



G001681

Control/Repeater Panel M 4.3

Part no. 5100195

System: Salwico Cargo, Salwico Cruise, Salwico LNG, Salwico Offshore, Salwico Ro/Pax, Salwico Workboat, Salwico Yacht, Salwico Navy, OEM Extinguish

General Description

The Control/Repeater Panel M 4.3 is a control panel with a 4.3" graphical colour display used to manage and supervise a system. Control/Repeater Panel M 4.3 mounts on any flat surface independently from a fire alarm cabinet.

Control/Repeater Panel M 4.3 is equipped with communication buses for connecting to the system, and it provides the following features:

- A backlit 4.3" graphical colour display
- Alarm buzzer
- LED status indicators
- Backbone Bus Interface
- Ethernet connection
- RS-422/RS-485 interface
- RS-232/RS-485 interface
- Three USB interfaces
- Two configurable powered I/Os
- Two programmable relay outputs

Refer to the User Guide for more information on operating Control/Repeater M 4.3.

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

Part No.

Control/Repeater M 4.3 Cargo	5100195-20A
Control/Repeater M 4.3 Ro/Pax	5100195-30A
Control/Repeater M 4.3 Workboat	5100195-40A
Control/Repeater M 4.3 Yacht	5100195-50A
Control/Repeater M 4.3 OEM	5100195-60A
Control/Repeater M 4.3 Cruise	5100195-80A

Data

Operating voltage range	19-30 VDC
Current consumption (at 24V)	Normal 100 mA Max. 270 mA
Ingress protection	IP22
Operating temperature range	-5°C to +55°C
Weight	1250g
Display	4.3", 480×272 pixels, TFT
Ethernet	10/100 Mbit, autosense
USB Host	USB 1.1 1 in front, 1 on back
USB Device	USB 1.1 1 on back
Relays rating	Max. 30 VDC, 500 mA
I/O 70 (as input)	24 VDC 5-70 mA
I/O 70 (as output)	24 VDC Max. 70 mA
Cable terminals	2.5 mm ²
SD Memory	(Optional)
Certified according to	ROHS EN 54-2 (1999/A1:2006) EN 60945



2531/yy
yy = year of production



Indicators

Control/Repeater Panel M 4.3 indicators display system status. Refer to the User Guide for more information.

Hot-Swap Replacement of the Module

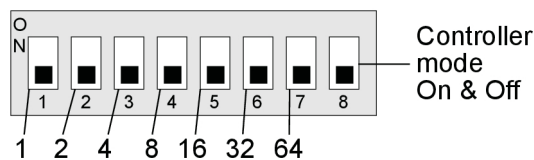
Replace this module following these steps:

1. Remove all cable connections from the module.

2. Address the Module DIP-Switch settings using old module as a guide.
3. Move the Micro SD memory from the old module, if installed, to new module.
4. Plug in all cable connections back.

Address Switch

This switch (see SW2 in figure Connection board) identifies modules in the system and sets the function. Control modules can serve as Bus Masters, i.e., operate in Controller Mode or in Managed Mode, for example repeaters and protocol converters. Address 1 and 2 are dedicated for control modules in Controller Mode. One control module per central shall be set in Controller Mode. If the system shall be redundant it is required to have a second control module, also set in Controller Mode. Modes for Managed and Controller are set with DIP switches as described in the following table:



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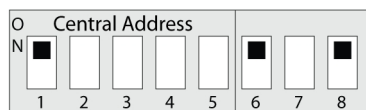
	Managed Mode	Controller Mode
DIP 8	Controller Mode (off)	Controller Mode (on)
DIP 7	Module Address (3-125)	Spare
DIP 6		Master (on/off)
DIP 5		Central Address (1-30)
DIP 4		
DIP 3		
DIP 2		
DIP 1		

Control Modules have two different modes of operation, as determined by their DIP settings (normally pre-set from factory):

Controller Mode

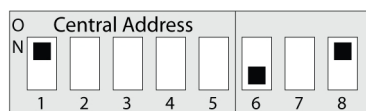
Single Central System:

Central 1 Primary
(automatically module address 1)



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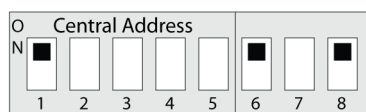
Central 1 Secondary (optional)
(automatically module address 2)



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Multi Central System:

Central 1 Primary
(automatically module address 1)



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Central 1 Secondary (optional)
(automatically module address 2)



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Central 30 Primary
(automatically module address 1)



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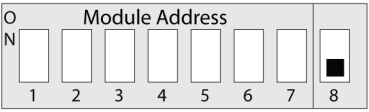
Central 30 Secondary (optional)
(automatically module address 2)



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Managed Mode

Module Address 3-125



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Connections

Control/Repeater Panel M 4.3 mounts outside of the central. Using ribbon cables, connect the Control/Repeater Panel M 4.3 to Terminal M (pre-fitted inside the Control/Repeater Panel M 4.3 casing, see [Module Dimensions \(mm\)](#)). All Control/Repeater Panel M 4.3 connections are made on the Connection board, located at the back of the front panel. See figure [Connection board](#).

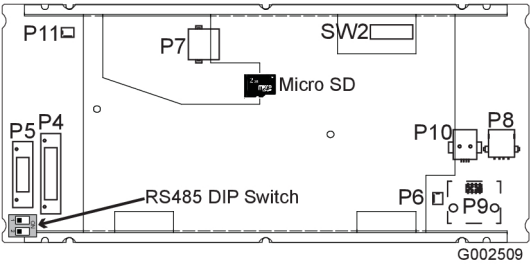
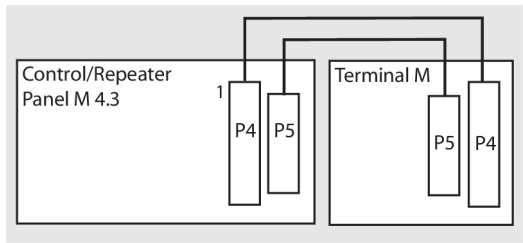


Figure 1. Connection board

Connector no.	Function	Description
P4	Connection to Terminal M	20-pol. Flat Cable *
P5	Connection to Terminal M	10-pol. Flat Cable *
P6		Door Switch
P7		Ethernet
P8	Type A/ Host	USB
P9		USB Expansion Board
P10	Type B/ Device	USB
P11		External Buzzer (24V)

* See illustration below for connection to Terminal M.



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CONTROL/REPEATER M 4.3									
BACKBONE BUS EXTERNAL CONNECTIONS:									
3	ISOLATED SERIAL INTERFACE CHANNEL 3	RS232/485	I/O 70	PROGRAMMABLE OUTPUT	24V 70mA +	24V 70mA +	Tx	D+	40
								D-	39
								CTS	38
								Rx	37
2	I/O 70	PROGRAMMABLE OUTPUT	24V 70mA +	24V 70mA +	30/0.5A		35	D+	36
								D-	35
								CTS	34
								Rx	33
1	I/O 70	PROGRAMMABLE OUTPUT	24V 70mA +	24V 70mA +	30/0.5A		31	D+	32
								D-	31
								CTS	30
								Rx	29
4	RELAY 30VDC/Max. 0.5A PROGRAMMABLE OUTPUT		30/0.5A		30/0.5A		28	D+	29
								D-	28
								CTS	27
								Rx	26
3	RELAY 30VDC/Max. 0.5A PROGRAMMABLE OUTPUT		30/0.5A		30/0.5A		27	D+	27
								D-	26
								CTS	25
								Rx	24
4	ISOLATED SERIAL INTERFACE CHANNEL 4	RS422Tx RS485	RS422Rx	SG_4**	D+	D-	21	D+	25
								D-	24
								CTS	23
								Rx	22
2	POWER SUPPLY OUT 24VDC TO NEXT CONTROL/REPEATER		V+	V+	V+	V+	19	D+	21
								D-	20
								CTS	19
								Rx	18
1	POWER SUPPLY OUT 24VDC TO NEXT CONTROL/REPEATER		V+	V+	V+	V+	17	D+	18
								D-	17
								CTS	16
								Rx	15
2	BACKBONE BUS EXTERNAL OUT (RS485)		D+	D+	D+	D+	14	D+	16
								D-	15
								CTS	14
								Rx	13
1	BACKBONE BUS EXTERNAL OUT (RS485)		D+	D+	D+	D+	12	D+	14
								D-	13
								CTS	12
								Rx	11
	BASIC BACKUP SIGNAL		BBU	V+	V+	V+	11	D+	11
								D-	10
								CTS	9
								Rx	8
2	POWER SUPPLY IN 24VDC		V+	V+	V+	V+	9	D+	8
								D-	7
								CTS	6
								Rx	5
1	POWER SUPPLY IN 24VDC		V+	V+	V+	V+	7	D+	7
								D-	6
								CTS	5
								Rx	4
2	BACKBONE BUS EXTERNAL IN (RS485)		D+	D+	D+	D+	5	D+	6
								D-	5
								CTS	4
								Rx	3
1	BACKBONE BUS EXTERNAL IN (RS485)		D+	D+	D+	D+	3	D+	4
								D-	3
								CTS	2
								Rx	1
	BASIC BACKUP SIGNAL		BBU	V+	V+	V+	1	D+	1
								D-	
								CTS	
								Rx	

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Figure 2. Terminal M

* Do not connect to this terminal!

** Terminal 23 is signal ground for channel 4, marked "GNDB" on PCB.

*** Terminal 38 is signal ground for channel 3, marked "GNDA" on PCB.

RS485 Termination of Serial Interface 3 & 4

For RS485 termination of channel 3 and channel 4 the built-in resistor (120 ohm) can be activated with the RS485 DIP switch located on the Connection board (see figure in section Connections).

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

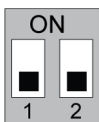


Table 1. DIP switch for RS485 termination

DIP Switch No.	Description	ON	OFF
1	Channel 3	Active	Deactivated
2	Channel 4	Active	Deactivated

Technical drawing of the front view of a rectangular container with a lid. The lid has a height of 20.7. The main body has a total height of 75.2 and a base height of 54.5. There are six circular openings on the front face. The leftmost opening is labeled 'M20/M25/M32' and the rightmost is labeled 'M20/M25'.



Technical drawing of a rectangular plate with the following specifications:

- Overall width: 276
- Overall height: 136⁺²₋₂
- Inner width (excluding side flanges): 270⁺²₋₂
- Inner height (excluding top and bottom flanges): 90
- Top flange thickness: 10
- Bottom flange thickness: 10
- Left side flange thickness: 10
- Right side flange thickness: 10
- Feature: CUT OUT (indicated by a dashed line and arrow pointing to the top-left corner of the inner rectangle)
- Feature: M4 THREAD (4x) (indicated by a dashed line and arrow pointing to the top-left corner of the outer rectangle)

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