



# Getting Started

Autroprime Interactive Fire Detection System



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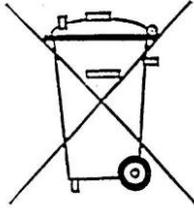
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# 1. Before you start

The **Getting Started handbook** provides information for the installation and setup of the Autoprime Interactive Fire Detection System, a fire detection system for small-to-medium-sized applications. For information on the cabling and installation of loop units and other peripheral units, refer to the separate handbook 116-P-CONNECTLOOPUNIT/DGB.

The handbook is intended to be used by technical personnel who are responsible for the installation and setup of Autoprime. The table below shows an overview of the complete technical documentation that is available in several languages:

Documents	Part number	File name
System Description	116-P-APRIME2-SYSTEM/XGB	aprime2system_xgb
Getting Started	116-P-APRIME2-GETSTAR/EGB	aprime2gestar_egb
Installation Handbook	116-P-APRIME2-INSTAL/DGB	aprime2instal_dgb
Connecting Loop Units	116-P-CONNECTLOOPUNIT/DGB	connectloopunit_dgb
Configuration Handbook	116-P-APRIME2-CONFIG/EGB	aprime2config_egb
Operator's Handbook	116-P-APRIME2-OPERAT/FGB	aprime2operat_fgb
User Guide	116-P-APRIME2-USERGU/LGB	aprime2usergu_lgb
Wall Chart	116-P-APRIME2-WALLC/LGB	aprime2wallc_lgb
Menu Structure	116-P-APRIME2-MENUS/MGB	aprime2menus_mgb
Datasheet; Fire Alarm Control Panel BS-200	116-P-BS200/CGB	bs200_cgb
Datasheet; Fire Alarm Control Panel BS-200M	116-P-BS200M/CGB	bs200m_cgb
Datasheet; Repeater Panel BS-211	116-P-BS211/CGB	bs211_cgb
Datasheet; Information Panel BV-210	116-P-BV210/CGB	bv210_cgb
Datasheet; Fire Brigade Panel BU-210	116-P-BU210/CGB	bu210_cgb
Datasheet; Mimic Driver BUR-200	116-P-BUR200/CGB	bur200_cgb

#### Inside this package you will find:

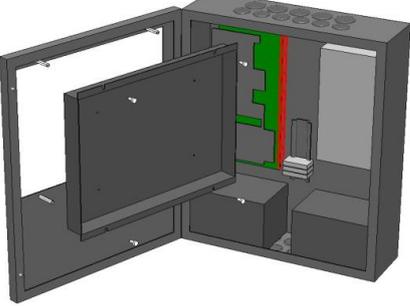
- rubber glands for the cable entries
- text foils for the indicators and buttons (available for all specified languages)
- a cable to interconnect the two batteries

\* **Autoprime supports the following languages** (listed in alphabetical order):

- Danish
- Dutch
- English
- Finnish
- French
- German
- Hungarian
- Icelandic
- Italian
- Norwegian
- Polish
- Portuguese (Brazilian)
- Russian
- Spanish
- Swedish

## 2. Panels, Brackets and Cabinet

The Autoprime system provides the following *panels*:

	<p><b>Fire Alarm Control Panel</b> (BS-200, BS-200M)</p> <p>BS-200 is an integrated fire-alarm control panel for small-to-medium-sized installations. The panel serves as a stand-alone operating panel, or as a master panel on a panel bus with a maximum of 8 additional panels.</p> <p>All alarm handling and system features can be configured, controlled and monitored from the panel.</p> <p>Dimensions: HxWxD (mm): 420x346x140</p>
	<p><b>Cabinet (UE-1747)</b></p> <p>If the Operator Panel (BS-210) is mounted separately outside the cabinet, the door bracket is to be turned inside out, and fastened to the cabinet's door.</p> <p>Dimensions: HxWxD (mm): 420x346x140</p>
	<p><b>Operator Panel (BS-210)</b></p> <p>The panel is delivered as an integrated part of the Fire Alarm Control Panel but can also be mounted separately outside a cabinet onto a bracket (UD-731).</p> <p>All alarm handling and system features can be configured, controlled and monitored from the panel.</p> <p>Dimensions: HxWxD (mm): 310 x 220 x 45</p>
	<p><b>Repeater Panel (BS-211)</b></p> <p>The panel is identical to the the Operator Panel BS-210, with the exception of the alphanumeric keypad.</p> <p>All alarm handling and system events can be monitored from the panel. Mounted onto a bracket (UD-731).</p> <p>Dimensions: HxWxD (mm): 310 x 220 x 45</p>
	<p><b>Fire Brigade Panel (BU-210)</b></p> <p>From the Fire Brigade Panel BU-210 it is possible to mute the panel's internal buzzer, silence sounders/bells etc. and reset the system. Only alarms are shown in the display. Mounted onto a bracket (UD-732).</p> <p>Dimensions: HxWxD (mm): 310 x 154 x 45</p>
	<p><b>Information Panel (BV-210)</b></p> <p>All alarm handling and system events can be monitored from the panel. All significant events/conditions are shown in the display. Mounted onto a bracket (UD-732).</p> <p>Dimensions: HxWxD (mm): 310 x 154 x 45</p>

 A photograph of the Mimic Driver (BUR-200) circuit board. It is a green printed circuit board (PCB) with a silver metal mounting bracket on top. The board features several rows of green terminal blocks along the top and bottom edges. There are also some components and markings on the surface of the board.	<p><b>Mimic Driver (BUR-200)</b></p> <p>The Mimic Driver is capable of driving 32 LEDs with series resistors on a mimic panel for additional indication of alarms. Provides also 8 standard monitored inputs</p> <p>Dimensions: HxWxD (mm): 181x125x40</p> <p><b>For maritime applications, the Mimic Driver BUR-200 is delivered in a cabinet providing 16 programmable relays.</b></p>
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In addition, the Autoprime system provides the "*Larmlagringspanel*" *BU-211* specifically designed for the Swedish Market.

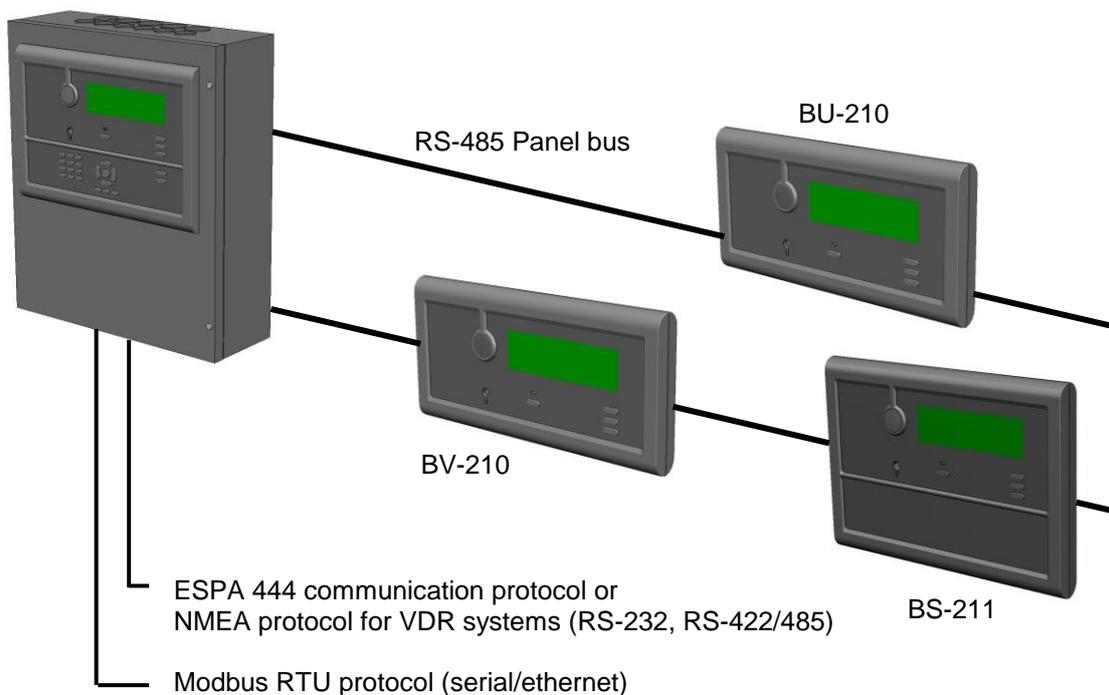
## 3. Interconnecting Panels

### 3.1 Overview

A maximum of 8 additional panels can be freely mixed and connected to the Fire Alarm Control Panel via the RS-485 panel bus, including Repeater Panels BS-211, Information Panels BV-210, Fire Brigade Panels BU-210 and Mimic Drivers BUR-200.

For information on cabling, refer to *Terminal Points*, chapter 7.

Fire Alarm Control Panel BS-200



### 3.2 Cyber Security

To ensure cyber security, we strongly recommend that the Ethernet port is not connected to the public internet.

## 4. Pre-installation

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### 4.1 Location

The Fire Alarm Control Panel or Operator Panel must be located in, or nearby, the entrance according to local regulations and in consultation with the fire brigade.

Repeater Panels, Fire Brigade Panels and Information Panels must be placed according to local regulations and in consultation with the fire brigade.

### 4.2 Environmental Requirements

The equipment complies to environmental conditions of IEC-721-3-3 class 3k5.

Ambient temperature: -5 to +55 C

Degree of protection:

- BS-200: IEC-529/IP30
- BS-200M: IEC-529/IP32

### 4.3 Mounting Height / Space Requirement

To ensure optimal readability of the panels' display, the recommended mounting height of the panel top is approximately 175 cm above the floor.

### 4.4 Mounting Alternatives

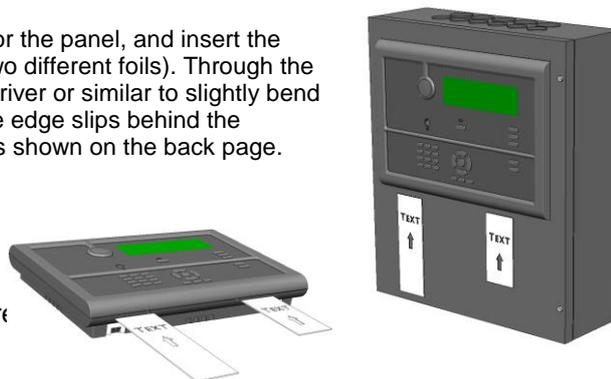
The Fire Alarm Control Panel (BS-200, BS-200M) is to be surface mounted onto the wall as a complete standalone cabinet or one of several panels interconnected to a panel bus.

The Operator Panel (BS-210), which is an integrated part of the Fire Alarm Control Panel, can also be mounted separately outside a cabinet, either surface mounted onto the wall or mounted inside a 19" rack or console.

All other panel types; Repeater Panel (BS-211), Fire Brigade Panel (BU-210), Information Panel (BV-210), Mimic Driver (BUR-200), and the "Larmlagringspanel" (BU-211) are to be surface mounted onto the wall or mounted inside a 19" rack or console. For information on mounting alternatives for the maritime panel BS-200M and cabinet BUR-200M, refer to chapter 8.

# 5. Mounting Instructions

- Find the text foils in the relevant language for the panel, and insert the textfoils in the correct locations (there are two different foils). Through the small hole near the slot, use a small screwdriver or similar to slightly bend the edge (approx. 1mm) of each foil until the edge slips behind the opening of the slot. An overview of all foils is shown on the back page.



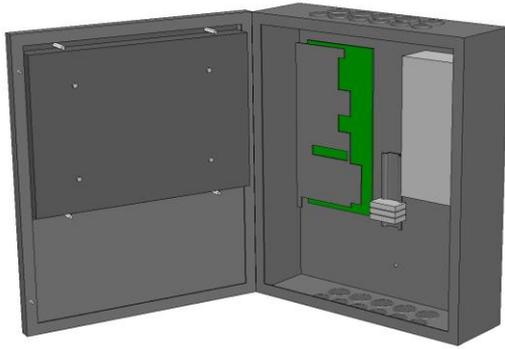
- Refer to the relevant mounting procedure, the drawings and follow the steps.

Step	A) Mounting the Fire Alarm Control Panel (BS-200). For information on BS-200M, see chapter 8)
1A	<ul style="list-style-type: none"> <li>The cabinet has 3 mounting holes located at the rear. The upper holes are of key-hole-type.</li> <li>Insert the 2 upper screws in the wall according to the drawing.</li> <li>Open the cabinet's front door and hang the cabinet onto the screws.</li> <li>Insert the lower screw, then tighten all screws.</li> </ul>
2A	<ul style="list-style-type: none"> <li>Place the 2 batteries inside the cabinet according to the drawing. Fasten them with strips.</li> </ul>
3A	<ul style="list-style-type: none"> <li>Connect all external cables to the correct terminal points. Refer to chapter 6.</li> </ul>

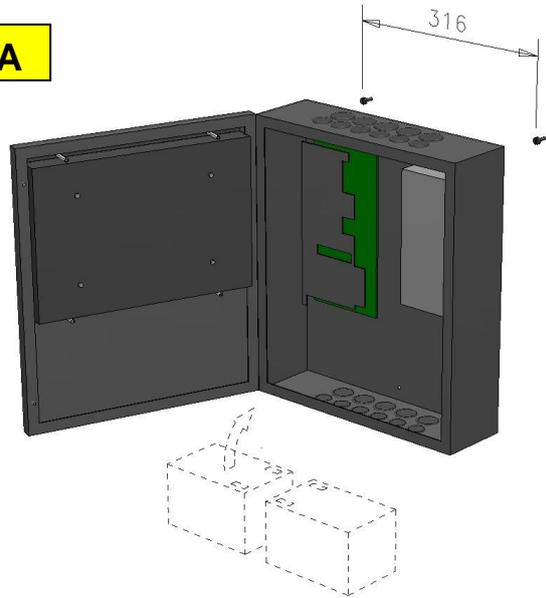
Step	B) Mounting the Operator Panel separately outside a cabinet (Operator Panel BS-210, an integrated part of BS-200)
1B	<ul style="list-style-type: none"> <li>The cabinet has 3 mounting holes located at the rear. The upper holes are of key-hole-type.</li> <li>Insert the 2 upper screws in the wall according to the drawing.</li> <li>Open the cabinet's front door and hang the cabinet onto the screws.</li> <li>Insert the lower screw, then tighten all screws.</li> </ul>
2B	<ul style="list-style-type: none"> <li>Unscrew the 4 screws which connect the panel to the cabinet's front door.</li> <li>Remove the Operator Panel with its bracket mounted.</li> <li>Remove the bracket from the Operator Panel.</li> <li>Disconnect the internal cable from the Operator Panel.</li> </ul>
3B	<ul style="list-style-type: none"> <li>For cosmetic reasons, unscrew the extended nuts from the door bracket (which the Operator Panel was fastened to), and turn the door bracket inside out, then fasten it to the cabinet's door. Note: The maritime panel BS-200M requires the use of a rubber seal (UY-108) between the door bracket and the cabinet's front door.</li> <li>Plug the holes by the four plastic studs.</li> </ul>
4B	<ul style="list-style-type: none"> <li>Mount the Operator Panel's bracket onto the wall.</li> </ul>
5B	<ul style="list-style-type: none"> <li>Connect all external cables to the correct terminal points. Refer to chapter 6.</li> </ul>
6B	<ul style="list-style-type: none"> <li>Place and centre the lower part of the panel onto the lower part of the bracket, then simply push the upper part of the panel towards the bracket until it snaps on.</li> </ul>

Step	C) Mounting all other panels (Repeater Panel BS-211, Fire Brigade Panel BU-210, Information Panel BV-210)
1C	<ul style="list-style-type: none"> <li>Set the correct address (1-9) by means of the Rotary switch located on the rear side of the panel. The arrow must point to the selected address (1-9).</li> </ul>
2C	<ul style="list-style-type: none"> <li>Mount the panel bracket onto the wall.</li> </ul>
3C	<ul style="list-style-type: none"> <li>Connect all external cables to the correct terminal points. Refer to chapter 7.</li> </ul>
4C	<ul style="list-style-type: none"> <li>Place and centre the lower part of the panel onto the lower part of the bracket, then simply push the upper part of the panel towards the bracket until it snaps on.</li> </ul>

**1A**

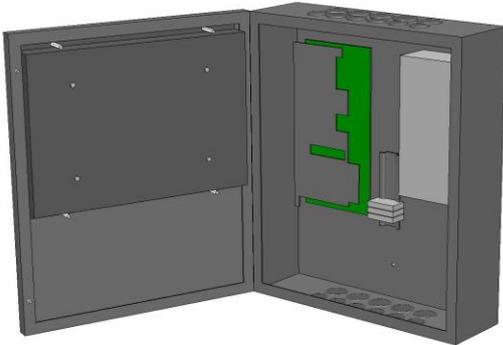


**2A**

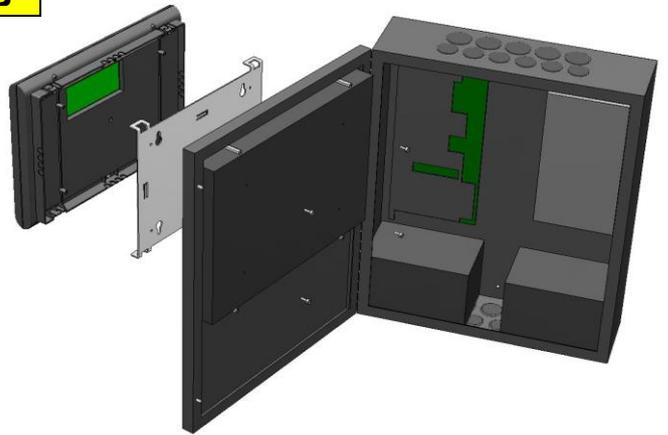


For adequate access to the inside of the panel when the door is opened, make sure that the distance between the panel's left side (front view) and an adjacent wall is approximately 30 cm.

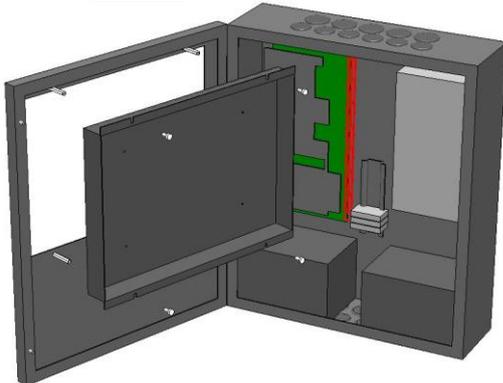
**1B**



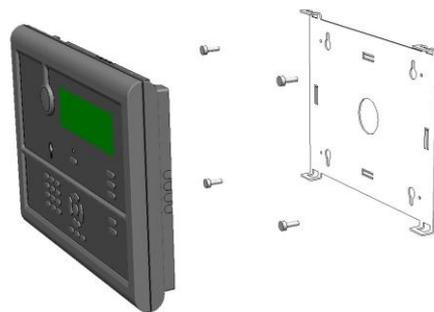
**2B**



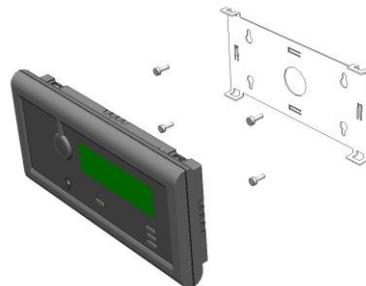
**3B**



**4B**



**4C**



## 6. Connecting the Cables

### 6.1 Connection Overview

Consult the drawings and terminal connections on the next pages and follow the procedure below.

NOTE: For specific information on the installation and cable connections for *maritime* installations, refer to chapter 8.

#### Fire Alarm Control Panel (BS-200, BS-200M)

1. Insert the rubber glands (delivered with the panel) into the suitable cable inlets at the top. This should be done regardless of whether the cables are to be fed through the cable inlets at the top or bottom. If the external cables are to be fed from the bottom, remove the knockouts from the cable inlets that are to be used. Note: If the cables are fed from the bottom, batteries cannot be placed in the cabinet.
2. Feed all the external cables into the cabinet through the suitable cable inlets.
3. Fasten the cable by strips to the rear of the panel.
4. Connect the detection loop cables to the correct terminal points.
5. Connect the panel bus cables to the correct terminal points (if several panels are interconnected, see 0).
6. Interconnect the two batteries (see drawing).
7. Connect the internal temperature sensor cable to the correct terminal points (see drawing), then fasten the sensor to the battery with a piece of tape.
8. For information on the connection of other peripheral units, refer to *Terminal Points*, chapter 7.



\*NOTE: In the fixed mains wiring to the panel a two-pole disconnect device must be provided to disconnect the equipment from the power supply when servicing is required. Normally, this switch is a two-pole automatic fuse located in the fuse terminal box at the premises. This fuse location must be marked "Fire Alarm System". The isolation of the mains wiring must be of either inflammability class V2 or the wiring has to be fixed to the cabinet separated from all other cables.

#### All other panels (Operator Panel BS-210, Repeater Panel BS-211, Fire Brigade Panel BU-210, Information Panel BV-210)

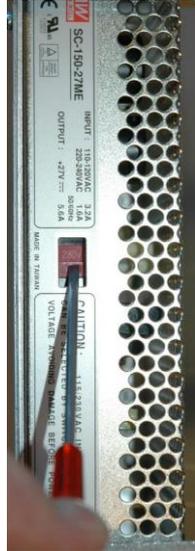
1. *If in-wall cabling is used*, feed the external cables through the hole of the bracket before mounting the panel (the cables should preferably stick out approximately 25cm from the surface of the wall).  
or;  
*if on-wall cabling is used*, remove the appropriate knockouts on the top, bottom, left or right hand side of the panel.
2. Before mounting the panel on the bracket, connect all external cables to the correct terminal points (the panel bus cable). Refer also to *Terminal Points*, chapter 7.

## 6.2 Voltage Selection 115/230VAC



**POWER OFF!**

- Make sure that the mains power is *not* connected.
- Use a screwdriver to slide the switch on the power supply to the correct position according to the appropriate voltage (115/230VAC).



## 6.3 Connection of Communication Cables inside the Cabinet (Fire Alarm Control Panel)



### CAUTION

Do not connect the 24V wire to the terminal points used for communication (A and B terminals). This will lead to malfunction of the communication circuits.

### 6.3.1 Connections (J7) for a standalone cabinet with integrated BS-210

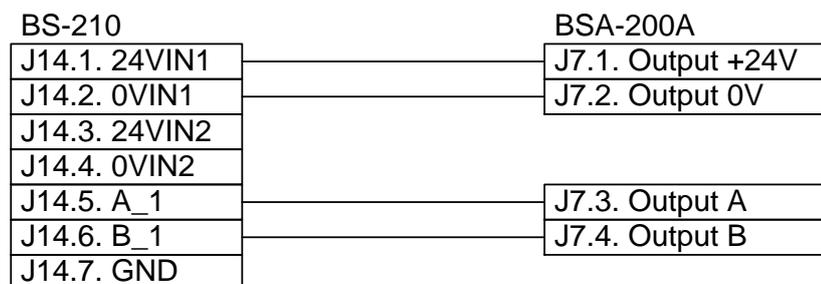
Delivered from the factory, the cables from the integrated operator panel (BS-210) in a standalone cabinet are connected to connector J7.

As the operator panel BS-210 is integrated in a standalone cabinet, redundancy is not required.

#### Note:

From the factory, the default configuration of the panel connection (Service Menu/System Settings/"Set Operator Panel connection") is set to "J7, Operator Panel" (connector J7), i.e. the configuration is by default prepared for a standalone cabinet with integrated BS-210.

#### Standalone cabinet, with integrated BS-210



### 6.3.2 Connections (J4) for a cabinet with external BS-210 and no external panel bus

If the Operator Panel BS-210 is to be placed outside a cabinet, and no external panel bus (with additional panels) is to be connected to the cabinet, the Auxiliary terminal connector J4 must be used.

**Note:**

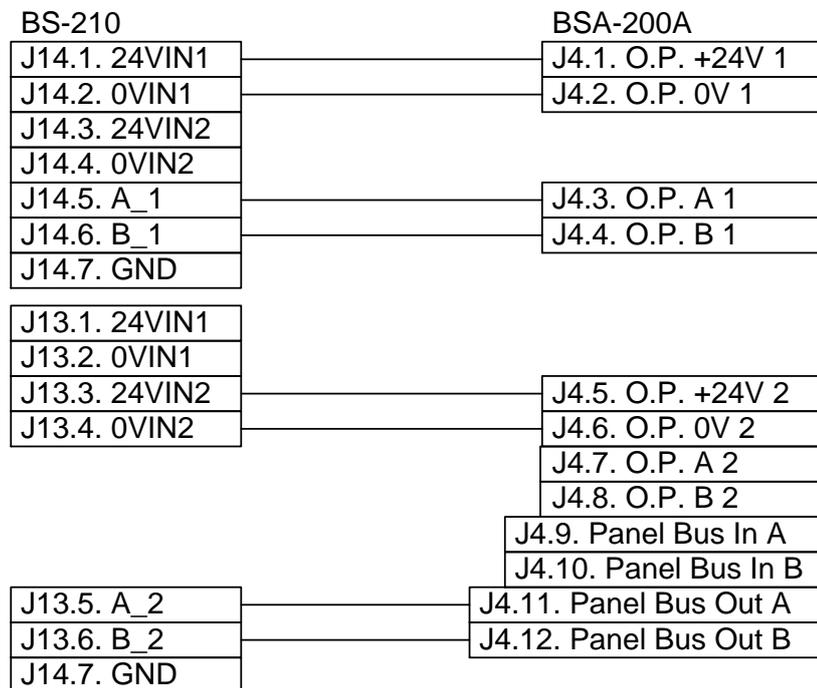
From the factory, the configuration is by default prepared for a standalone panel with integrated BS-210.

*If the Operator Panel BS-210 is to be placed outside the cabinet and no external panel bus is to be connected to the cabinet, the configuration of the panel has to be changed during commissioning in order to achieve redundancy and fault monitoring of the panel bus.*

**Configuration change:**

The configuration of the panel connection (Service Menu/System Settings/“Set Operator Panel connection”) must be set to “J4, Auxiliary terminal block” (connector J4) during commissioning/reconfiguration.

Cabinet with external BS-210, no external panel bus



### 6.3.3 Connections (J4) for a cabinet with integrated BS-210 and external panel bus

If the cabinet has an integrated operator panel BS-210 and an external panel bus (with additional panels) is to be connected to the cabinet, the Auxiliary terminal connector J4 must be used.

**Note:**

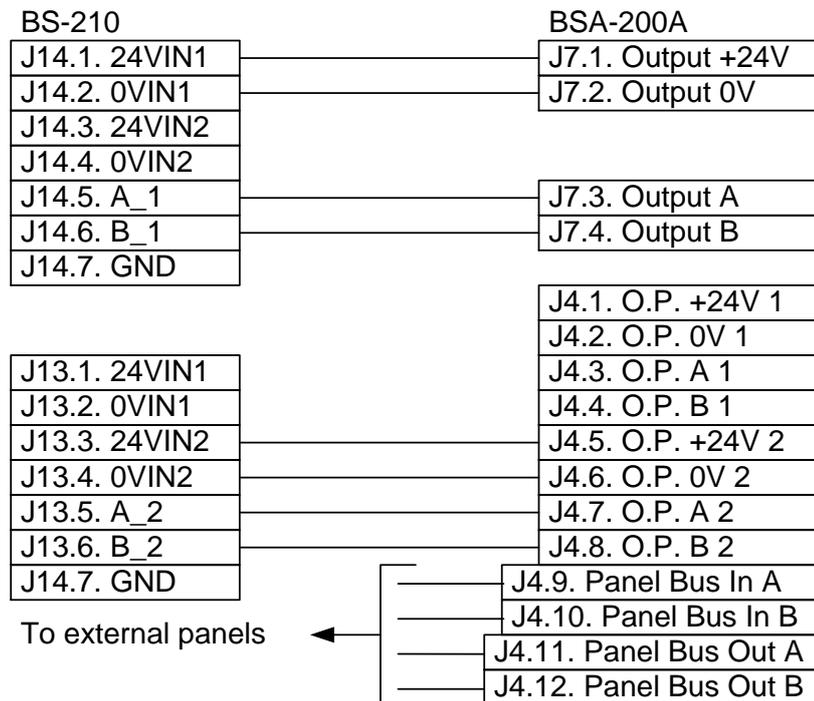
From the factory, the configuration is by default prepared for a standalone panel with integrated BS-210.

*If the cabinet has an integrated BS-210 and an external panel bus is to be connected to the cabinet, the configuration of the panel has to be changed during commissioning in order to achieve redundancy and fault monitoring of the panel bus.*

**Configuration change for panels on a panel bus:**

The configuration of the panel connection (Service Menu/System Settings/“Set Operator Panel connection”) must be set to “J4, Auxiliary terminal block” (connector J4) during commissioning/reconfiguration.

#### Cabinet with integrated BS-210, external panel bus



### 6.3.4 Connections (J4) for a cabinet with external BS-210 and external panel bus

If the Operator Panel BS-210 is to be placed outside a cabinet and an external panel bus (with additional panels) is to be connected to the cabinet, the Auxiliary terminal connector J4 must be used.

**Note:**

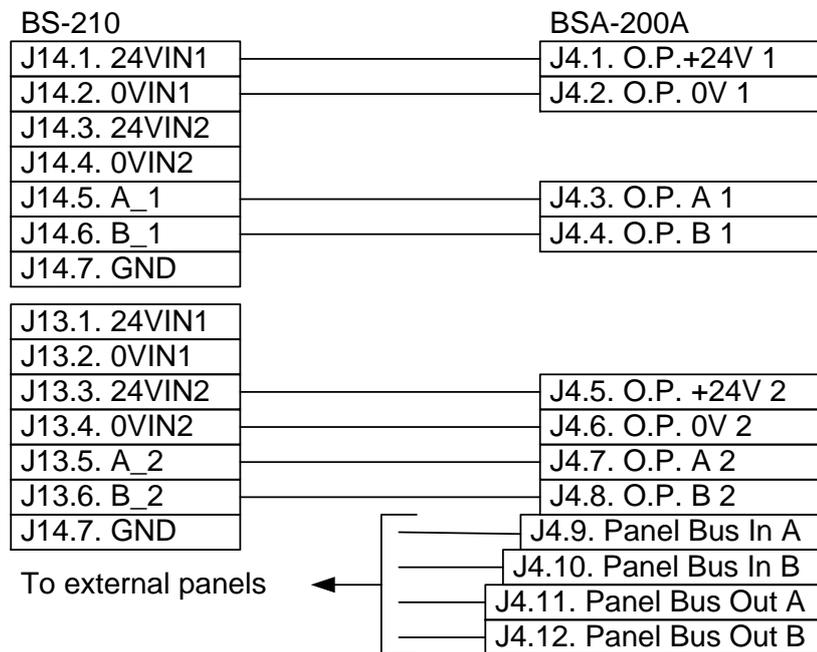
From the factory, the configuration is by default prepared for a standalone panel with integrated BS-210.

*If the Operator Panel BS-210 is to be placed outside the cabinet and an external panel bus is to be connected to the cabinet, the configuration of the panel has to be changed during commissioning in order to achieve redundancy and fault monitoring of the panel bus.*

**Configuration change for panels on a panel bus:**

The configuration of the panel connection (Service Menu/System Settings/“Set Operator Panel connection”) must be set to “J4, Auxiliary terminal block” (connector J4) during commissioning/reconfiguration.

Cabinet with external BS-210, external panel bus



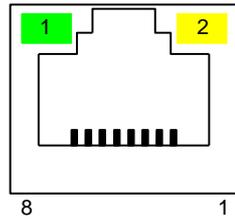
# 7. Terminal Connections

Verify that all cables are correctly and properly connected before connecting the mains cable and the internal battery cables (refer to *Startup*, chapter 9).

## 7.1 Main Terminal Block J1

	J1-	Description
Det.Loop2 in -	32	For connection of Max 127 detectors/loop units
Det.Loop2 in +	31	
Det.Loop2 out -	30	
Det.Loop2 out +	29	
Det.Loop1 in -	28	For connection of Max 127 detectors/loop units
Det.Loop1 in +	27	
Det.Loop1 out -	26	
Det.Loop1 out +	25	
Rel.Outp.2 NC	24	Default configured as Fault Warning Routing Equipment.(FWRE) Potential free changeover contact. Non-monitored. Max.30VDC/1A
Rel.Outp.2 NO	23	
Rel.Outp.2 C	22	
Rel.Outp.1 NC	21	Default configured as Fire Alarm Routing Equipment.(FARE) Potential free changeover contact. Non-monitored. Max. 30VDC/1A
Rel.Outp.1 NO	20	
Rel.Outp.1 C	19	
Aux1 +24V out	18	Supply voltage for loads connected to Open collector outputs 1 and 2. Max.1A
Open Collector Output 2	17	User configurable Open collector output. Non-monitored Switches to 0V at activation. Max.0,5A
Open Collector Output 1	16	User configurable Open collector output. Non-monitored Switches to 0V at activation. Max.0,5A
Mon.Outp.2 0V	15	Default configured as Fire Alarm Device
Mon.Outp.2 +24V	14	Output. Monitored for short and open circuit. 2kohm end resistor.Max 500mA
Mon.Outp.1 0V	13	Default configured as Fire Alarm Device
Mon.Outp.1 +24V	12	Output. Monitored for short and open circuit. 2kohm end resistor.Max 500mA
Mon.Inp.0V	11	0V reference for Monitored Inputs 1 & 2
Mon.Inp. 2	10	User configurable input. Monitored for open and short circuit.2k resistor to 0V. Activates at 910 ohm to 0V
Mon.Inp. 1	9	User configurable input. Monitored for open and short circuit.2k resistor to 0V. Activates at 910 ohm to 0V
0V out 2	8	Power to panel bus.
+24V out 2	7	Max 1A (Fuse F4)
0V out 1	6	Power to panel bus.
+24V out 1	5	Max 1A (Fuse F1) (includes output 18)
Charger 0V	4	For connection of internal charger
Charger +24V	3	
Battery -	2	For connection of standby battery
Battery +	1	Fuse F2, 5A

## 7.2 Ethernet RJ45 connector J2



J2-	Description
1	TX+, Transmit Data+
2	TX-, Transmit Data-
3	TX+, Transmit Data+
4	N.C.
5	N.C.
6	TX-, Transmit Data-
7	N.C.
8	N.C.

LED 1	Link/Activity LED
LED 2	If ON, 100MBit/s, if OFF, 10MBit/s

## 7.3 Power Supply Control and Battery Temperature Measurement J3

J3-	Description
1	Vcon 1
2	-V 2
3	PSF 3
4	Thermistor
5	Thermistor

## 7.4 Auxiliary Terminal Block J4

The auxiliary spring-loaded connection block is capable of cables up to 1mm<sup>2</sup> single or multi stranded cables. If multi/stranded cables are used, cable crimps should be used.

J4-	Description	
1	O.P. +24V 1	Connections to Operator Panel (Return/Input for redundancy)
2	O.P. 0V 1	
3	O.P. A 1	
4	O.P. B 1	
5	O.P. +24V 2	
6	O.P. 0V 2	
7	<b>O.P. A 2</b>	Connections to panel bus. Connects from unit to unit. (Return/Input for redundancy)
8	O.P. B 2	
9	Panel Bus in A	
10	Panel Bus in B	
11	Panel Bus Out A	
12	Panel Bus Out B	

## 7.5 Add-on Network Interface, J5

J5-	Description
1	External network interface reset
2	To RX on network card, RS232 level
3	To TX on network card, RS232 level
4	Vbatt
5	Protective 0V
6	+24.0V
7	Reset to external loopers
8	+5.0V
9	To TX on external loopers, TTL level RS232
10	Connector key
11	To RX on external loopers, TTL level RS232
12	0V
13	Protective 0V
14	0V

## 7.6 Auxiliary Terminal Block J6

J6-	Description	
1	RS-232 TX	
2	RS-232 RX	
3	RS-232/422/485 0V	
4	RS-422/485 A	
5	RS-422/485 B	
6	RS-422/485 Z	
7	RS-422/485 X	
8	Non-monitored inp.1 +	User configurable input Activates on closing contacts between 24VDC and 0V. Observe polarity
9	Non-monitored inp.1 -	
10	Non-monitored inp.2 +	User configurable input Activates at application of 24VDC. Observe polarity
11	Non-monitored inp.2 -	

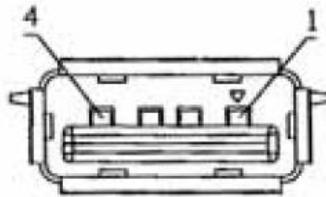
## 7.7 Operator Panel, Single, J7

J7-	Description
1	Operator Panel Output +24V
2	Operator Panel Output 0V
3	Operator Panel Output A
4	Operator Panel Output B

## 7.8 Add-on Looper Interface J8

J8-	Description
1	Not connected
2	Not connected
3	Not connected
4	Not connected
5	Protective 0V
6	+24.0V
7	Reset to external loopers
8	+5.0V
9	To TX on external loopers, TTL level RS232
10	Connector key
11	To RX on external loopers, TTL level RS232
12	0V
13	Protective 0V
14	0V

## 7.9 USB Host J10



USB host connector, mates with USB type A connector.

J10-	Description
1	+5V
2	Data 1 +
3	Data 1 -
4	0V

## 7.10 User Configurable Inputs

User configurable inputs can be used for

- Day/Night input
- User Configurable input
- Morse input
- Mute FAD input
- Reset in
- Silence in
- FARE feedback
- Activate all alarms
- Monitored Fault Warning Routing Equipment, FWRE

## 7.11 User Configurable Outputs

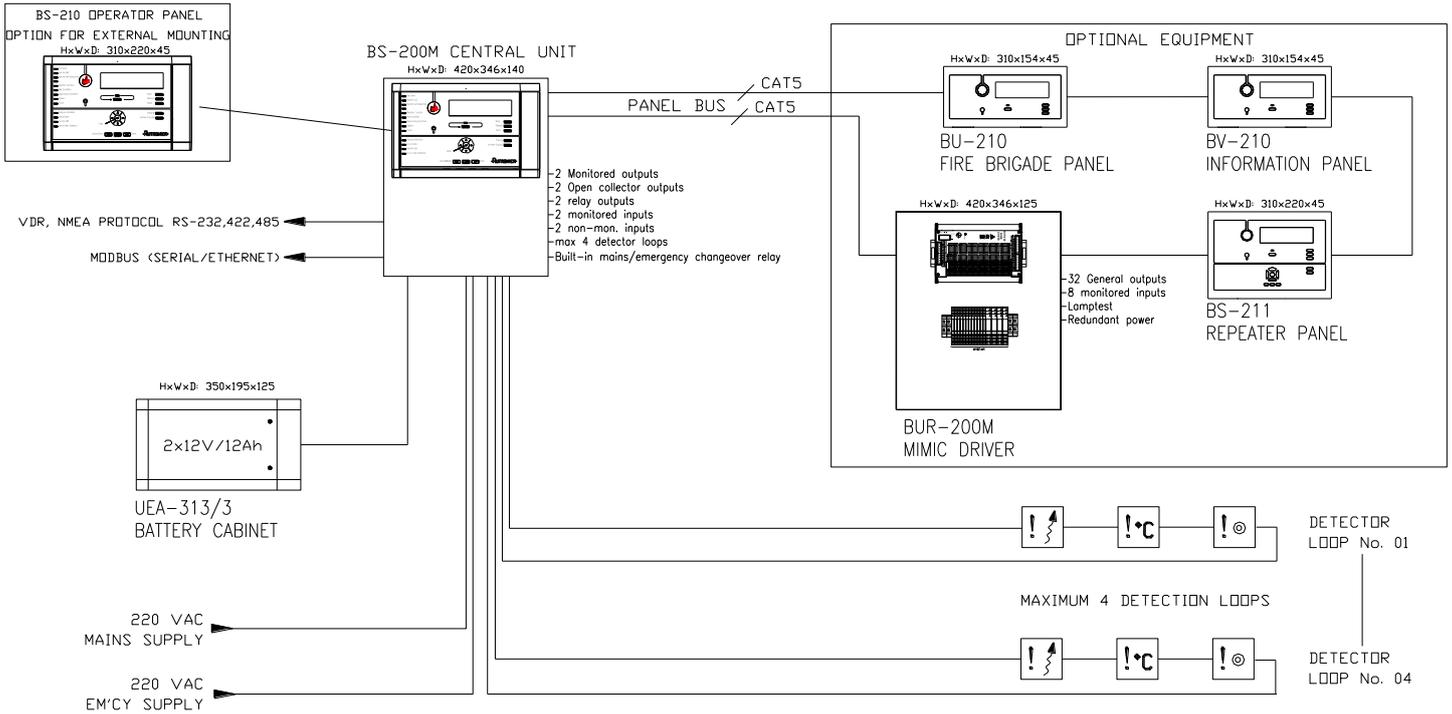
User configurable outputs can be used for

- User Configured output (or General output)
- Reset Out
- Silence Out
- Disable Out
- Silent Alarm Out
- Small Alarm Out
- Fire Alarm Device, FAD
- Fire Alarm Routing Equipment, FARE
- Fault Warning Routing Equipment, FWRE (Relay Output/non-monitored)

# 8. Maritime Installations

## 8.1 Typical Maritime Installation – Overview

The overview below shows an example of a typical system layout for a maritime installation.

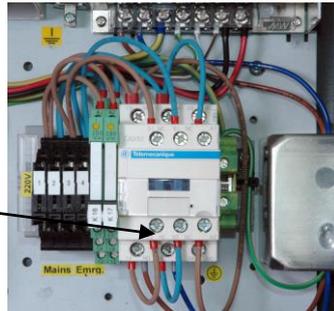


## 8.2 Fire Alarm Control Panel BS-200M

The BS-200M is specifically designed for use in maritime applications. The panel is provided with a filter.

### 8.2.1 External Connections

116-71211549 (230VAC) and  
116-71211550 (110VAC)



**X1**

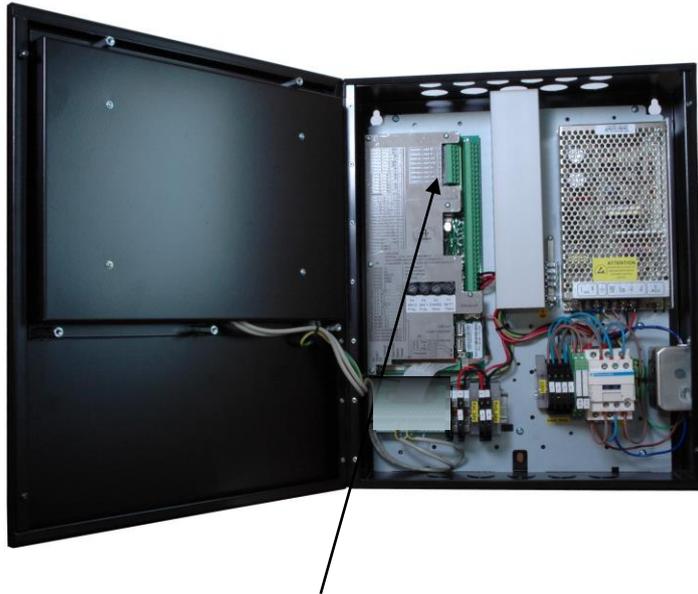
X1	Description
1	Mains 110/230 VAC
2	Mains 110/230 VAC
3	Emergency 110/230 VAC
4	Emergency 110/230 VAC
5	Earth
K15	Change-over Relay
K16	Mains Fault
K17	Emergency Fault



**X2**

X2	Description
1	External 24V +
2	External 24V -
3	Battery 24V +
4	Battery 24V -

## 8.2.2 Detection Loop Connections – Extended Terminal Block



1	Detection Loop 3 out +		For connection of Max 127 detectors/ loop units	
2	Detection Loop 3 out -			
3	Detection Loop 3 in +			
4	Detection Loop 3 in -			
5	Detection Loop 4 out +		For connection of Max 127 detectors/ loop units	
6	Detection Loop 4 out -			
7	Detection Loop 4 in +			
8	Detection Loop 4 in -			

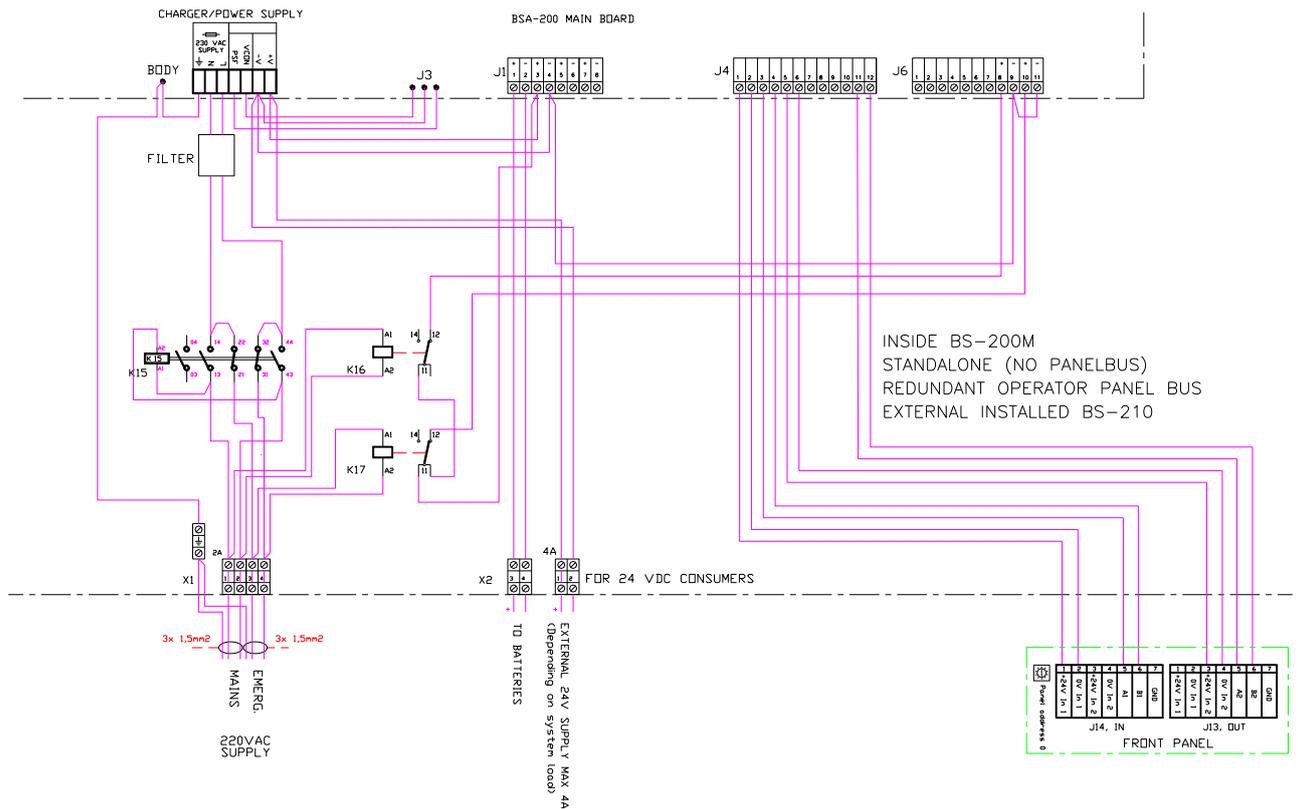
### 8.2.3 Internal Wiring

The drawings in this chapter shows the internal wiring of the Fire Alarm Control Panel BS-200M (cabinet) for the following alternatives:

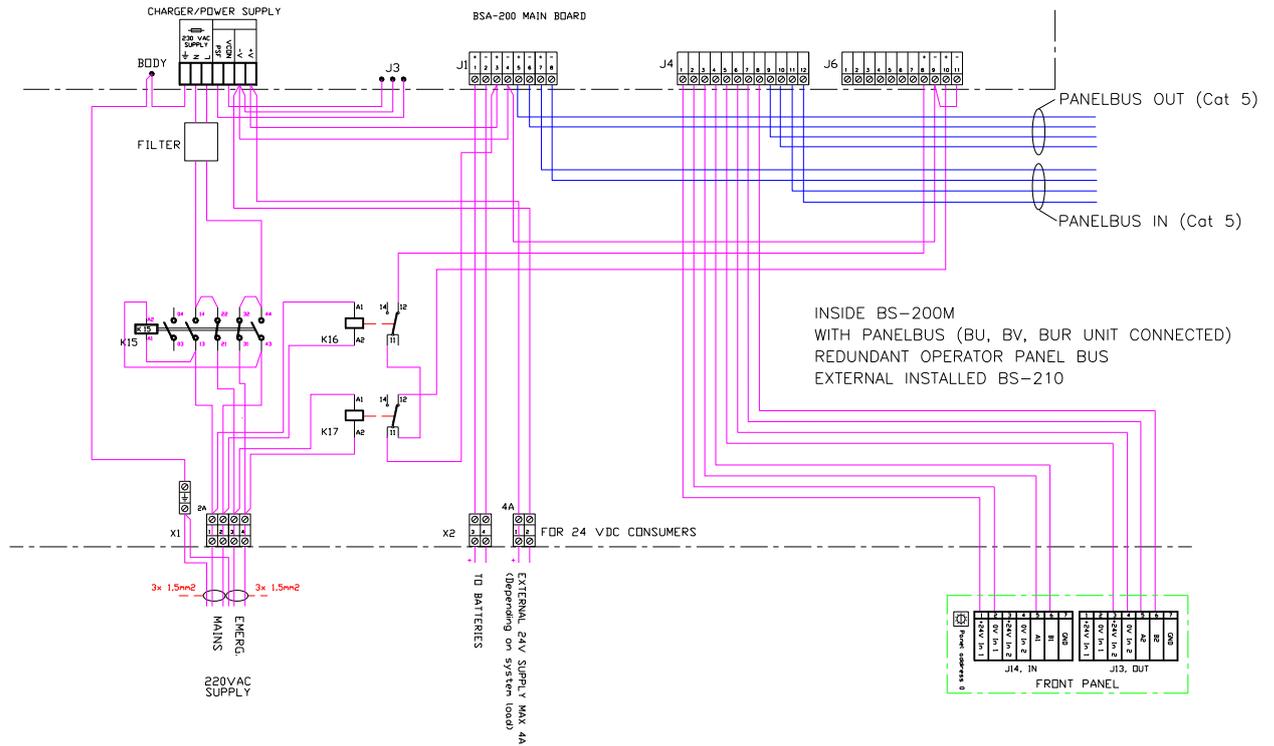
- Cabinet with external BS-210 and no external panel bus
- Cabinet with external BS-210 and an external panel bus
- Cabinet with integrated BS-210 with or without external panel bus – with mains changeover relay
- Cabinet with integrated BS-210 with or without external panel bus - without mains changeover relay

The following description applies to all alternatives:  
 K16 and K17 are connected to non-monitored input 1 and 2 on X3 for mains/energy fault indication. Inputs have to be configured to show the correct fault text on the panel. If the power fault indication is needed on external systems, 2 dedicated outputs can be configured to be activated by non-monitored input 1 and 2 for external power fault indication.

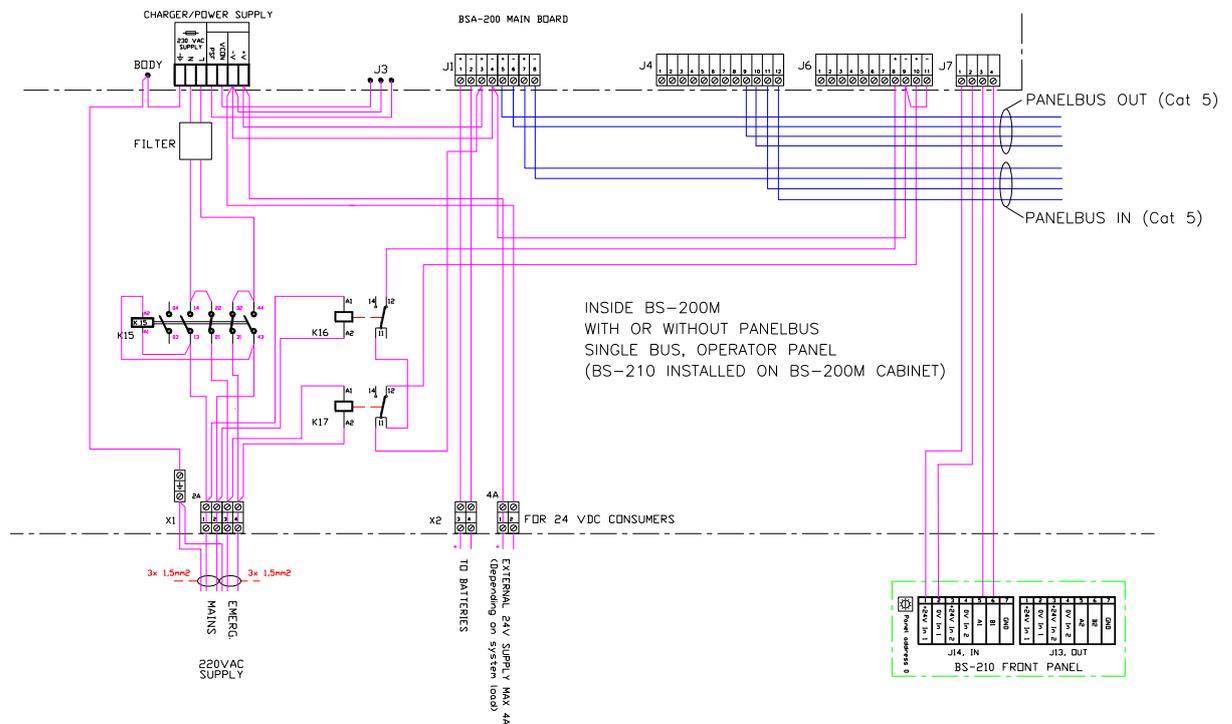
#### 8.2.3.1 Cabinet with external BS-210 and no external panel bus



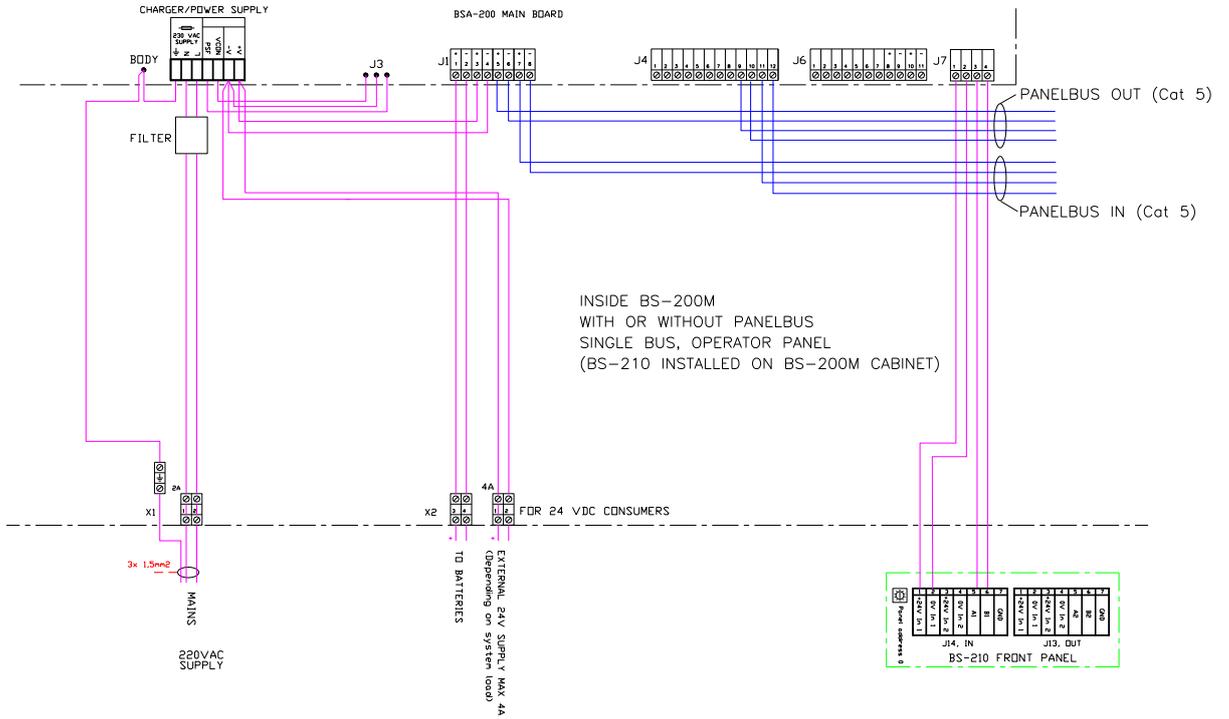
### 8.2.3.2 Cabinet with external BS-210 and external panel bus



### 8.2.3.3 Cabinet with integrated BS-210 with/without external panel bus – with mains changeover relay



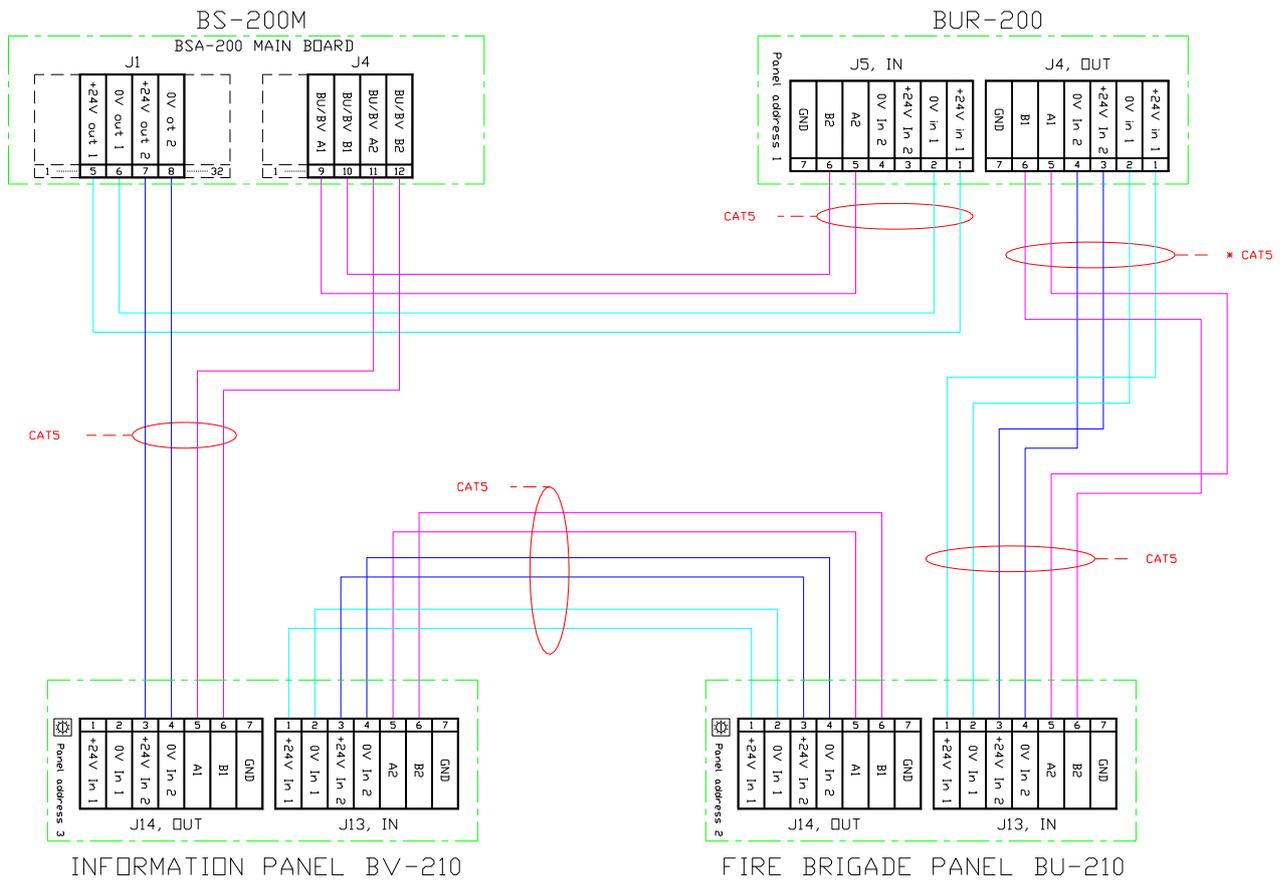
### 8.2.3.4 Cabinet with integrated BS-210 with/without external panel bus – without mains changeover relay



## 8.2.4 Panel Bus Connection

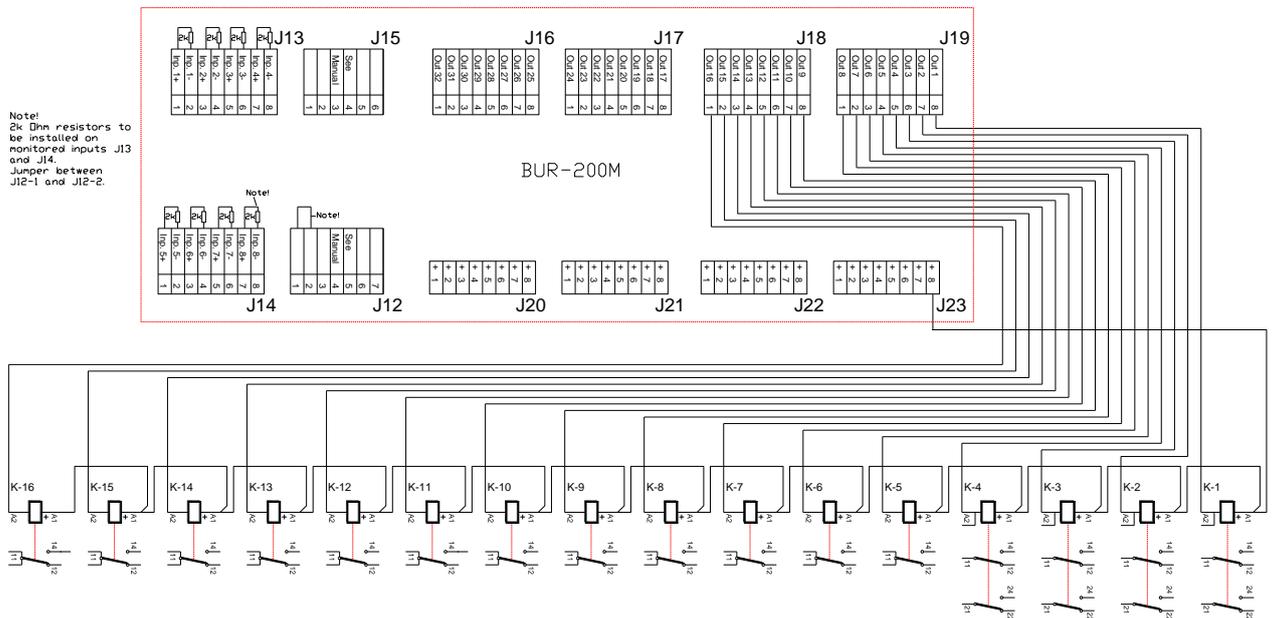
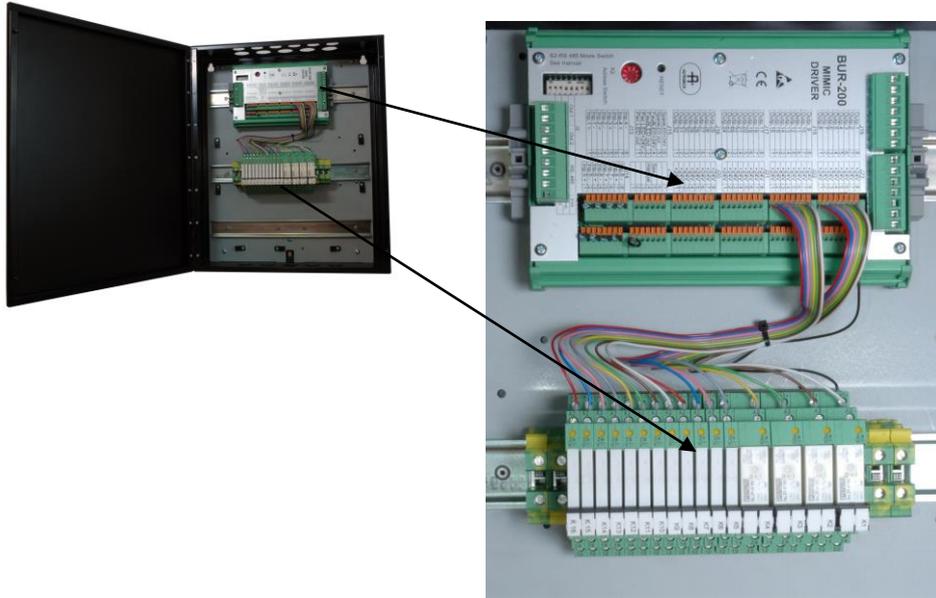
The drawing below shows an example of a panel bus interconnecting a Fire Alarm Control Panel BS-200M, a Repeater Panel BS-211, an Information Panel BV-210 and a BUR-200 Mimic Driver.

Note that connections depend on the number of panels on the Panel Bus.



## 8.3 Mimic Cabinet BUR-200

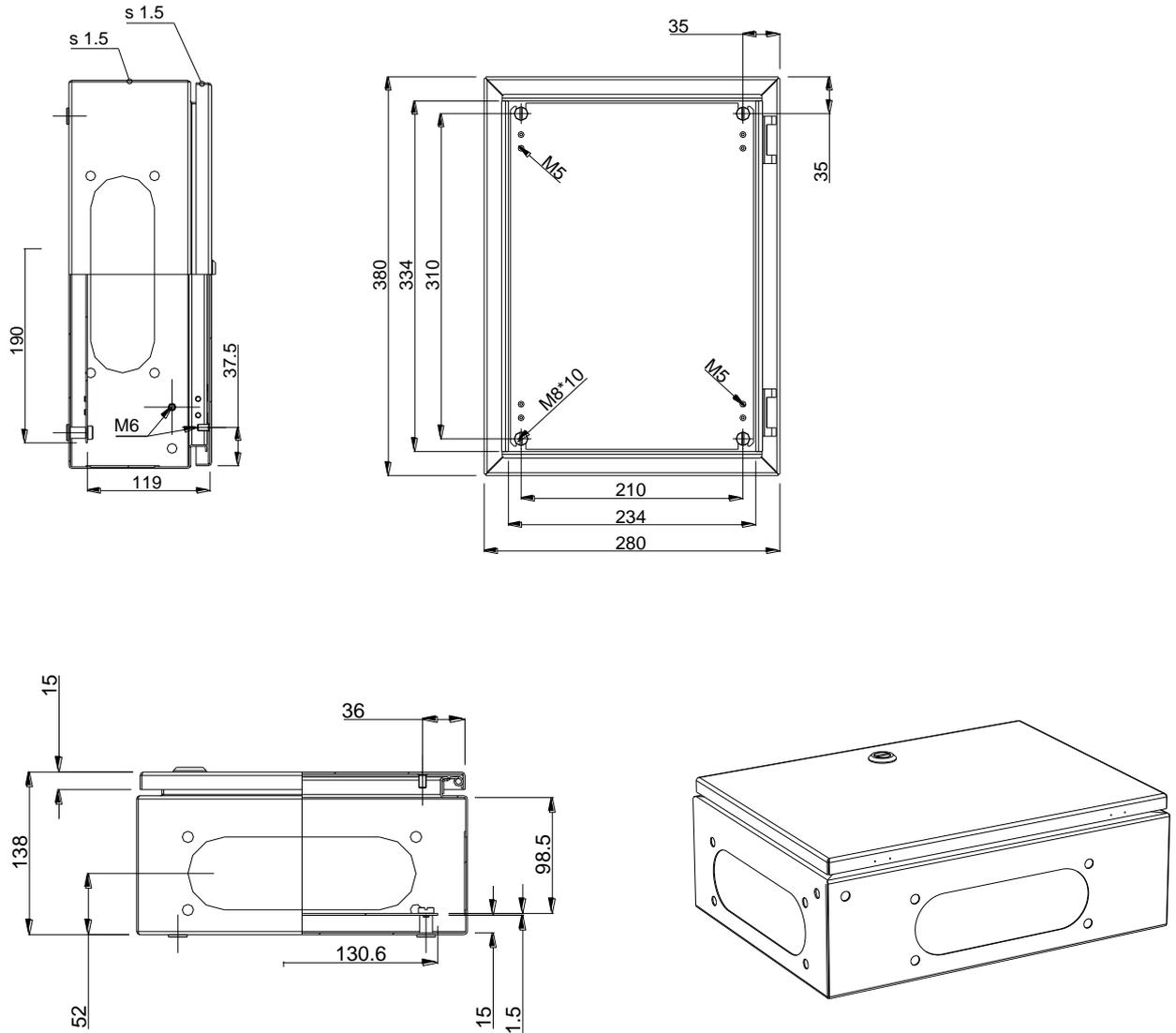
The Mimic Cabinet BUR-200 is specifically designed for use in maritime applications. It includes 1 Mimic Driver BUR-200 and 16 programmable relays.



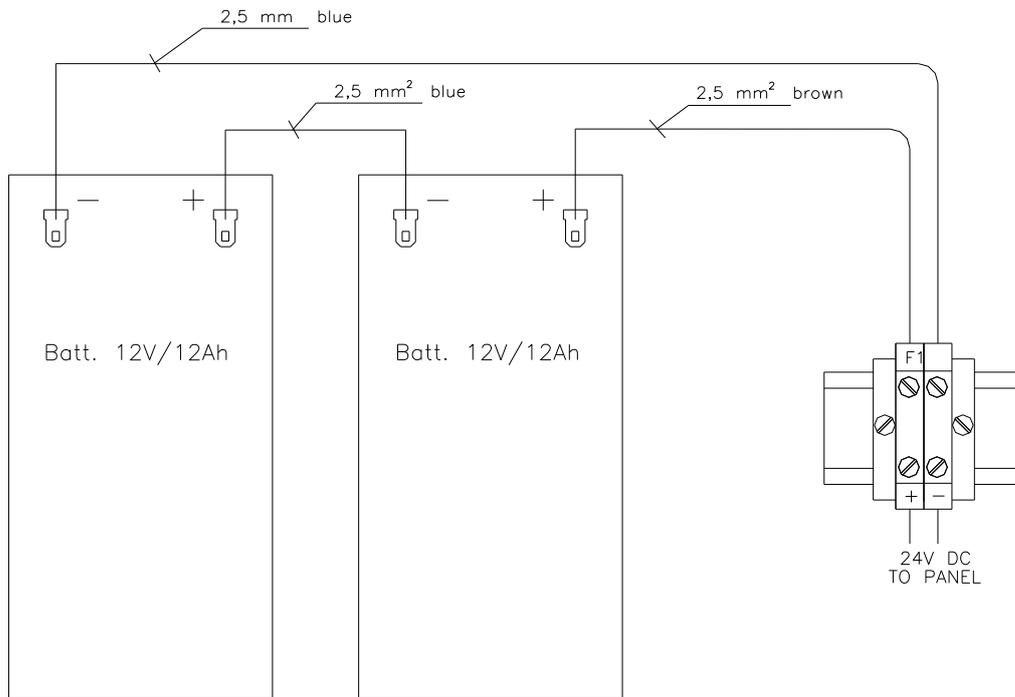
## 8.4 Battery Cabinet

Part number	Description
116-234403	Battery Cab. 1x24 DC 12Ah CS

### 8.4.1 Dimensions



### 8.4.2 Internal Connections in Battery Cabinet



# 9. Startup

## 9.1 Power Up

Autoprime is provided to the user in a pre-configured state. In this state the panel is set to recognize detectors and other loop units connected to the detection loops and the availability of routing equipment, etc. As such, the system is fully functional and ready-to-use simply by turning ON the power and following the simple steps below.

When the necessary cabling for the Fire Alarm Control Panel and all other panels that are to be interconnected is completed, you are ready to power up the Fire Alarm Control Panel.

- To turn ON the Fire Alarm Control Panel, connect the mains cable, then connect the internal battery cables to the correct terminal points. Refer to the *Terminal Points*, chapter 7.

The green Power-indicator lights up with a steady green light, and an initialization starts. For information on buttons, refer to page 36.

Step	Display Indication / What happens?	Actions to be taken
1	<p>The panel type, firmware version and address are shown in the display.</p> <p>A pulsing cursor starts to move from left to right on the bottom line of the display, indicating the progress of the initialization procedure.</p> <p>The length of the initialization period depends on the number and types of loop units, and whether there are branches on the loops.</p> <p>After a short time, the system will prompt you to select the appropriate language.</p>	<ul style="list-style-type: none"> <li>• To select the appropriate language, press the Enter button, then use the left/right arrow buttons.</li> <li>• To accept the selected language, press the Enter button twice.</li> </ul> 
2	<p>The system will then prompt you to enter a password.</p>	<ul style="list-style-type: none"> <li>• Press Enter, use the alphanumeric keypad to type the password and then type it once more to confirm the password.</li> </ul>
3	<p>The system will prompt you to set the date and time.</p>	<ul style="list-style-type: none"> <li>• Press Enter, use the alphanumeric keypad to set the time, press the Enter button, then set the date.</li> <li>• To accept, press the Enter button twice.</li> </ul>
4	<p>When the initialization procedure is completed, the panel will recognize detectors and other loop units and the system topology is shown in the display. A functional verification of the panel is run to assure the panel itself is fully functional.</p>	<ul style="list-style-type: none"> <li>• Verify that the topology is correct according to the actual installation.</li> </ul>

Step	Actions to be taken
5	<ul style="list-style-type: none"> <li>• Turn the key clockwise.</li> <li>• To enter Service Mode, press and hold down the Enter button for a few seconds.</li> <li>• Use the Arrow down button to select Service, then press Enter.</li> <li>• Select System Settings (the uppermost menu selection which is highlighted), then press Enter.</li> <li>• Select <b>Save Configuration</b> (the uppermost menu selection which is highlighted), then press Enter twice.</li> <li>• Type the Operator Name, then press Enter.</li> <li>• Type the Site Configuration Version, then press Enter.</li> <li>• Type a Description, then press Enter.</li> <li>• Press Enter once more to confirm.</li> <li>•</li> <li>• Use the Arrow down button to select <b>Restart System</b>.</li> <li>• Use the left Arrow button to select Accept, then press Enter.</li> <li>• The message "System is now shutting down..." will appear, and the system will reboot automatically.</li> </ul> <p>The system topology is shown in the display. Press the Cancel/Back button to reveal the idle display.</p>
6	<p>Before leaving the system unattended, all faults should be corrected. Any fault preventing the system from detecting or reporting a fire must be corrected.</p>

The system now functions with the default configuration. Site-specific configuration can now be carried out.

## 9.2 Testing

To ensure that the system works properly during normal operation after commissioning, the whole system (control panel, detectors, control functions, activation groups, activation of inputs/outputs) should be verified.

## 9.3 Safety Measures during Commissioning and Maintenance

### NOTE

To avoid unmotivated activation of release outputs on connected safety-critical systems, it is important that service personnel physically disconnects or disables (in the Service Menu) the safety-critical system from the fire detection system during commissioning and maintenance.

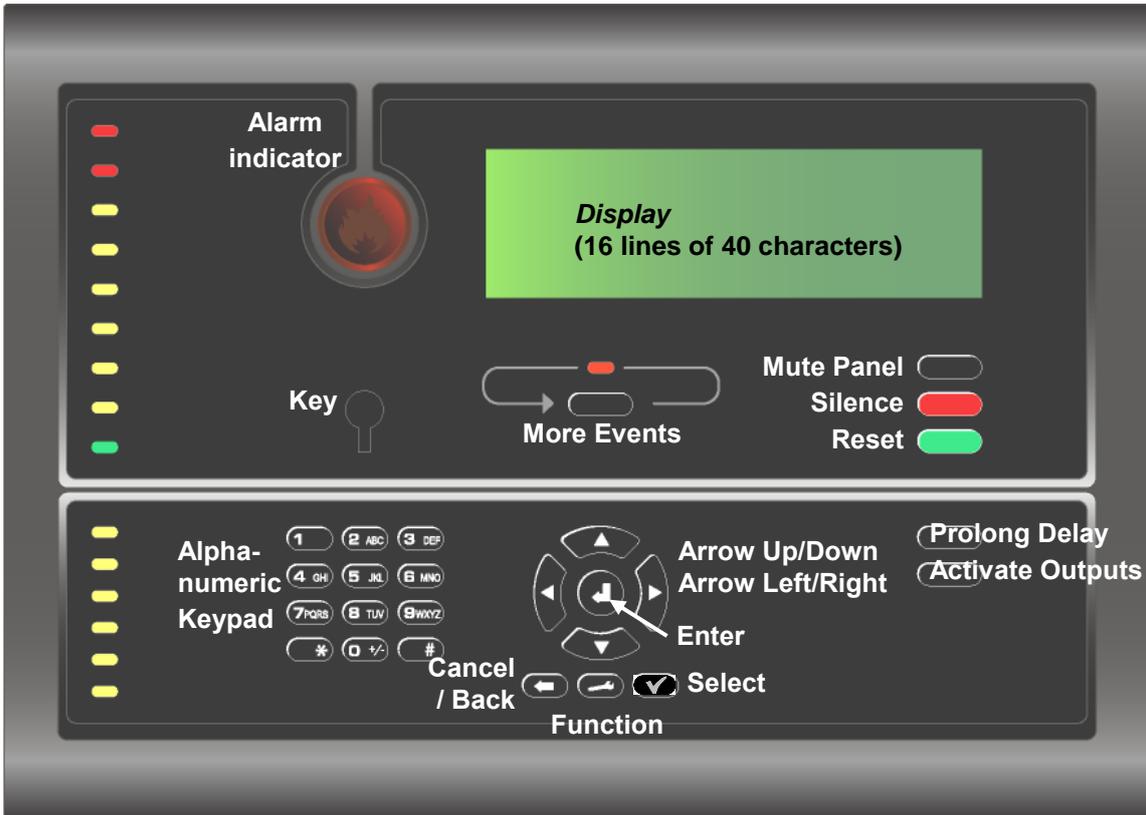
# 10. Shortform User Guide

During normal operation, all operating buttons, indicators and corresponding texts are not visible, except for the Power indicator that always has a steady green light when the power is ON and the Enter-button that has a backlight.

- To operate the panel, turn the key clockwise.

The illustration below shows the display, buttons and indicators.

## Buttons



## Indicators

## In the Event of a **Fire Alarm**

One or several fire detectors or manual call points in one or several detection zones are signalling a *Fire Alarm*.

Step	Actions to be taken
1	Follow all precautions described in the local fire instructions, step by step.
2	To silence the internal buzzer, press the Mute Panel button 
3	Scroll with the arrow down (/up) button to observe the point(s) in Fire Alarm state.
4	To view detailed information for a selected point, press 
5	Investigate the scene(s) and carry out the necessary actions.
6	To silence all alarms, press the Silence Alarms button 
7	Press the Reset button 

## In the Event of a **Pre Alarm**

A fire detector in one of the detection zones has entered the Pre Alarm state.

Step	Actions to be taken
1	Follow all precautions described in the local fire instructions, step by step.
2	To silence the internal buzzer, press the Mute Panel button 
3	Scroll with the arrow down (/up) button to observe the point(s) in Pre Alarm state.
4	To view detailed information for a selected point, press 
5	Investigate the scene(s) and carry out the necessary actions.
6	Press the Reset button 

## In the Event of Faults

Fault indicator: Pulsing light when unaccepted fault warnings exist. The text display indicates the nature of the fault. The internal buzzer is activated.

Step	Actions to be taken
1	Notify service personnel.
2	To silence the internal buzzer, press the Mute button.
3	Scroll with the arrow down (/up) button to observe the fault.
4	To view detailed information for a selected fault, press the Enter-button.
5	Investigate the scene(s) and carry out the necessary actions, i.e. repair the faults.
6	Press the Function-button. If there are several faults, scroll using the arrow buttons.
7	To acknowledge the selected fault, press the Enter-button twice. To acknowledge all faults (if several), scroll downwards to "Acknowledge All Faults", then press the Enter-button.

# 11. Appendix

## 11.1 System Capacity

Maximum number of;	
Detection Loops per fire alarm control panel	2
Loop units per detection loop	127
Loop units per branch on a detection loop	32
Loop sounders per detection loop	40
Fire Brigade/Information/Repeater panels/Mimic Drivers per fire alarm control panel	8
Serial ports	1
Ethernet ports	1
USB Host ports	1
Languages supported	15

## 11.2 Communication Ports

- A serial bus communication is used for the communication between the Autoprime Fire Alarm Control Panel, Fire Brigade panels and Information panels.
- The system offers 1 serial port for communication with third-party equipment via RS-232, RS-422 or RS-485. The baud rate is selectable.

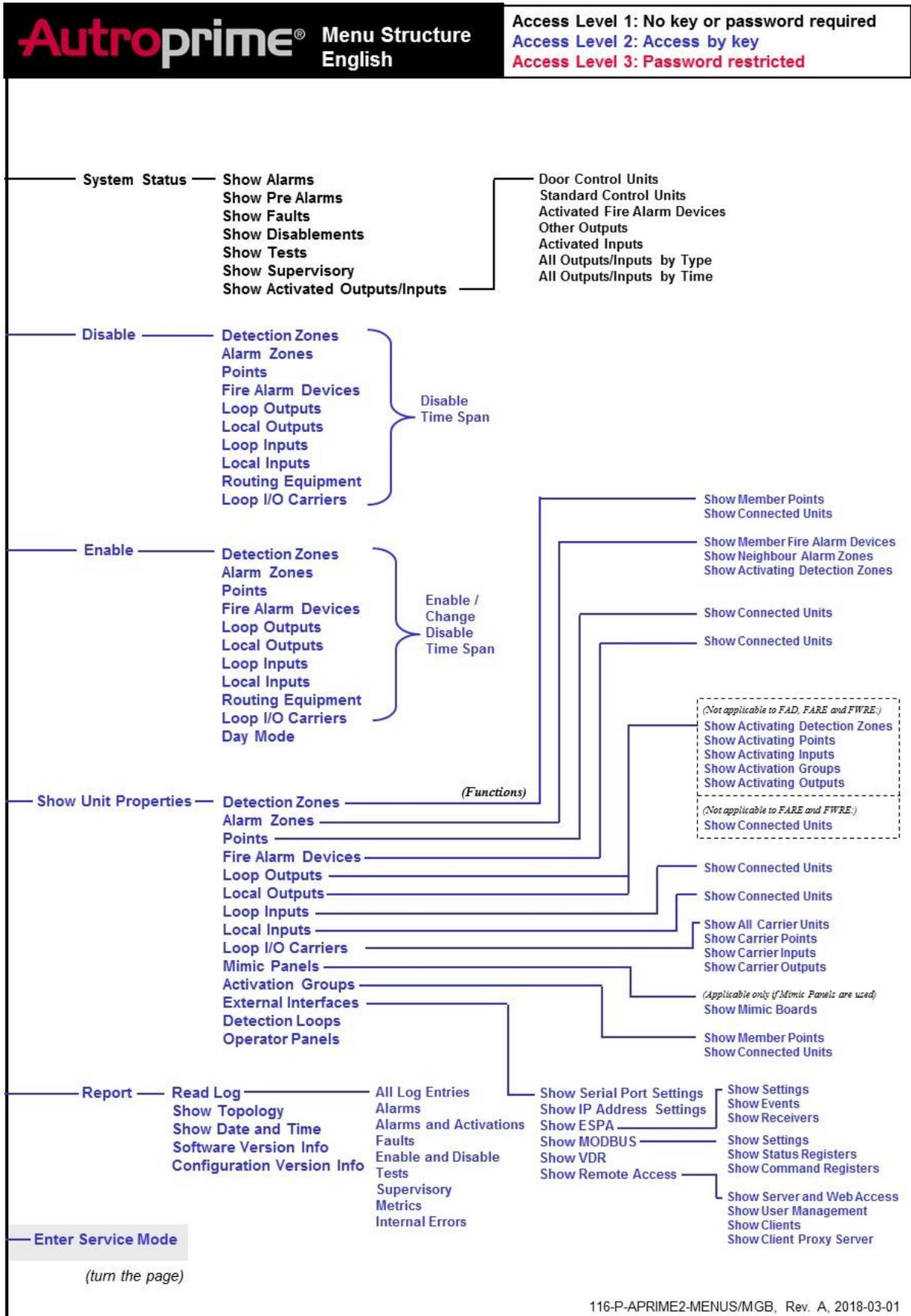
## 11.3 Menu Structure

The entire menu structure can be found on the next pages.

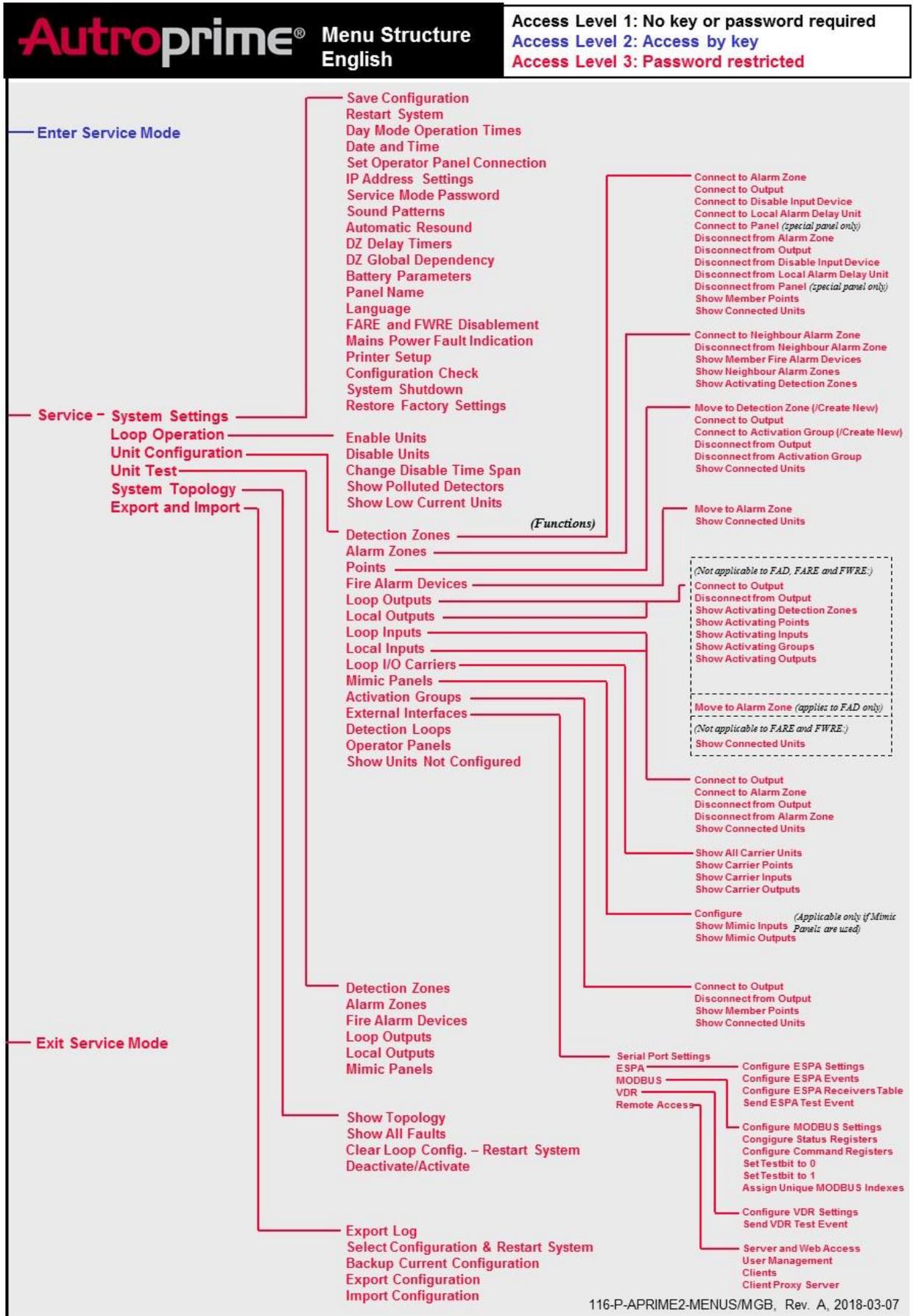
- To enter Menu Mode, press and hold down (for a few seconds) the Enter button.

Note that all user interface controls are classified as belonging to one of the three different access levels described below:

Access Level	Access	Description
1	No key or password required.	Accessible by members of the general public. All mandatory indications are visible at access level 1 without prior manual intervention. The normal operation mode is the default setting for the panel.
2	Access by key. 	Accessible by persons having a specified responsibility for safety.
3	Password restricted.	Accessible by persons trained and authorized to do reconfiguration of site specific data and maintenance according to the manufacturer's published instruction.



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Text foils for:	Indicators	Buttons
Operator Panel and Repeater Panel	E-2717/XX-1	E-2717/XX-2
Fire Brigade Panel	E-2721/XX-1	E-2721/XX-2
Information Panel	E-2735/XX-1	E-2735/XX-2
"Larmlagringspanel"	E-2736/XX-1	E-2736/XX-2



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