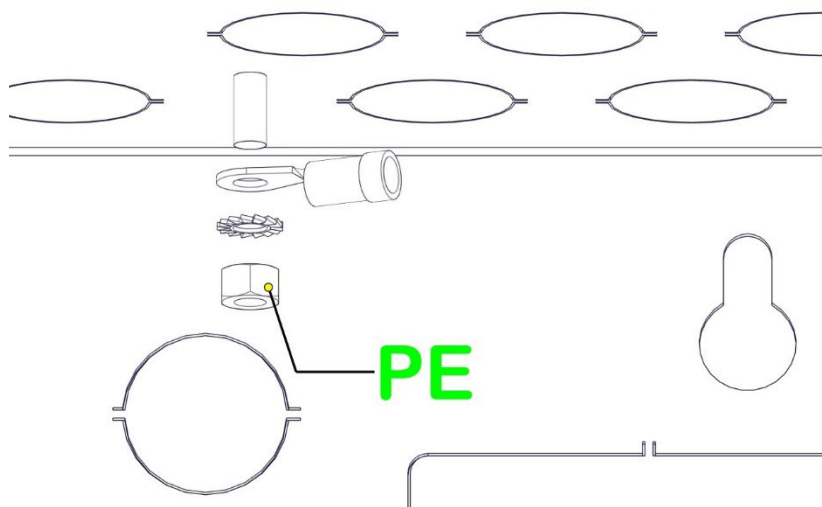
Good quality fire protection cable incorporating drain wires or screens must be used. The drain wires or screens must be earthed inside the enclosure. Cable screen or drain wire and earthing points. Ensure that drain wires or screens are properly grounded inside the enclosure; grounding points are provided on the enclosure to cover all cable entry points.

Use the earthing screw and clamp to obtain the required earth connection for the screens. Ensure that the screws are tightened and the contact is low resistance for EMC purposes.

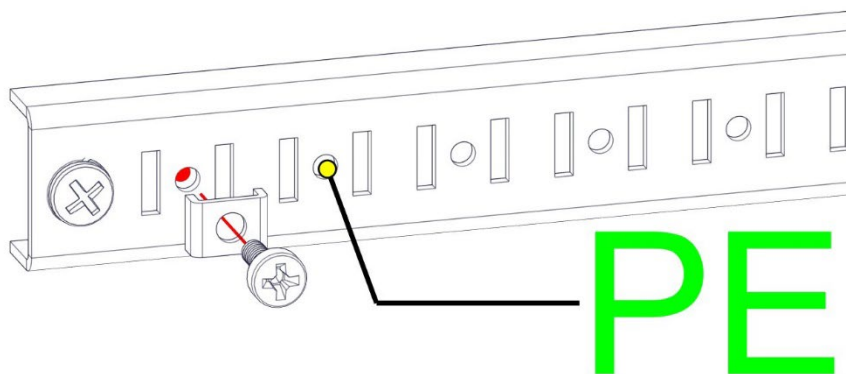
Use cable manufacturers' recommendations for proper earthing of drainage wires or shields.

A ground bar is available in the panel for screen termination, as shown below:

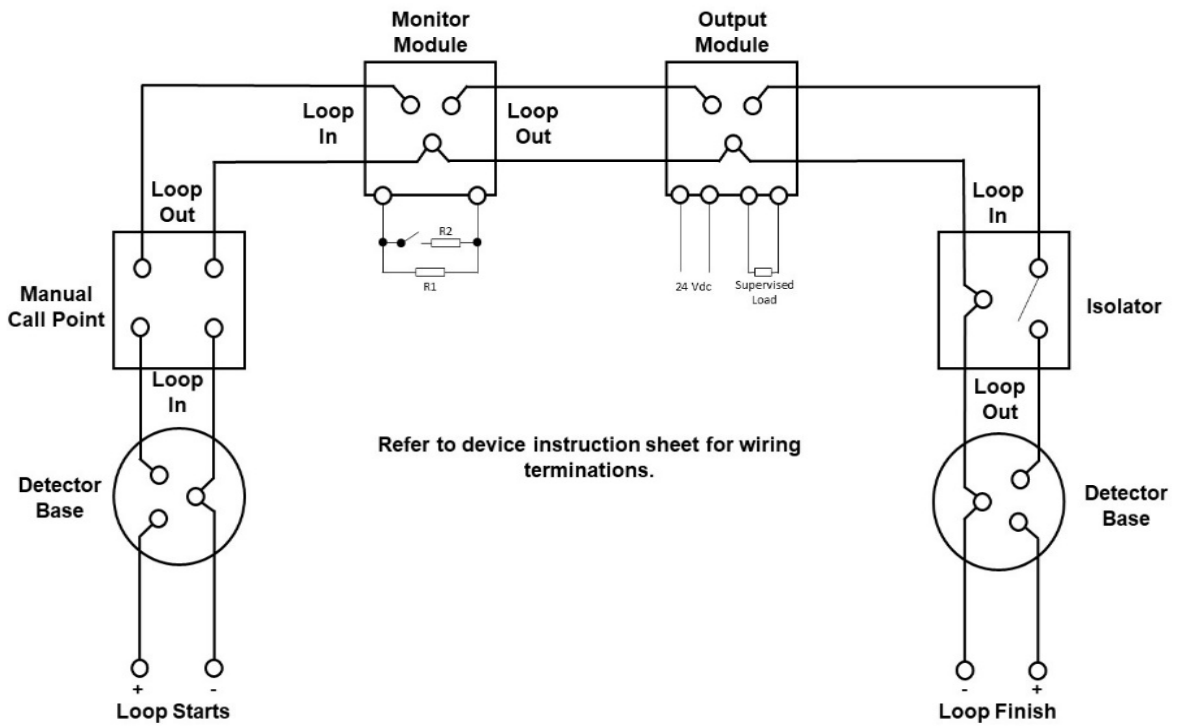
MA-1000



MA-2000 - MA-8000



17.9 Example of a closed Loop (6 Loop style)



The total length of the loop (from the output and input of the Panel Loop) must NOT exceed 3,000 metres.

The use of the POL-200-TS* loop test and diagnostic device is recommended to check the correct installation of lines.



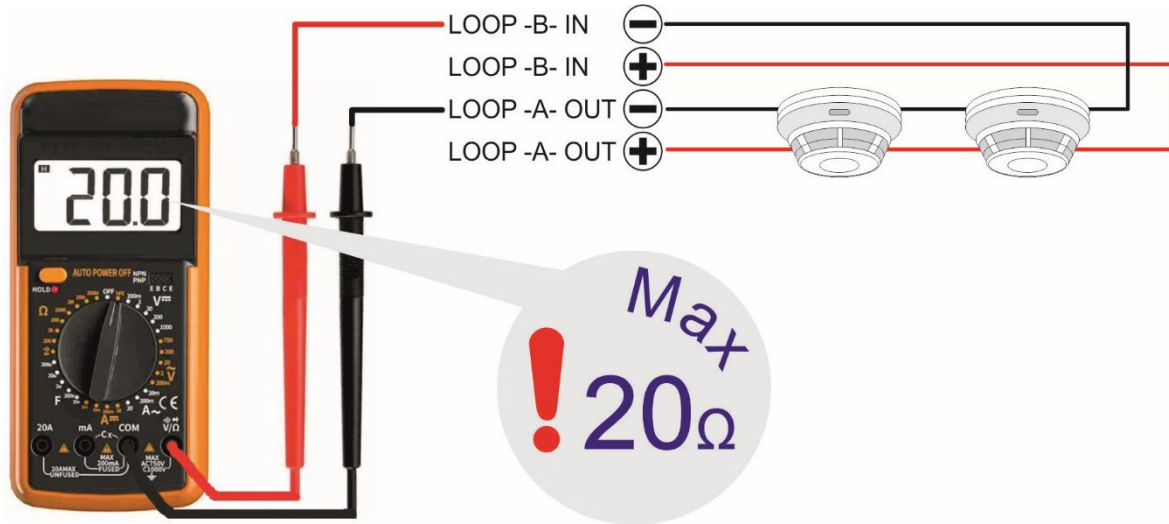
* For further information please refer to the POL-200-TS manual

17.10 Test procedure for detection Loop

Before feeding the control unit lines, check the following values:

NOTE: A DIGITAL MULTIMETER IS REQUIRED

Line resistance



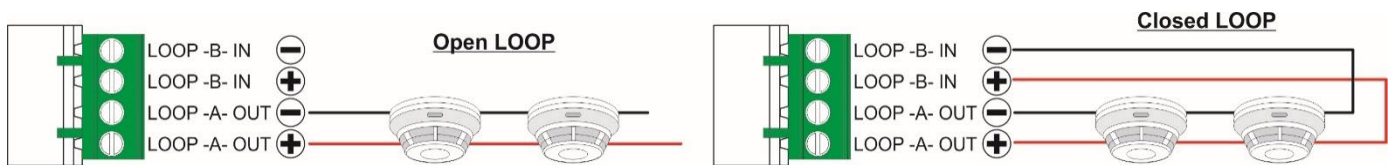
The DC resistance of the negative loop wire **MUST NOT** exceed 20 Ohms.

The measurement must be carried out by disconnecting channels 'A' and 'B' of the Loop Card. The multimeter test leads must be connected to the negative wire terminals.

To obtain the total resistance of the loop wire, multiply the value read on the negative side by 2 and add the resistance of the insulators.

17.10.1 Loop insulation

Place the test leads of the tester between (+) and (-) line, with sensors or modules installed, and check as follows:



Test 1:

Connect: Tester [+] / Line [+] and Tester [-] / Line [-]

Control: Resistance: 1 - 1.3 Mohm

Test 2:

Connect: Tester [+] / Line [-] and Tester [-] / Line [+]

Control: Resistance: 0.7 - 0.9 Mohm

17.10.2 Shielding of cable/loop insulation

Place one tip of the tester on the shield of the line cable and the other tip on the positive (+) cable of the same line. The resistance measured must be above 15-20 Mohm, preferably 'infinite'.

Perform the same operation between the line screen and the negative (-) cable. Check that the resistance is also higher than 15-20 Mohm in this case.

17.10.3 Line earthing/insulation

Place one tip of the tester on the earth of the system and the other tip on the positive (+) cable of the line; the resistance measured must be higher than 15-20 Mohm, preferably 'infinite'.

Carry out the same operation between the earth and the negative (-) cable of the line. Check that the resistance is also higher than 15-20 Mohm in this case.

17.10.4 Cable shield grounding/insulation

Place one tip of the tester on the earth of the system and the other tip on the cable braid; the resistance measured should be above 15-20 Mohm, preferably 'infinite'.

17.10.5 Loop voltage

With the detector/module line connected, the line output voltage must be 24 VDC without device interrogation (no programmed point). A voltage much lower than 14 VDC indicates a connection reversal of the detector or modules.

18. SYSTEM TESTING AND COMMISSIONING

The installation of the control unit must be carried out after carefully reading the instructions in the installation manual and programming manual.

Once the mechanical installation of the control unit is complete, perform the following steps:

- Check the correct wiring of the detection line with a multimeter (refer to chapter Test Procedure for Analogue System Lines in this manual).
- Connect the detection lines to the control unit.
- Connect the main alarm siren (equipped with a 47 KW ¼ W balancing resistor) to terminals CNU-xx and xx.
- To correctly size the batteries to be used, check the autonomy that the system must guarantee in the event of a 230 Vac mains failure.

Connect the control unit to the 230 Vac mains using a three-core cable: phase, earth, neutral (the earth cable must be longer than the phase and neutral ones) on terminal block CN1 (earth connection is compulsory) and must be fixed to the cabinet using a cable fixing device so that it cannot be accidentally torn off.

The power supply connection must be made through the following steps:

- Switch off the main switch of the 230 Vac mains system supplying the control unit.
- Disconnect the 'CN1 AW80-PPx' terminal block from the control unit.
- Connect the 230 Vac mains to the "CN1 AW80-PPx" terminal block.
- Connect terminal block 'CN1 AW80-PPx' to the control unit.
- Switch on the 230 Vac mains switch.
- Install and connect the batteries as indicated in this manual.

When the control unit is powered, check the following conditions on the front panel:

- **Green LED " VOLTAGE PRESENT "** = lit
- **Yellow LED " FAULTS "** = flashing
- Buzzer = continuous sound

By pressing the "**SILENCE BUZZER**" button, the acoustic signal will cease and the display will show the following fault indication "CENTRAL POWER ON".

Pressing the '**RESET**' button will prompt the display to enter the level 2 password [default = 22222].

Enter the password and check the following conditions:

- **Green "VOLTAGE PRESENT" LED** = lit
- **Yellow 'FAULTS' LED** = off
- No fault signal present on the display

To programme the control unit, refer to chapter "**RECOMMENDED SEQUENCE FOR PROGRAMMING THE CONTROL UNIT**". in the Programming Manual.

19. PERIODIC SYSTEM MAINTENANCE

- Check that the **green** 'PRESENT VOLTAGE' LED is lit.
- Check that all other LEDs in the control centre are off.
- Press the 'TEST' function key and enter the level 2 password to access the menu.
- Use the arrow keys **▲ ▼** to select 'LED' (lamp test function) and press the enter key **✔** to carry out the test, check that all light indications light up for a few moments.

1. Disconnect the 230Vac power supply from the control unit and check the following conditions:

- The display shows " **NO NETWORK** ".
- **Yellow LED** " **FAULTS** " = flashing
- **Green LED** " **VOLTAGE PRESENT**" = lit
- **Yellow LED** " **POWER** " = lit
- General *FAULT* relay active.
- After at least 15 minutes, check the battery voltage.
If the sum of the two battery voltages is less than 20.5 V, they must be replaced.

2. Connect the 230Vac mains power supply to the control unit via an external disconnection means, press the "**BUZZER**" button and check the following conditions:

- The display indication of " **NO NETWORK** " is not present.
- **Yellow** 'FAULTS' LED = off
- **Green LED** " **VOLTAGE PRESENT**" = off
- **Yellow LED** " **POWER** " = off
- General *FAULT* relay deactivated.

3. Disconnect both batteries; wait (no more than 2-3 minutes) for the control unit to signal:

- The display indication of " **NO BATTERIES** ".
- **Yellow LED** " **FAULTS** " = flashing
- **Green LED** " **VOLTAGE PRESENT**" = lit
- **Yellow LED** " **POWER** " = lit
- General *FAULT* relay active.

Reconnect the batteries and press the " **ALARM/FAIL** " button and check:

- No fault signal present on the display.
- **Yellow** 'FAULTS' LED = off
- **Green LED** " **VOLTAGE PRESENT**" = off
- **Yellow LED** " **POWER** " = off
- General *FAULT* relay not active.

4. Alarm a device in line No. 1 and check the following:

- **Red LED** " **ALARM** " = flashing
- *SIREN* output active.
- Alarm display.

Press the " **SILENCE BUZZER** " button followed by the " **SILENCE ALARMS / FAULTS** " button. The display will prompt you to enter the level 2 password [default = 22222].

Enter the password and check the following

- **Yellow** 'SILENCED SIRENS' LED = off
- **Red LED** " **ALARM** " = lit
- *SIREN* output deactivated.

Press 'RESET'; the display will show the request for password entry level 2 [default = 22222].

Enter the password and check the following conditions:

- **Yellow** 'SILENCED SIRENS' LED = off
- **Red** 'ALARM' LED = off
- *SIREN* output deactivated.
- No alarm signal present on the display.

At the end of maintenance, leave the control unit in an idle state (without alarm and fault signals) and check that the **green** 'PRESENT VOLTAGE' LED is lit.

20. LABELS IN DIFFERENT LANGUAGES

In this chapter labels in different languages are shown for the control panel of the MA-x000, which can be printed 1:1.

- Print the labels in their original size, pay attention to the printer settings.
- Be sure to use a color printer to print the labels with all features.
- Carefully cut the labels along their edges as shown in the example.
- Carefully slide the labels into their respective holders and check that they are positioned correctly.

| ISO 639-1 | | | |
|----------------------------|--|----|------------|
| ET-0840 A1-B1-C1 | <i>Slovenian 1</i>  | SL | 29/03/2022 |
| ET-0840 A2-B2-C2 | <i>Serbian 2</i>  | SR | 12/04/2022 |
| ET-0840 A3-B3-C3 | <i>Croatian 3</i>  | HR | 12/04/2022 |
| ET-0840 A4-B4-C4 | <i>Greek 4</i>  | EL | 29/03/2022 |
| ET-0840 A5-B5-C5 | <i>Bulgarian 5</i>  | BG | 29/03/2022 |
| ET-0840 A6-B6-C6 | <i>Albanian 6</i>  | AL | 29/03/2022 |
| ET-0840 A7-B7-C7 | <i>Dutch 7</i>  | NL | 14/04/2022 |
| ET-0840 A8-B8-C8 | <i>Romanian 8</i>  | RO | 14/04/2022 |
| ET-0840 A9-B9-C9 | <i>German 9</i>  | DE | 24/10/2022 |
| ET-0840 A10-B10-C10 | <i>Spanish 10</i>  | ES | 31/07/2023 |
| ET-0840 A11-B11-C11 | <i>Portuguese 11</i>  | PT | 31/07/2023 |
| ET-0840 A12-B12-C12 | <i>Italian 12</i>  | IT | 31/10/2022 |
| ET-0840 A13-B13-C13 | <i>Norwegian 13</i>  | NO | 28/03/2023 |
| ET-0840 A14-B14-C14 | <i>Hebrew 14</i>  | HE | 17/05/2023 |
| ET-0840 A15-B15-C15 | <i>French 15</i>  | FR | 26/06/2023 |
| ET-0840 A16-B16-C16 | <i>Swedish 16</i>  | SV | 17/10/2023 |
| ET-0840 A17-B17-C17 | <i>Danish 17</i>  | DA | 24/10/2023 |

| | |
|------------------------|-----------|
| ALARM | |
| PREALARM | |
| REMOTE ALARM ACTIVATED | |
| SILENCE SOUNDER | |
| DELAY ACTIVATED | |
| EVACUATION | |
| TEST | |
| POWER | |
| EN | EN |
| ET-0797_A 03112020 | |

ET-0797_C
03112020

| | |
|---------------------|-----------|
| FAULTS | |
| SYSTEM | |
| POWER SUPPLY | |
| EARTH FAULT | |
| DISABLEMENTS | |
| SOUNDER | |
| FAULT TRANSMISSION | |
| ALARM TRANSMISSION | |
| EXTINGUISHING | |
| EN | EN |
| ET-0797_B 03112020 | |



English



Italian 12



> Cut
2 x 32x146 mm
1 x 10x190 mm

| | |
|-----------------------|-----------|
| ALLARME | |
| PREALLARME | |
| ALLARME REMOTO ATTIVO | |
| SIRENE TACITATE | |
| RITARDI ATTIVI | |
| EVACUAZIONE | |
| TEST | |
| TENSIONE PRESENTE | |
| IT | IT |
| ET-0840_A12 31102022 | |

ET-0840 A12

| | |
|----------------------|-----------|
| GUASTI | |
| SISTEMA | |
| ALIMENTAZIONI | |
| DISPERSIONE A TERRA | |
| ESCLUSIONI | |
| SIRENA | |
| TRASMISSIONE GUASTI | |
| TRASMISSIONE ALLARMI | |
| COMANDO ANTINCENDIO | |
| IT | IT |
| ET-0840_B12 31102022 | |

ET-0840 B12

| | | | | |
|-----------|-------------|-----------------|----------------------|---------------------|
| EN | EVACUATION | SILENCE BUZZER | SILENCE RESOUND | RESET |
| IT | EVACUAZIONE | AZZERRA RITARDO | TACITAZIONE CICALINO | TACIT./RIPR. SIRENE |

ET-0840_C12
31102022

ET-0840 C12

ET-0797 C

RESET

| | | | |
|---------------------------|--------------------------|--------------------------|--------------------------|
| ALARM | ALARM | ALARM | ALARM |
| PREDALARM | PREDALARM | PREDALARM | PREDALARM |
| ALARMNA DALJAVO AKTIVIRAN | DALJINSKI ALARM UKLJUČEN | DALJINSKI ALARM UKLJUČEN | DALJINSKI ALARM UKLJUČEN |
| UTIŠAJ ZVOČNO NAPRAVO | UTIŠAJ ZVUČNIK | UTIŠAJ ZVUČNIK | UTIŠAJ ZVUČNIK |
| ZAKASNITEV AKTIVIRANA | AKTIVIRANA ODGODA | AKTIVIRANA ODGODA | AKTIVIRANA ODGODA |
| EVAKUACIJA | EVAKUACIJA | EVAKUACIJA | EVAKUACIJA |
| TEST | TEST | TEST | TEST |
| VKLOP/IZKLOP | NAPAJANJE | NAPAJANJE | NAPAJANJE |
| SL | SR | SR | SR |
| ET-0840_A1 29032022 | ET-0840_A2 12042022 | ET-0840_A2 12042022 | ET-0840_B2 12042022 |

| | | | |
|---------------------|---------------------|---------------------|---------------------|
| NAPAKE | NAPAKE | NAPAKE | NAPAKE |
| SISTEM | SISTEM | SISTEM | SISTEM |
| NAPAJANJE | NAPAJANJE | NAPAJANJE | NAPAJANJE |
| NAPAKA OZEMLJITVE | NAPAKA OZEMLJITVE | NAPAKA OZEMLJITVE | NAPAKA OZEMLJITVE |
| ONEMOGOČITVE | ONEMOGOČITVE | ONEMOGOČITVE | ONEMOGOČITVE |
| ZVOČNA NAPRAVA | ZVOČNA NAPRAVA | ZVOČNA NAPRAVA | ZVOČNA NAPRAVA |
| PRENOS NAPAKE | PRENOS NAPAKE | PRENOS NAPAKE | PRENOS NAPAKE |
| PRENOSALARMA | PRENOSALARMA | PRENOSALARMA | PRENOSALARMA |
| GAŠENJE | GAŠENJE | GAŠENJE | GAŠENJE POŽARA |
| SL | SL | SL | SR |
| ET-0840_P1 29032022 | ET-0840_P1 29032022 | ET-0840_P1 29032022 | ET-0840_B2 12042022 |



Slovenian 1



> Cut
2 x 32x146 mm
1 x 10x190 mm





Serbian 2

| | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| ALARM | ALARM | ALARM | ALARM |
| PREDALARM | PREDALARM | PREDALARM | PREDALARM |
| DALJINSKI ALARM UKLJUČEN | DALJINSKI ALARM UKLJUČEN | DALJINSKI ALARM UKLJUČEN | DALJINSKI ALARM UKLJUČEN |
| UTIŠAJ ZVUČNIK | UTIŠAJ ZVUČNIK | UTIŠAJ ZVUČNIK | UTIŠAJ ZVUČNIK |
| AKTIVIRANA ODGODA | AKTIVIRANA ODGODA | AKTIVIRANA ODGODA | AKTIVIRANA ODGODA |
| EVAKUACIJA | EVAKUACIJA | EVAKUACIJA | EVAKUACIJA |
| TEST | TEST | TEST | TEST |
| NAPAJANJE | NAPAJANJE | NAPAJANJE | NAPAJANJE |
| SR | SR | SR | SR |
| ET-0840_A2 12042022 | ET-0840_A2 12042022 | ET-0840_A2 12042022 | ET-0840_B2 12042022 |

| | | | |
|---------------------|---------------------|---------------------|---------------------|
| KVAROVI | KVAROVI | KVAROVI | KVAROVI |
| SISTEM | SISTEM | SISTEM | SISTEM |
| NAPAJANJE | NAPAJANJE | NAPAJANJE | NAPAJANJE |
| GREŠKA UZEMLJENJA | GREŠKA UZEMLJENJA | GREŠKA UZEMLJENJA | GREŠKA UZEMLJENJA |
| ONEMOGOČENJA | ONEMOGOČENJA | ONEMOGOČENJA | ONEMOGOČENJA |
| ZVUČNIK | ZVUČNIK | ZVUČNIK | ZVUČNIK |
| PRENOSKVARA | PRENOSKVARA | PRENOSKVARA | PRENOSKVARA |
| PRENOSALARMA | PRENOSALARMA | PRENOSALARMA | PRENOSALARMA |
| GAŠENJE POŽARA | GAŠENJE POŽARA | GAŠENJE POŽARA | GAŠENJE POŽARA |
| SR | SR | SR | SR |
| ET-0840_B2 12042022 | ET-0840_B2 12042022 | ET-0840_B2 12042022 | ET-0840_C2 |

| | | | |
|---------------------|---------------------|---------------------|---------------------|
| SR | SR | SR | SR |
| EVAKUACIJA | EVAKUACIJA | EVAKUACIJA | EVAKUACIJA |
| PREKINI ZAKASNITEV | PREKINI ZAKASNITEV | PREKINI ZAKASNITEV | PREKINI ZAKASNITEV |
| UTIŠAJ BREŃALO | UTIŠAJ BREŃALO | UTIŠAJ BREŃALO | UTIŠANJE ZVOKA |
| ODGODA KRAJA | ODGODA KRAJA | ODGODA KRAJA | ZUJALICA TIŠINE |
| REAKTIVACIJA SIRENA | REAKTIVACIJA SIRENA | REAKTIVACIJA SIRENA | REAKTIVACIJA SIRENA |
| ET-0840_C1 | ET-0840_C1 | ET-0840_C1 | ET-0840_C2 |

| | | | | | | | |
|--------------------------------|----------------------|---|-------------------------|---|---------------------|-------------------------|--|
| ALARM | | ALARM | | ΣΥΝΑΓΕΡΜΟΣ | | ΣΦΑΛΜΑΤΑ | |
| PREDALARM I | | GREŠKE | | ΠΡΟΣΥΝΑΓΕΡΜΟΣ | | ΣΥΣΤΗΜΑ | |
| DALJINSKI ALARM UKLJUČEN | SUSTAV |  | |  | | ΤΡΟΦΟΔΟΣΙΑ | |
| UTIŠAJ SIRENU | NAPAJANJE | Croatian 3 | | Greek 4 | | ΣΦΑΛΜΑΤΕΙΩΣΗΣ | |
| AKTIVIRANA ODGODA | GREŠKA UZEMLJENJA | ONEMOΓΟΥCENJA | | ΑΠΟΜΑΚΡΥΣΜΕΝΟΣ ΣΥΝΑΓΕΡΜΟΣ ΕΝΕΡΓΟΠΟΙΗΜΕΝΟΣ | | ΑΠΕΝΕΡΓΟΠΟΙΗΣΕΙΣ | |
| EVAKUACIJA | ZVUČNIK | ΖΥΥCΗΝΙΚ | | ΗΧΗΤΙΚΟΣ ΤΟΝΟΣΣΙΓΙΓΑCΗΣ | | ΗΧΗΤΙΚΟΣ ΤΟΝΟΣ | |
| TEST | PRIJENOS GREŠKE | PRIJENOS GREŠKE | | ΚΑΘΥCΤΕΡΗΣΗ ΕΝΕΡΓΟΠΟΙΗΜΕΝΗ | | ΣΦΑΛΜΑ ΜΕΤΑΔΟCΗΣ | |
| NAPAJANJE | PRIJENOS ALARMA | PRIJENOS ALARMA | | ΕΚΚΕΝΩCΗ | | ΣΥΝΑΓΕΡΜΟΣ ΜΕΤΑΔΟCΗΣ | |
| | GAŠENJEPOŽARA | GAŠENJEPOŽARA | | ΙCΧΥC | | ΚΑΤΑCΒΕCΗ | |
| HR | HR | HR | | EL | | EL | |
| ET-0840_A3 12042022 | ET-0840_B3 12042022 | ET-0840_A4 29032022 | | ET-0840_B4 29032022 | | ET-0840_C3 12042022 | |
| HR | EVAKUACIJA | ZUJALICA TIŠINE | REAKTIVIRANJE SIRENA | RONIŠTI | ET-0840 C4 | | |
| ET-0840 C3 | EL | ΕΚΚΕΝΩCΗ | ΛΗΞΗ ΚΑΘΥCΤΕΡΗΣΗC | ΜΠΑΖΕΡΣΙΓΑCΗΣ | ΑΝΤΗΧΗCΗ CΙΓΑCΗΣ | ΕΠΑΝΑΦΟΡΑ | |





> Cut
2 x 32x146 mm
1 x 10x190 mm

ET-0840_C4
29032022

| | | | |
|-------------------------|-------------------------|-------------------------|-------------------------|
| АЛАРМА | АЛАРМА | АЛАРМА | АЛАРМА |
| ПРЕДВ. АЛАРМА | ПРЕДВ. АЛАРМА | ПРЕДВ. АЛАРМА | ПРЕДВ. АЛАРМА |
| АКТИВИРАНА ДИСТ. АЛАРМА | АКТИВИРАНА ДИСТ. АЛАРМА | АКТИВИРАНА ДИСТ. АЛАРМА | АКТИВИРАНА ДИСТ. АЛАРМА |
| ЗАГЛУШЕНА СИРЕНА | ЗАГЛУШЕНА СИРЕНА | ЗАГЛУШЕНА СИРЕНА | ЗАГЛУШЕНА СИРЕНА |
| АКТИВИРАНО ЗАКЪСНЕНИЕ | АКТИВИРАНО ЗАКЪСНЕНИЕ | АКТИВИРАНО ЗАКЪСНЕНИЕ | АКТИВИРАНО ЗАКЪСНЕНИЕ |
| ЕВАКУАЦИЯ | ЕВАКУАЦИЯ | ЕВАКУАЦИЯ | ЕВАКУАЦИЯ |
| ТЕСТ | ТЕСТ | ТЕСТ | ТЕСТ |
| ЗАХРАНВАНЕ | ЗАХРАНВАНЕ | ЗАХРАНВАНЕ | ЗАХРАНВАНЕ |
| BG | BG | BG | BG |
| ET-0840_A5 29032022 | ET-0840_A5 29032022 | ET-0840_A5 29032022 | ET-0840_A5 29032022 |

| | | | |
|---------------------|---------------------|---------------------|---------------------|
| ПОВРЕДИ | ПОВРЕДИ | ПОВРЕДИ | ПОВРЕДИ |
| СИСТЕМА | СИСТЕМА | СИСТЕМА | СИСТЕМА |
| ЗАХРАНВАНЕ | ЗАХРАНВАНЕ | ЗАХРАНВАНЕ | ЗАХРАНВАНЕ |
| ПОВРЕДА ЗАЗЕМЯВАНЕ | ПОВРЕДА ЗАЗЕМЯВАНЕ | ПОВРЕДА ЗАЗЕМЯВАНЕ | ПОВРЕДА ЗАЗЕМЯВАНЕ |
| ИЗКЛЮЧВАНИЯ | ИЗКЛЮЧВАНИЯ | ИЗКЛЮЧВАНИЯ | ИЗКЛЮЧВАНИЯ |
| СИРЕНА | СИРЕНА | СИРЕНА | СИРЕНА |
| ИЗПРАЩАНЕ ПОВРЕДА | ИЗПРАЩАНЕ ПОВРЕДА | ИЗПРАЩАНЕ ПОВРЕДА | ИЗПРАЩАНЕ ПОВРЕДА |
| ИЗПРАЩАНЕ АЛАРМА | ИЗПРАЩАНЕ АЛАРМА | ИЗПРАЩАНЕ АЛАРМА | ИЗПРАЩАНЕ АЛАРМА |
| ПОЖАРОГАСЕНЕ | ПОЖАРОГАСЕНЕ | ПОЖАРОГАСЕНЕ | ПОЖАРОГАСЕНЕ |
| BG | BG | BG | BG |
| ET-0840_P5 29032022 | ET-0840_P5 29032022 | ET-0840_P5 29032022 | ET-0840_P5 29032022 |

| | | | |
|---|---|----------------------------------|----------------------------------|
|  |  | АЛАРМ | АЛАРМ |
| <i>Bulgarian 5</i> | <i>Albanian 6</i> | ПАРА АЛАРМ | ПАРА АЛАРМ |
| АКТИВИЗИМОНГА ДИСТАНЦА Т АЛАРМИТ | АКТИВИЗИМОНГА ДИСТАНЦА Т АЛАРМИТ | АКТИВИЗИМОНГА ДИСТАНЦА Т АЛАРМИТ | АКТИВИЗИМОНГА ДИСТАНЦА Т АЛАРМИТ |
| ПУШИМ СИРЕНЕ | ПУШИМ СИРЕНЕ | ПУШИМ СИРЕНЕ | ПУШИМ СИРЕНЕ |
| АКТИВИЗИМОНГА ДИСТАНЦА Т АЛАРМИТ | АКТИВИЗИМОНГА ДИСТАНЦА Т АЛАРМИТ | АКТИВИЗИМОНГА ДИСТАНЦА Т АЛАРМИТ | АКТИВИЗИМОНГА ДИСТАНЦА Т АЛАРМИТ |
| ЕВАКУИМ | ЕВАКУИМ | ЕВАКУИМ | ЕВАКУИМ |
| ТЕСТ | ТЕСТ | ТЕСТ | ТЕСТ |
| ТЕНСИОНИ ПРЕЗЕНТ | ТЕНСИОНИ ПРЕЗЕНТ | ТЕНСИОНИ ПРЕЗЕНТ | ТЕНСИОНИ ПРЕЗЕНТ |
| AL | AL | AL | AL |
| ET-0840_A6 29032022 | ET-0840_A6 29032022 | ET-0840_A6 29032022 | ET-0840_A6 29032022 |



> Cut
2 x 32x146 mm
1 x 10x190 mm

| | | | |
|---------------------|---------------------|---------------------|---------------------|
| ДЕФЕКТЕ | ДЕФЕКТЕ | ДЕФЕКТЕ | ДЕФЕКТЕ |
| СИСТЕМИ | СИСТЕМИ | СИСТЕМИ | СИСТЕМИ |
| БЛОКУ И УШИМИТ | БЛОКУ И УШИМИТ | БЛОКУ И УШИМИТ | БЛОКУ И УШИМИТ |
| ДЕФЕКТОКЕЗИМИ | ДЕФЕКТОКЕЗИМИ | ДЕФЕКТОКЕЗИМИ | ДЕФЕКТОКЕЗИМИ |
| С'АКТИВИЗИМЕ | С'АКТИВИЗИМЕ | С'АКТИВИЗИМЕ | С'АКТИВИЗИМЕ |
| СИРЕНА | СИРЕНА | СИРЕНА | СИРЕНА |
| ТРАНСМЕТИМ ДЕФЕКТЕШ | ТРАНСМЕТИМ ДЕФЕКТЕШ | ТРАНСМЕТИМ ДЕФЕКТЕШ | ТРАНСМЕТИМ ДЕФЕКТЕШ |
| ТРАНСМЕТИМ АЛАРМЕСИ | ТРАНСМЕТИМ АЛАРМЕСИ | ТРАНСМЕТИМ АЛАРМЕСИ | ТРАНСМЕТИМ АЛАРМЕСИ |
| ЕХТИНГУИШИНГ | ЕХТИНГУИШИНГ | ЕХТИНГУИШИНГ | ЕХТИНГУИШИНГ |
| AL | AL | AL | AL |
| ET-0840_B6 29032022 | ET-0840_B6 29032022 | ET-0840_B6 29032022 | ET-0840_B6 29032022 |

| | | | |
|---------------------|---------------------|---------------------|---------------------|
| АЛАРМ | АЛАРМ | АЛАРМ | АЛАРМ |
| ЕВАКУАЦИЯ | ЕВАКУАЦИЯ | ЕВАКУАЦИЯ | ЕВАКУАЦИЯ |
| КРАЙНА ЗАКЪСНЕНИЕ | КРАЙНА ЗАКЪСНЕНИЕ | КРАЙНА ЗАКЪСНЕНИЕ | КРАЙНА ЗАКЪСНЕНИЕ |
| ЗАГЛУШАВАНЕ ЗУМЕР | ЗАГЛУШАВАНЕ ЗУМЕР | ЗАГЛУШАВАНЕ ЗУМЕР | ЗАГЛУШАВАНЕ ЗУМЕР |
| ЗАГЛУШАВАНЕ СИРЕНА | ЗАГЛУШАВАНЕ СИРЕНА | ЗАГЛУШАВАНЕ СИРЕНА | ЗАГЛУШАВАНЕ СИРЕНА |
| РЕСЕТ | РЕСЕТ | РЕСЕТ | РЕСЕТ |
| AL | AL | AL | AL |
| ET-0840_C5 29032022 | ET-0840_C5 29032022 | ET-0840_C5 29032022 | ET-0840_C5 29032022 |

| | | | |
|-------------------|-------------------|-------------------|-------------------|
| АЛАРМ | АЛАРМ | АЛАРМ | АЛАРМ |
| ПУШИМ СИРЕНЕСИ | ПУШИМ СИРЕНЕСИ | ПУШИМ СИРЕНЕСИ | ПУШИМ СИРЕНЕСИ |
| РЕСЕТ | РЕСЕТ | РЕСЕТ | РЕСЕТ |
| ET-0840 C6 | ET-0840 C6 | ET-0840 C6 | ET-0840 C6 |

| ET-0840 A7 | | ET-0840 B7 | | ET-0840 A8 | | ET-0840 B8 | |
|---------------------------|-----------------------------------|--------------------------|-------------------------------------|----------------------|-----------------------|------------|-------------------|
| BRAND | VOORALARM | STORING | ALARME | PREALARME | DEFECTE | | |
| DOORMELDING UITGEVOERD | DOORMELDING STOP UITGEVOERD | SYSTEEM | ACTIVARE TRANSMISIE DINSTANTĂ | STOP SIRENE | SISTEM | | |
| SIGNAALGEVERS | SIGNAALGEVERS | VOEDING | STOP SIRENE | ÎNTĂRZIERE ACTIVĂ | ALIMENTARE | | |
| VERTRAGING ACTIEF | BUITEN DIENST | AARDLEK STORING | EVACUARE | TEST | PUNERE LA PĂMÂNT | | |
| ONTRUIMING | SIGNAALGEVERS | BUITEN DIENST | EVACUARE | ALIMENTARE | DEZACTIVĂRI | | |
| INTEST | DOORMELDING STORING | DOORMELDING STORING | TEST | ALIMENTARE | SIRENE | | |
| INBEDRIJF | DOORMELDING BRAND | DOORMELDING BRAND | ALIMENTARE | | TRANSMISIE DEFECTE | | |
| | BLUSSING | BLUSSING | | | TRANSMISIE ALARME | | |
| NL | NL | NL | RO | RO | STINGERE | RO | |
| ET-0840_A7 14042022 | ET-0840_B7 14042022 | ET-0840_A8 14042022 | ET-0840_B8 14042022 | ET-0840_B8 14042022 | | | |
| NL | ONTRUIMING | EINDE VERTRAGING | STOP/HERST. SIGNAALG. | RESET | | | ET-0840 C8 |
| ET-0840 C7 | RO | EVACUARE | ANULARE ÎNTĂRZIERE | STOP BUZZER | STOP/START SIRENE | RESET | |



Dutch 7



Romanian 8



> Cut
2 x 32x146 mm
1 x 10x190 mm

ET-0840_C8
14042022

ALARM
VORALARM

ABGES.
ALARM AKTIV

AKUSTIKAB

VERZÖGERUNG
LÄUFT

EVAKUIERUNG

TEST

BETRIEB

DE

ET-0840_A9 24102022

ET-0840_C9
24102022

STÖRUNGEN

SYSTEM

ENERGIEVERS.

ERDSCHLUSS

ABSCHALT.

AKUSTIK

STÖRUNGS-
ÜBERTRAGUNG

ALARM-
ÜBERTRAGUNG

LÖSCHANLAGE

DE

ET-0840_P9 24102022



German 9

ALARMA
PREALARMA

ALARMA REMOTA
ACTIVA

SILENCIAR
SIRENAS

RETARDOS
ACTIVOS

EVACUACIÓN

PRUEBA

ALIMENTACIÓN

ES

ET-0840_A10 31072023

AVERÍAS

AVERÍA
SISTEMA

AVERÍA
ALIMENTACIÓN

AVERÍA TIERRA

ANULACIÓN

SIRENA

TRANSMISIÓN
AVERÍAS

TRANSMISIÓN
ALARMAS

EXTINCIÓN

ES

ET-0840_B10 31072023



> Cut
2 x 32x146 mm
1 x 10x190 mm

ET-0840 A10

ET-0840 B10

Spanish 10

RÜCKSETZTEN

AKUSTIK AB/AN

SUMMER AUS

VERZÖGERUNG
BEEINDET

EVAKUIERUNG

DE

ET-0840_C9
24102022

ET-0840 C10

SILENC./REACT.
SIRENAS

SILENCIAR
ZUMBADOR

FIN RETARDOS

EVACUACIÓN

ES

ET-0840 C9

REARME

| ALARME | | PRÉ-ALARME | | Portuguese 11 | | Norwegian 13 | | Portuguese 11 | | Norwegian 13 | |
|----------------------|----------------------|----------------------|--------------------------|----------------------|---------------------|----------------------|---------------------|----------------------|------------------------|----------------------|------------------|
| ET-0840_A11 31072023 | ALARME REMOTO ACTIVO | ET-0840_A11 31072023 | PRÉ-ALARME REMOTO ACTIVO | ET-0840_B11 31072023 | AVARIAS SISTEMA | ET-0840_B11 31072023 | AVARIAS SISTEMA | ET-0840_A13 28032023 | ALARME | ET-0840_B13 28032023 | FEIL |
| ET-0840_C11 31072023 | SILENCIAR SIRENES | ET-0840_A11 31072023 | SILENCIAR SIRENES | ET-0840_B11 31072023 | AVARIA ALIMENTAÇÃO | ET-0840_B11 31072023 | AVARIA ALIMENTAÇÃO | ET-0840_A13 28032023 | FORVARSEL | ET-0840_A13 28032023 | SYSTEM |
| ET-0840_C11 31072023 | ATRASSO ACTIVO | ET-0840_A11 31072023 | ATRASSO ACTIVO | ET-0840_B11 31072023 | AVARIA DE TERRA | ET-0840_B11 31072023 | AVARIA DE TERRA | ET-0840_A13 28032023 | FJERNALARM AKTIVERT | ET-0840_A13 28032023 | STRØMFORSYNING |
| ET-0840_C11 31072023 | EVACUAÇÃO | ET-0840_A11 31072023 | EVACUAÇÃO | ET-0840_B11 31072023 | ANULADOS | ET-0840_B11 31072023 | ANULADOS | ET-0840_A13 28032023 | AVSTILL ALARMKLOKKER | ET-0840_A13 28032023 | JORDFEIL |
| ET-0840_C11 31072023 | TESTE | ET-0840_A11 31072023 | TESTE | ET-0840_B11 31072023 | SIRENE | ET-0840_B11 31072023 | SIRENE | ET-0840_A13 28032023 | FORSINKELSE AKTIVERT | ET-0840_A13 28032023 | UTKOBLING |
| ET-0840_C11 31072023 | ALIMENTAÇÃO | ET-0840_A11 31072023 | ALIMENTAÇÃO | ET-0840_B11 31072023 | TRANSMISSÃO AVARIAS | ET-0840_B11 31072023 | TRANSMISSÃO AVARIAS | ET-0840_A13 28032023 | EVAKUERING | ET-0840_A13 28032023 | ALARMKLOKKER |
| ET-0840_C11 31072023 | | ET-0840_A11 31072023 | | ET-0840_B11 31072023 | TRANSMISSÃO ALARMES | ET-0840_B11 31072023 | TRANSMISSÃO ALARMES | ET-0840_A13 28032023 | TEST | ET-0840_A13 28032023 | OVERFØRINGSFEIL |
| ET-0840_C11 31072023 | | ET-0840_A11 31072023 | | ET-0840_B11 31072023 | EXTINÇÃO | ET-0840_B11 31072023 | EXTINÇÃO | ET-0840_A13 28032023 | DRIFT | ET-0840_A13 28032023 | ALARMOVERFØRING |
| ET-0840_C11 31072023 | | ET-0840_A11 31072023 | | ET-0840_B11 31072023 | PT | ET-0840_B11 31072023 | PT | ET-0840_A13 28032023 | NO | ET-0840_A13 28032023 | SLUKKING |
| ET-0840_C11 31072023 | PT | ET-0840_A11 31072023 | PT | ET-0840_B11 31072023 | EVACUAÇÃO | ET-0840_B11 31072023 | FIM ATRASOS | ET-0840_A13 28032023 | SILENC./REACT. SIRENES | ET-0840_A13 28032023 | NO |
| ET-0840_C11 31072023 | | ET-0840_A11 31072023 | | ET-0840_B11 31072023 | EVACUAÇÃO | ET-0840_B11 31072023 | EVACUAÇÃO | ET-0840_A13 28032023 | REARME | ET-0840_A13 28032023 | ET-0840 C13 |
| ET-0840_C11 31072023 | | ET-0840_A11 31072023 | | ET-0840_B11 31072023 | NO | ET-0840_B11 31072023 | EVAKUERING | ET-0840_A13 28032023 | AVSTILL PANELSUMMER | ET-0840_A13 28032023 | TILBAKESTILL |
| ET-0840_C11 31072023 | | ET-0840_A11 31072023 | | ET-0840_B11 31072023 | AVSLUTT FORSINKELSE | ET-0840_B11 31072023 | AVSLUTT FORSINKELSE | ET-0840_A13 28032023 | AVSTILL PÅSTILL | ET-0840_A13 28032023 | |



> Cut
2 x 32x146 mm
1 x 10x190 mm

ET-0840_C11
31072023

ET-0840_C13
28032023

| | | |
|--------------------|-----------|----------------------|
| אזעקה | HE | ET-0840_A14 17052023 |
| קדם אזעקה | HE | ET-0840_A14 17052023 |
| אזעקה מרוחק מופעלת | | |
| השתקת צופר | | |
| השה"ה מופעלת | | |
| פינוי | | |
| בדיקה | | |
| מתח | | |

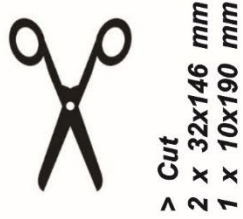
| | | |
|---------------|-----------|----------------------|
| תקלות | HE | ET-0840_B14 17052023 |
| מערכת | | |
| ספק כח | | |
| תקלת הארקה | | |
| מגבלות | | |
| צופר | | |
| תקלת שידור | | |
| תקלת אזעקה | | |
| כיבוי | | |



Hebrew 14



French 15



| | | |
|----------------------|-----------|----------------------|
| ALARME | FR | ET-0840_A15 26062023 |
| PRE-ALARME | | |
| TRANSMISSION ACTIVEE | | |
| SIRENE ARRETEES | | |
| TEMPORISATION ACTIVE | | |
| EVACUATION | | |
| TEST | | |
| SOUS TENSION | | |

| | | |
|----------------------|-----------|----------------------|
| DEFAULT | FR | ET-0840_B15 26062023 |
| SYSTÈME | | |
| ALIMENTATION | | |
| DEFAULT TERRE | | |
| HORS SERVICE | | |
| SIRENES | | |
| DEFAULT TRANSMISSION | | |
| ALARME TRANSMISSION | | |
| EXTINCTION | | |

| | | | | | | | |
|--------------------|-----------|------------|-----------|----------------|----------------------|---------|--------------------|
| ET-0840 C14 | FR | פינוי | "ים השה"ה | השתק זמזם | השתק צופר | אתחול | ET-0840 C15 |
| ET-0840 C14 | FR | EVACUATION | FIN DELAI | ARRET RONFLEUR | DESACT./ACT. SIRENES | REARMER | |

| | | | | |
|--------------------------|----------------------|--------------------------|-----------------------|-----------------------|
| LARM | VARNING | ALARM | FEJL | FEJL |
| FJÄRRALARM AKTIVERAT | SYSTEMET | FORVARSEL | SYSTEM | SYSTEM |
| AVBRYT LARM | STRÖMFÖRSÖRJNING | FJERNALARM AKTIVERET | STRÖMFÖRSYNING | STRÖMFÖRSYNING |
| FÖRDRÖJNING AKTIVERAD | JORDFEL | AFSTIL LYDGIVER | JORDFEJL | JORDFEJL |
| EVAKUERING | URKOPPLING | FORSINKELSE AKTIVERET | UDKOBLING | UDKOBLING |
| TESTA | ALARMKLOCKOR | EVAKUERING | ALARMGIVER | ALARMGIVER |
| DRIFT | ÖVERFÖRINGSFEL | TEST | TRANSMISSIONSFEJL | TRANSMISSIONSFEJL |
| | LARMÖVERFÖRING | DRIFT | ALARMÖVERFÖRING | ALARMÖVERFÖRING |
| | STÄNGERAV | | SLUKNING | SLUKNING |
| SV | SV | DA | DA | DA |
| ET-0840_A16 17102023 | ET-0840_B16 17102023 | ET-0840_A17 24102023 | ET-0840_B17 24102023 | ET-0840_B17 24102023 |
| SV | SV | DA | DA | DA |
| EVAKUERING | EVAKUERING | ÅTERSTÄLLA | ÅTERSTÄLLA | ÅTERSTÄLLA |
| | FÖRDRÖJNING | AVBRYTT/ AKTIVERA | AVBRYTT/ AKTIVERA | AVBRYTT/ AKTIVERA |
| | SLUT | PANEL BUZZER | PANEL BUZZER | PANEL BUZZER |
| | | AFSLUT FORSINKELSE | AFSLUT FORSINKELSE | AFSLUT FORSINKELSE |
| ET-0840 C16 | ET-0840 C16 | ET-0840 C17 | ET-0840 C17 | ET-0840 C17 |
| ANNULLER/ AKTIVER | ANNULLER/ AKTIVER | ANNULLER/ AKTIVER | ANNULLER/ AKTIVER | ANNULLER/ AKTIVER |
| | | | | NULSTIL |



Swedish 16



Danish 17



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2 x 32x146 mm
1 x 10x190 mm

ET-0840 C16
17102023

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17102023

Morley international offices



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