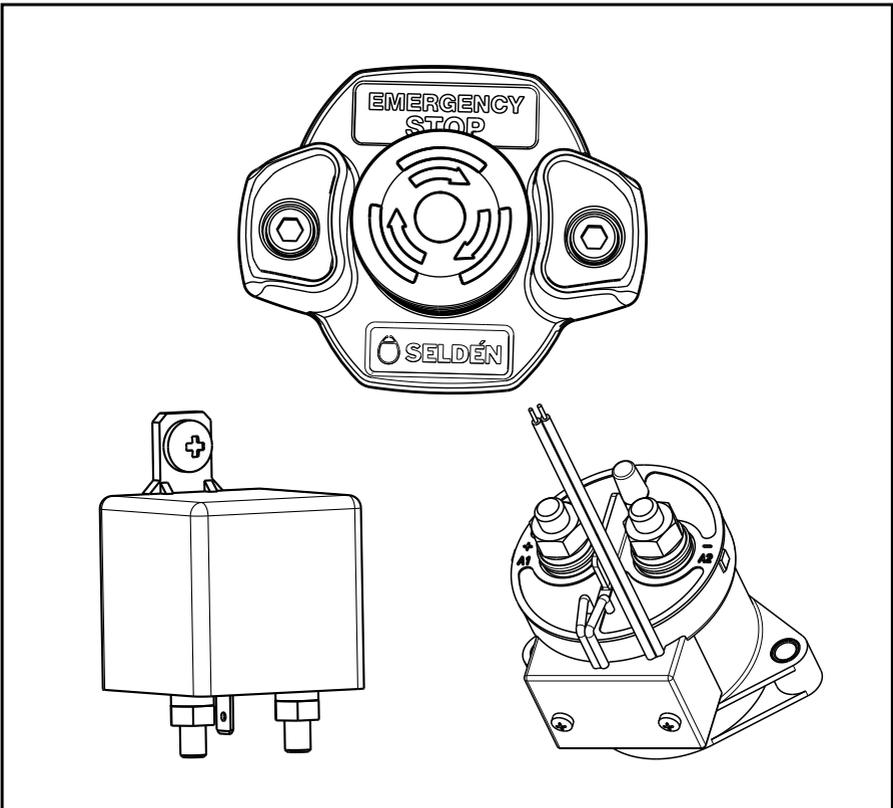


# SEL-Bus Emergency Stop & Relay

## Manual for installation





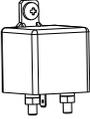
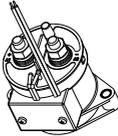
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# 1. Introduction

This manual covers the installation of the SEL-Bus emergency stop button and relay as shown in the table below.

Description	Part Number	Illustration
Emergency stop button	540-648	
Protective guard for emergency stop button	540-649-01	
Relay 12V 100A	532-498	
Relay 24V 100A	532-499	
Relay 12/24V 250A	532-599	

Please read the entire manual before installation/usage and keep the manual available for future reference. The latest version of this manual is available at [www.seldenmast.com](http://www.seldenmast.com).

## Related installation manuals and user guides:

597-283 SEL-Bus order guide

597-275 Power supply and SEL-Bus system

## Safety Precautions

Carefully pay attention to, and follow, the instructions with the following symbols:

### ATTENTION

This symbol indicates technical advice or a critical moment during the installation.

### WARNING

This symbol indicates a potentially hazardous situation. If not avoided, this could result in serious personal injury or damage to property.

If there are any questions, please consult an authorized Seldén dealer. All dealers are listed at [www.seldenmast.com](http://www.seldenmast.com) and divided into categories describing their competence. For the emergency stop button and relay we recommend dealers in the category Advanced technical installations.

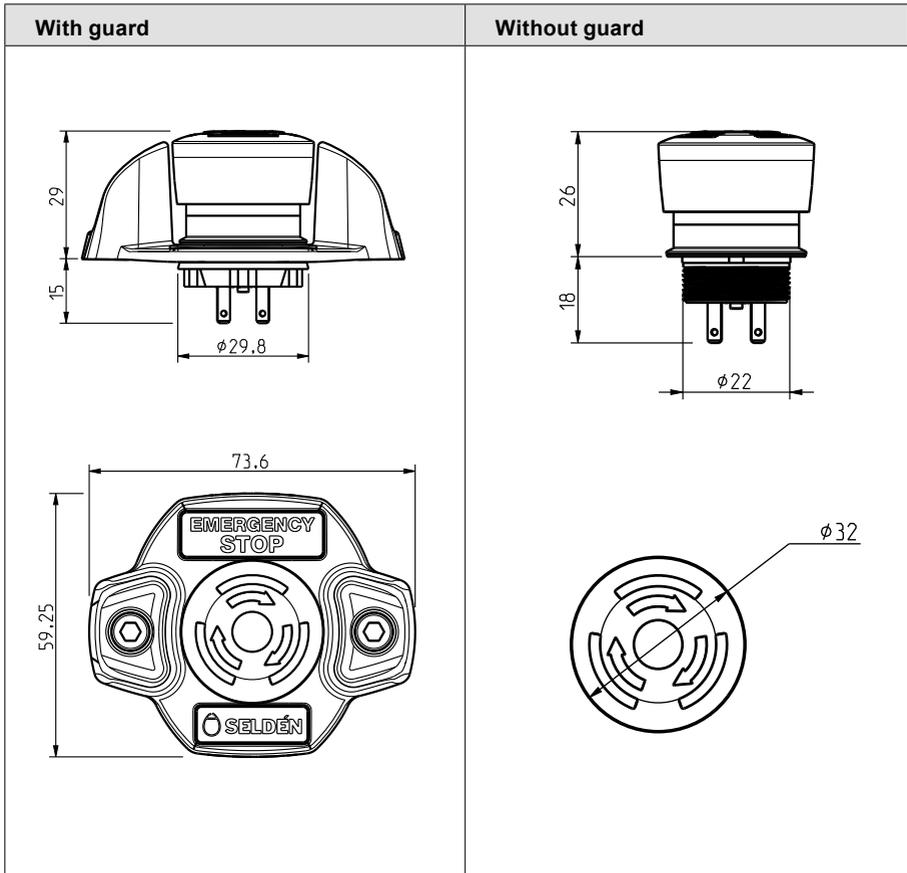
# 2 Emergency stop button

This section describes the emergency stop button, its dimensions, installation procedure and electrical connections.

Seldén recommends installing the emergency stop button with its protective guard to prevent unintentional activation of the emergency stop.

## 2.1 Dimensions

The outer dimensions of the emergency stop button with and without its protective guard.



## 2.2 Instalation

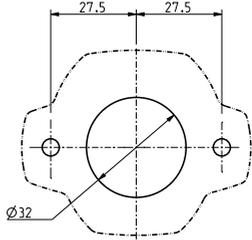
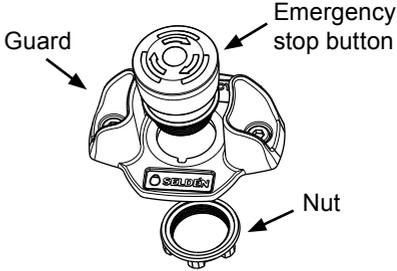


The emergency stop button should be mounted for easy access when using SEL-Bus controlled devices.

The tables below show the installation procedure for installing the emergency stop button, both with and without the protective guard. The installation procedure in this section does not include the electrical installation, which is described in section 4.

Read the entire installation description and section 4 about the electrical installation before any work is started.

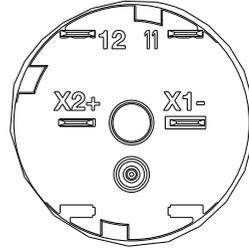
### Installation with protective guard:

<p><b>1.</b></p> <p>Select suitable fasteners for the intended installation.</p> <p>Any fastener with a head size smaller than <math>\varnothing 9.5 \times 4 \text{mm}</math> and a thread smaller than <math>\varnothing 5 \text{mm}</math> will fit.</p> <p>Examples are MLC6S M5 &amp; MRT M5.</p>	
<p><b>2.</b></p> <p>Drill the mounting holes in the boat.</p> <p> Make sure the holes are the correct size for the selected fasteners.</p>	
<p><b>3.</b></p> <p>Attach the emergency stop button to the guard.</p>	

**4.**

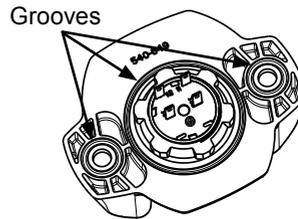
Connect the required cables to the terminals on the emergency stop button.

The connectors are described in section 2.3 and wiring diagrams are found in section 4.



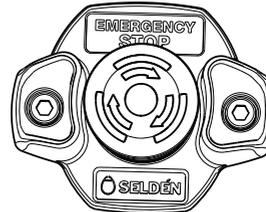
**5.**

Apply sealant in the grooves at the bottom of the guard.



**6.**

Fasten the emergency stop button and guard to the boat.

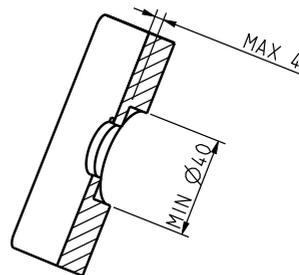


### Installation without protective guard:

**1.**

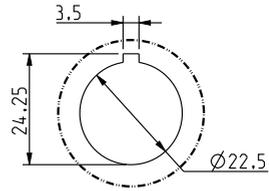
Check the thickness of the mounting surface. The maximum thickness is 4mm.

If the mounting surface is thicker than 4mm, a 40mm countersink needs to be created on the back side.



**2.**

Drill the mounting hole in the boat.

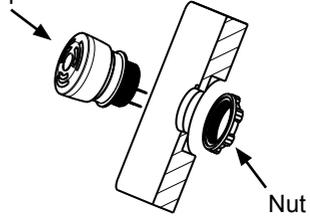


**3.**

Install the emergency stop button using the nut.

- ! The emergency stop button has a seal, but on an uneven mounting surface extra sealant may be required.

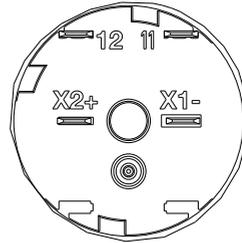
Emergency stop button



**4.**

Connect the required cables to the terminals on the emergency stop button.

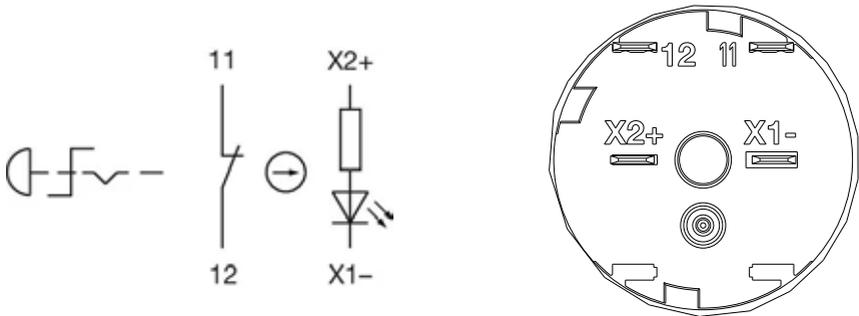
The connectors are described in section 2.3 and wiring diagrams are found in section 4.



## 2.3 Electrical Connectors

This section describes the connectors on the emergency stop button.

Terminal	Connector	Description
11 & 12	Blade Receptacle 2.8x0.5mm	Button, Normally Closed  Used to connect emergency stop button to the relay.
X1- & X2+	Blade Receptacle 2.8x0.5mm	LED light  Optional light, recommended to connect to navigation light switch. Connect terminals to 12-24V, X1- to negative & X2+ to positive.



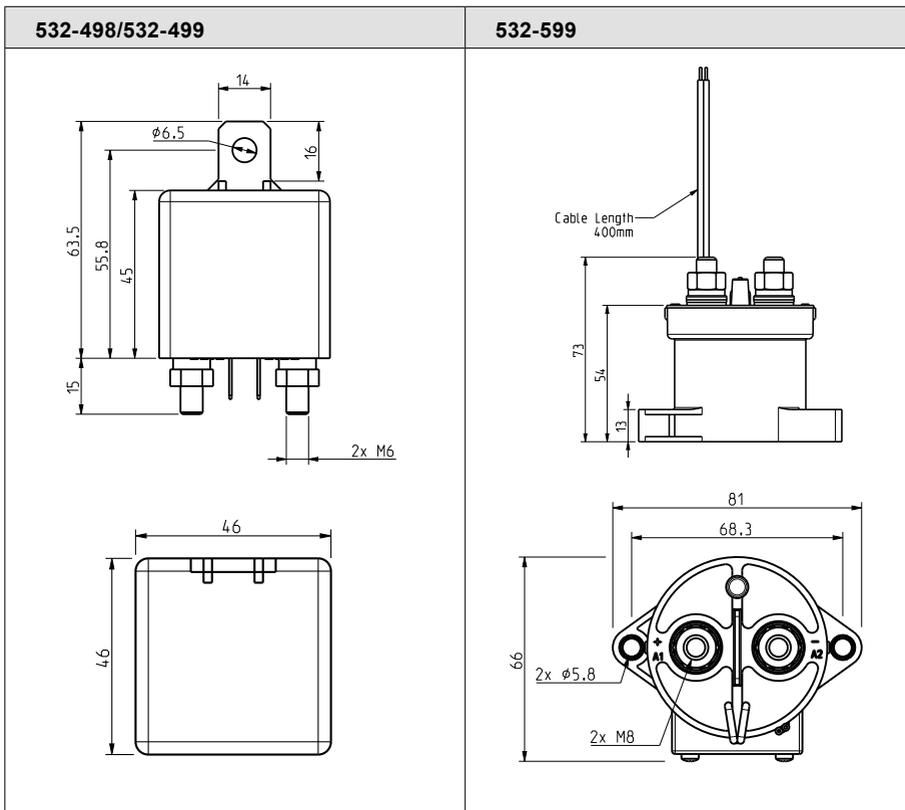
# 3 Relay

The relay controls the incoming power to the SEL-Bus PSU (Power Supply Unit). It comes in three variants. The correct relay needs to be selected with regard to the system's voltage and power requirements. The power requirement for a SEL-Bus system is 100A for each PSU in a 12V installation and 50A for each PSU in a 24V installation.

Article number	532-498	532-499	532-599
Voltage (V)	12	24	12/24
Current (A)	100	100	250
Power consumption (W)	6	6	3 (45 on start up)

## 3.1 Dimensions

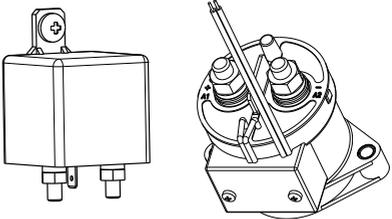
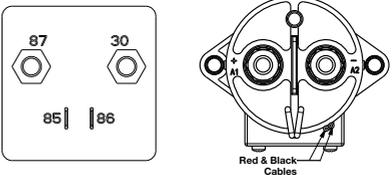
Outer dimensions of the relays.



## 3.2 Installation

The tables below show the installation procedure for the relay. The installation procedure in this section does not include the electrical installation, which is described in section 4.

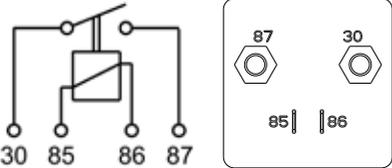
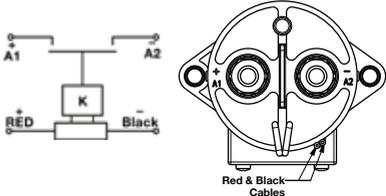
Read the entire installation description and section 4 about the electrical installation before any work is started.

<p><b>1.</b></p> <p>Mount the relay.</p>	
<p><b>2.</b></p> <p>Connect the required cables to the terminals on the relay.</p> <p>The connectors are described in section 3.3 and wiring diagrams are found in section 4.</p>	

## 3.3 Electrical Connectors

This section describes the connectors on the relay.

Relay	Terminal	Connector	Description
<b>532-498</b> <b>532-499</b>	30 & 87	Ring terminal, M6	Power terminals
	85 & 86	Blade Receptacle, 6.8x0.8mm	Control terminals, Relay coil
<b>532-599</b>	+A1 & -A2	Ring terminal, M8	Power terminals
	Red & Black	Cables	Control terminals, Relay coil

<p><b>532-498/532-499</b></p> 	<p><b>532-599</b></p> 
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# 4 Electrical installation

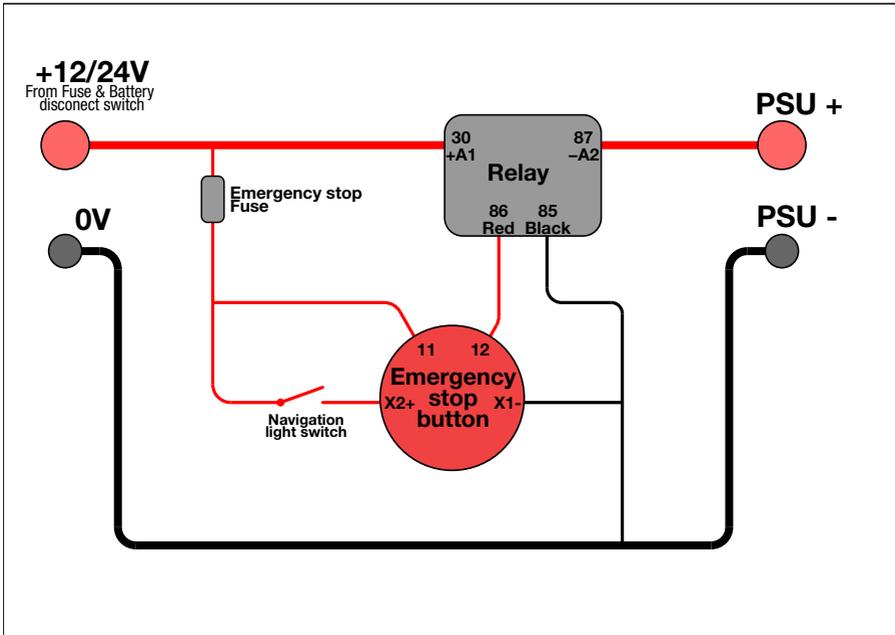
The relay controls the incoming power to the SEL-Bus PSU (Power Supply Unit). It comes in three variants. The correct relay needs to be selected with regard to the system's voltage and power requirements. The power requirement for a SEL-Bus system is 100A for each PSU in a 12V installation and 50A for each PSU in a 24V installation.

Relay	Voltage (V)	Fuse Current rating (A)	Min Cabel area (mm2) *
532-498	12	2	1
532-499	24	1	0.35
532-599	12	4	1
	24	2	0.35

\* Max. cable lenth 10m.

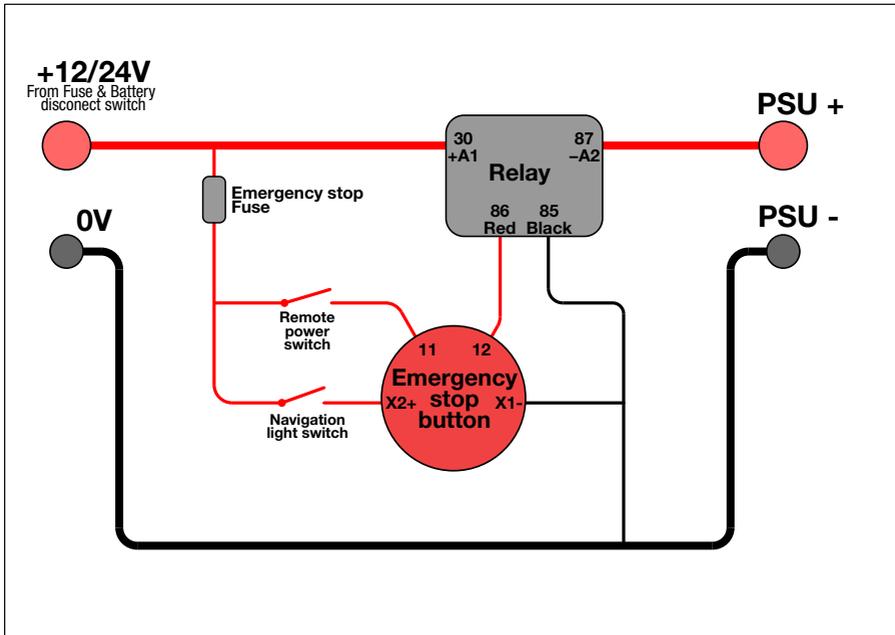
## 4.1 Emergency stop without remote power switch

The wiring diagram below shows the recommended installation for the emergency stop button and relay.



## 4.2 Emergency stop with remote power switch

The wiring diagram below shows the recommended installation for the emergency stop button and the relay. The diagram also shows the suggested connection of a remote power switch.



## 5 Disposal



The crossed out wheeled bin symbol on the product means that used electrical and electronic equipment (WEEE) should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge. Alternatively, in some countries, you may be able to return your products to your local retailer upon purchase of an equivalent new product.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

Please contact your local authority for further details of your nearest designated collection point.

## 6 Warranty

Seldén Mast AB guarantees the emergency stop and relay for 2 years. The guarantee covers faults arising from defective design, materials or workmanship.

The guarantee is only valid if the product is installed, operated and maintained in accordance with this manual and is not subjected to loads in excess of those specified in manuals, brochure and on the Seldén website.

Complete shipment and warranty conditions are to be found on Seldén's website [www.seldenmast.com](http://www.seldenmast.com). See Resources/Partners information/General information/General conditions of sale (595-546-E).

If the system is repaired or modified by anyone other than Seldén Mast AB or one of our authorized dealers, the guarantee ceases to be valid.

Seldén Mast AB reserves the right to alter the content and design without prior warning.



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