

G003352

# Surge Prot M H

Part no. 5100421-00A

System: Salwico Cargo, Salwico Cruise, Salwico Ro/Pax,  
Salwico Workboat, Salwico Yacht, CFD5000

## General Description

Surge Prot has 3 major functions:

- Surge protected power inputs for the Backbone Bus Internal, BBI.
- Terminal board for Backbone Bus External, BBE (RS485 Repeater).
- Electronic short circuit protected outputs for Control or Repeater panels.  
Note! This output is not supervised.

These functions can be used together or individually.

The module is designed to be used where there are no requirements for electrical isolation between devices.



### NOTE!

The module has built-in terminators for BBI and BBE. See section RS485 Termination for more information.

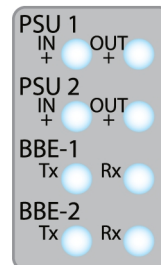
For details on assembling a system and definitions of common system terms, refer to the Installation Manual.

## Data

|  |                     |
|--|---------------------|
| Operating voltage range                    | 19-30 VDC           |
| Max. supply current<br>– PSU1 IN & PSU2 IN | 8 A + 8 A           |
| Max. load current<br>– PSU1 OUT & PSU2 OUT | 0.7 A + 0.7 A       |
| Quiescent current consumption<br>(at 24V)  | 42 mA               |
| Cable terminals                            | 2,5 mm <sup>2</sup> |
| Operating temperature range                | -5°C to +55°C       |
| Weight (with housing)                      | 115g ±5%            |
| Spare part no.<br>(without housing)        | 5100420-00A         |
| Fuse F101/F102                             | 10A Fast-Acting     |

## Indicators

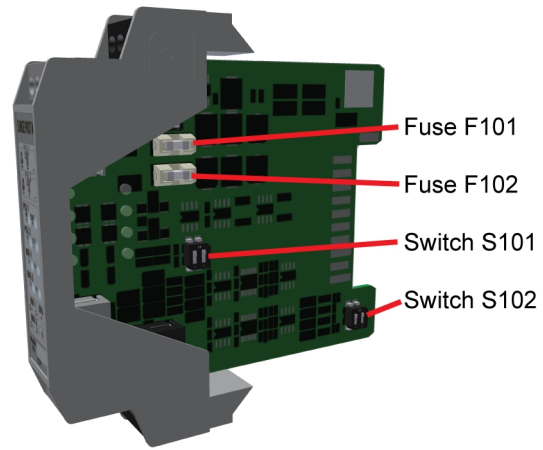
Surge Prot indicators display input and output status.



G003351

| Indicator     | Indicator Colour | Status   |
|---------------|------------------|--|
| PSU 1 IN      | Green            | OK   |
|               | Yellow           | Fuse F101 has blown                            |
|               | None             | PSU1 IN supply not present                     |
| PSU 1 OUT     | Green            | OK   |
|               | Yellow           | PSU1 OUT fault (Output overloaded)             |
|               | None             | PSU1 IN supply not present, or Fuse F101 blown |
| PSU 2 IN      | Green            | OK   |
|               | Yellow           | Fuse F102 has blown                            |
|               | None             | PSU2 IN supply not present                     |
| PSU 2 OUT     | Green            | OK   |
|               | Yellow           | PSU2 OUT fault (Output overloaded)             |
|               | None             | PSU2 IN supply not present, or Fuse F102 blown |
| BBE-1 Tx - Rx | Green            | OK   |
|               | None             | No communication                               |
| BBE-2 Tx - Rx | Green            | OK   |
|               | None             | No communication                               |

### Connection Board



G003393

### RS485 Termination

For RS485 Termination the built-in terminator (120 ohm) can be activated with the BBE DIP switch S101 and the BBI DIP switch S102 located on the Connection board (see figure).

For recommendations and examples on RS485 Termination, refer to the Installation Manual.

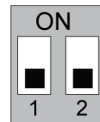


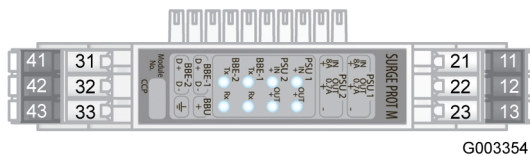
Table 1. BBE-1 and BBE-2 terminations, DIP Switch S101

| DIP Switch No. | Description | ON     | OFF         |
|----------------|-------------|--------|-------------|
| 1              | BBE-1       | Active | Deactivated |
| 2              | BBE-2       | Active | Deactivated |

Table 2. BBI-1 and BBI-2 terminations, DIP Switch S102

| DIP Switch No. | Description | ON     | OFF         |
|----------------|-------------|--------|-------------|
| 1              | BBI-1       | Active | Deactivated |
| 2              | BBI-2       | Active | Deactivated |

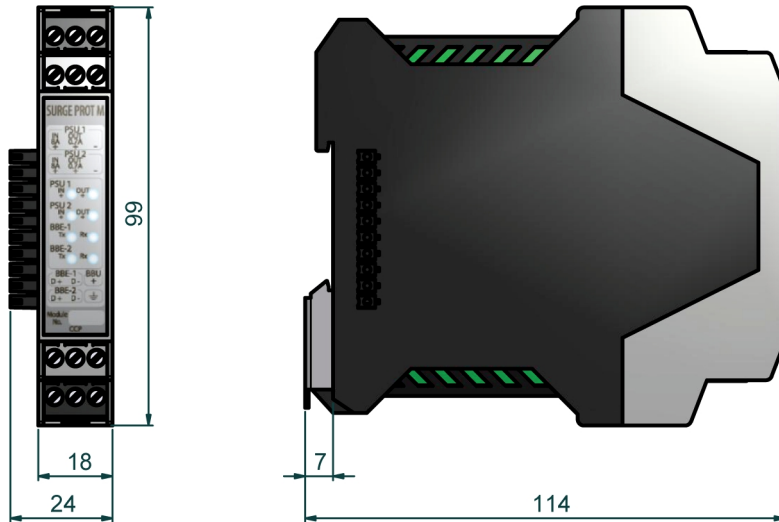
### Connections



G003354

| Connector No. | Function  | Description |
|---------------|-----------|-------------|
| 11            | IN 8A+    | PSU 1       |
| 12            | OUT 0.7A+ |             |
| 13            | -         |             |
| 21            | IN 8A+    | PSU 2       |
| 22            | OUT 0.7A+ |             |
| 23            | -         |             |
| 31            | D+        | BBE-1       |
| 32            | D-        |             |
| 33            | +         | BBU         |
| 41            | D+        | BBE-2       |
| 42            | D-        |             |
| 43            |           | Ground      |

## Module Dimensions (mm)



G003349

## Mounting

Mount the module on a horizontal 35 mm DIN rail.