



G001681

System: TERRA FIRE

Control/Repeater Panel M 4.3

Part no. 5100195

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 TERRA FIRE	5100195-xxA
Control/Repeater M 4.3 Brand SE	5100195-70A
Control/Repeater M 4.3 TERRA FIRE	5100195-71A
DK	
Control/Repeater M 4.3	5100195-72A
Servoteknikk CS5000 NO	

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
	CE 09 2531-CPD-232.1686 DOP no.6301900

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

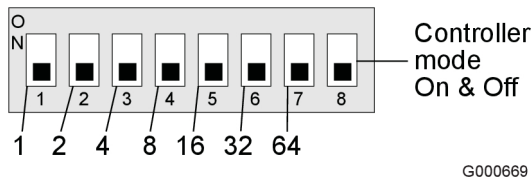
Replace this module following these steps:

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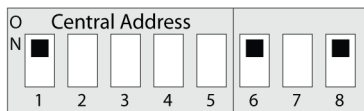
	Managed Mode	Controller Mode
DIP 8	Controller Mode (off)	Controller Mode (on)
DIP 7	Module Address (3-125)	Spare
DIP 6		Master (on/off)
DIP 5		Central Address (1-30)
DIP 4		
DIP 3		
DIP 2		
DIP 1		

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

Controller Mode

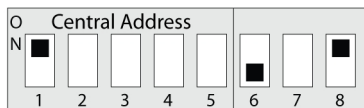
Single Central System:

Central 1 Primary
(automatically module address 1)



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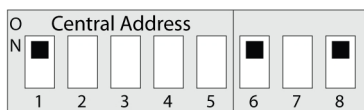
Central 1 Secondary (optional)
(automatically module address 2)



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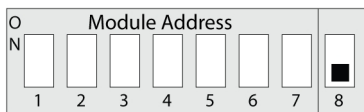
Central 30 Secondary (optional)
(automatically module address 2)



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Managed Mode

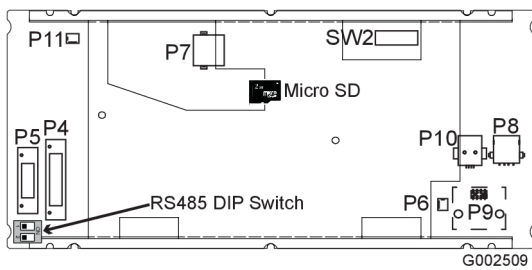
Module Address 3-125



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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](#).

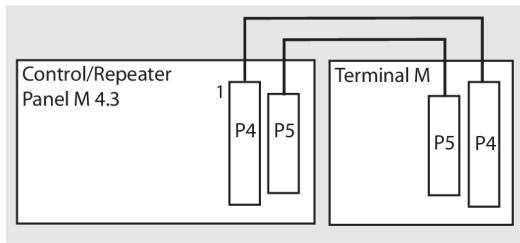


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Figure 1. Connection board

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:											
	1	2	1	2		1	2	1	2	4	3
BASIC BACKUP SIGNAL	BACKBONE BUS EXTERNAL IN (RS485)	BACKBONE BUS EXTERNAL IN (RS485)	POWER SUPPLY IN 24VDC	POWER SUPPLY IN 24VDC	BASIC BACKUP SIGNAL	BACKBONE BUS EXTERNAL OUT (RS485)	BACKBONE BUS EXTERNAL OUT (RS485)	POWER SUPPLY OUT 24VDC TO NEXT CONTROL/REPEATER	POWER SUPPLY OUT 24VDC TO NEXT CONTROL/REPEATER	ISOLATED SERIAL INTERFACE CHANNEL 4	RELAY 30VDC/Max. 0.5A PROGRAMMABLE OUTPUT
BBU	D+	D-	V+	V-	BBU	D+	D-	V+	V-	RS422Tx RS485	C
1	2	3	4	5	11	12	13	14	15	21	26
										SG_4**	NO
											30/0.5A
											24V 70mA+
											24V 70mA+
											CTS
											Rx
											Tx
											SG_3***
											D+
											D-
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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.

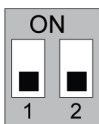
RS485 Termination of Serial Interface 3 & 4

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).

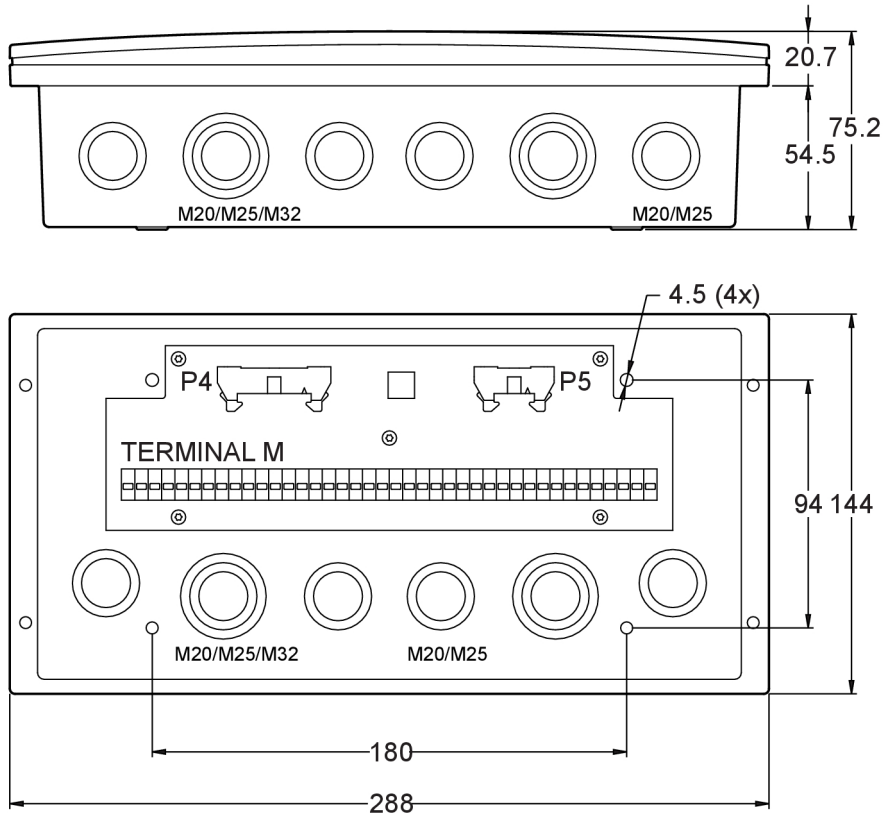
For recommendations and examples on RS485 termination, refer to the Installation Manual.

Table 1. DIP switch for RS485 termination

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

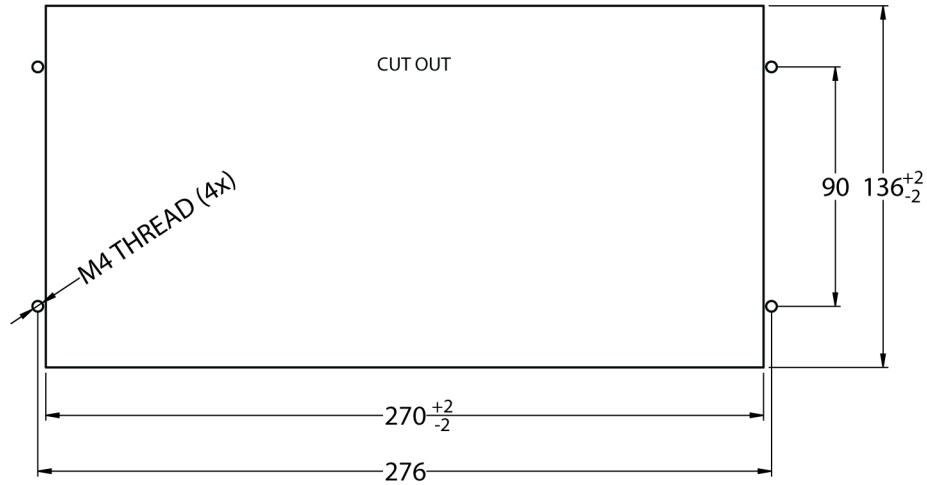


Module Dimensions (mm)



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Mounting Dimensions (mm)



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