

Ci Junction box for NFPA single

Item numbers covered by this datasheet

540352	Ci Junct box NFPA single
540352-60	Ci Junct box NFPA single UL

General

The junction box is for connection of solenoid (Ci IS8*), low pressure switch and a NFPA switch to a control panel with one or two output to actuators. For example, SigmaXT (one actuator output) and the SigmaXT+ (two actuator outputs).

It is also possible to connect an aux device, example a pressure switch and/or to connect a "NFPA switch". The box is also available in a special ULversion(-60).

Note. It is possible to use M16 or M20 cable gland. The cable glands is enclosed.

*Ci IS8 is a solenoid from Fire Eater, especially developed to use for activation of valves.

Specifications

Temperature (operation / storage)

Ingress protection	IP66
Materials Box	Poly Carbonate
Dimensions HxLxD (mm)	57x130x95
Weight (kg)	0.3
Flammability (540352-60)	UL94

Electrical specific

Voltage	0-40V
Current	max. 4A
Max. rising temperature @+25C (inside the box, when output short at max current).	+2C
Resistance (ACT1/AC2/LEAK) default	6K8/6K8/5K6 *
Terminals	Springs (use a screwdriver to open spring)
Cable entries	0.08-1.5mm ²
Cable entry	M16/M20 (range 4-12 mm cable)

*Default resistors are for the SigmaXT control panel, so there is no fault at the panel.

Marking

Fire Eater Logo
Name of product
Item number

Document:

540352 Ci Junction box NFPA

Text

Category:

Electrical comp.

Id: MRP

Rev:2023-03-17



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1
2
3
4
5
6
7
8
9

Installation

Before installation, the power must be off.

Note, for a control panel with dual outputs (e.g. SigmaXT+), the two jumpers J1 and J2 below the terminals to the control panel must be cut.

The shown (+) and (-) are when the control panel is activated (discharged).

Low Pressure is connect to the manometer where the specified colours on the PCB for the low pressure are for connections to a manometer. The 'BL' is only for 'dummy' connection, so that there is no floating wire from the cable, with three wires.

If the NFPA switchs are not use, the 'shorts' at NFPA connectors (GR to BR) must not be remove.

The NFPA Switch (1 and 2) are for connections to an NFPA switch, which indicate if the valve is disconnect from the solenoid. The signal is connected via the 'Low Pressure' switch.

The ACTUATOR (1 and 2) is for connection to an actuator with four wires, where the colours from the solenoids are specified. E.g. Ci IS8 series from Fire Eater.

The fitted resistors at 'LOW PRESSURE' and Actuator 1 and 2 are for End Of Line (EOL) resistance so that the control panel is free of fault.

To connect/disconnect a wire from the 'spring' terminal, a special tool or a screwdriver at 3.5 mm must be used to 'release' the spring.

Cable gland (M16 or M20): Use the right cable gland, according to the cable.

Fig. 1 Junction box board

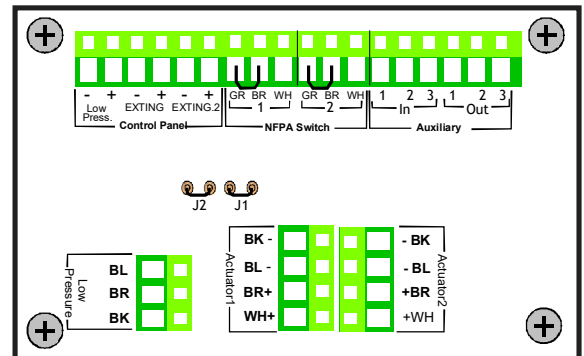
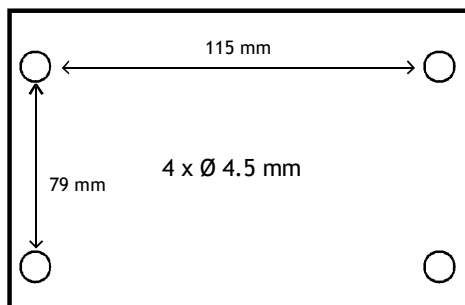


Fig. 2 Mounting holes.



Document: 540352 Ci Junction box NFPA		Text
		1
		2
Category: Electrical comp.	Id: MRP	3
	Rev:2023-03-17	4
		5
		6
		7
		8
		9



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Installation continued

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Fig. 3 Control panel with one activation output

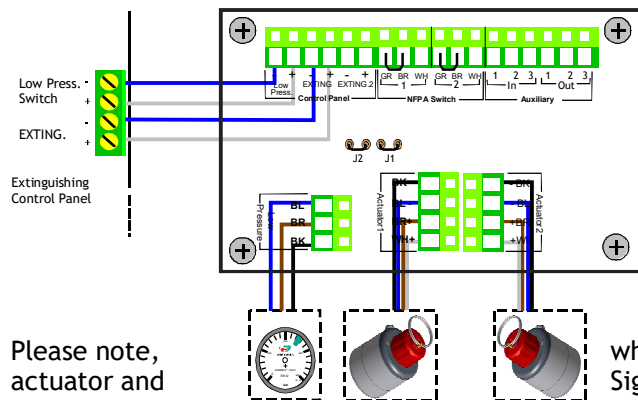
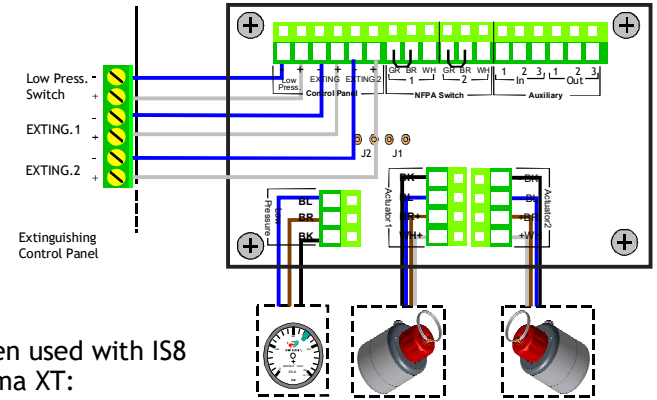


Fig. 4 Control panel with dual activation output



Please note, actuator and

when used with IS8 Sigma XT:

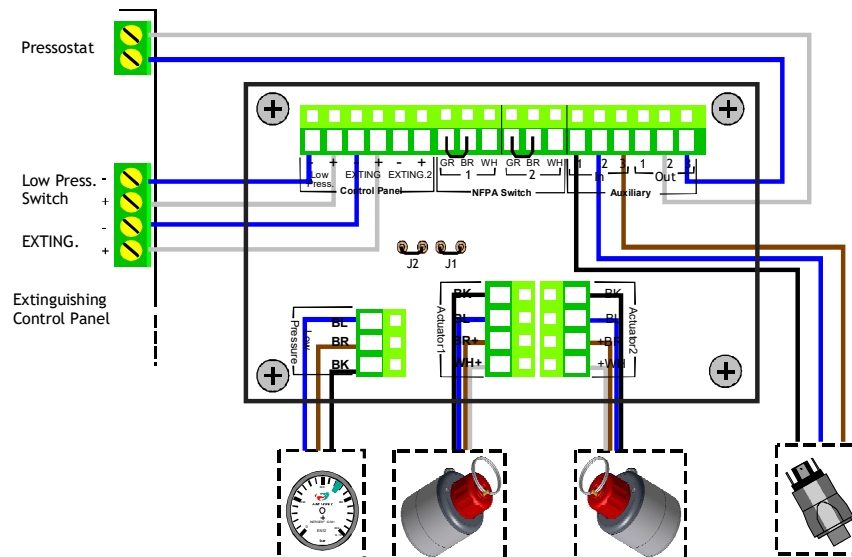
The actuators are connect to "ACTUATOR 1" and "ACTUATOR 2".

(Remember they are polarized, connect '+' to '+' and '-' to '-').

If only one IS8 actuator is connect to "ACTUATOR 1", the "ACTUATOR 2" must be connected with a resistor 6K8 ohm, because of the monitoring for Sigma XT. (If the resistor is not mounted, Sigma XT will show a fault).

If the junction box is connected to a control panel with dual actuator output (fig. 3), the two jumpers J1 and J2 that are placed below the terminals from the control panel, must be cut.

Fig. 5 Control panel with one activation and pressure switch



Document:
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Text

1
2
3
4
5
6
7
8
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Installation continued

Before installation, the power must be off.

Control panel with one activation and NFPA switch connected via the manoswitch to a control panel. If the NFPA switch is disassemble the control panel will come with a 'Floding zone fault' and a 'Low Press fault' on a SigmaXT control panel.

Notes, the jumper on NFPA Switch terminal between "BR" and "GR" on NFPA terminal no 2 must not be remove.

Fig. 6 Control panel with one activation and one NFPA switch via Low Press.

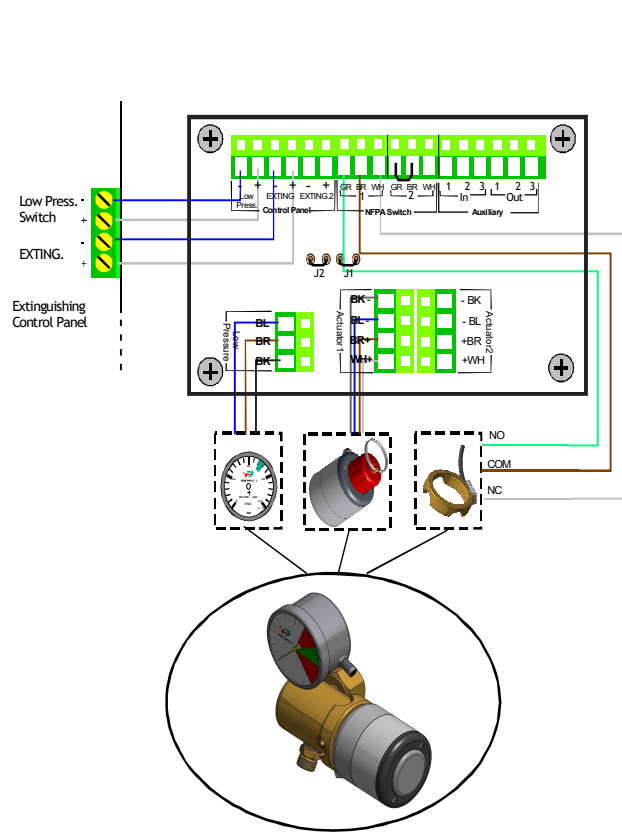
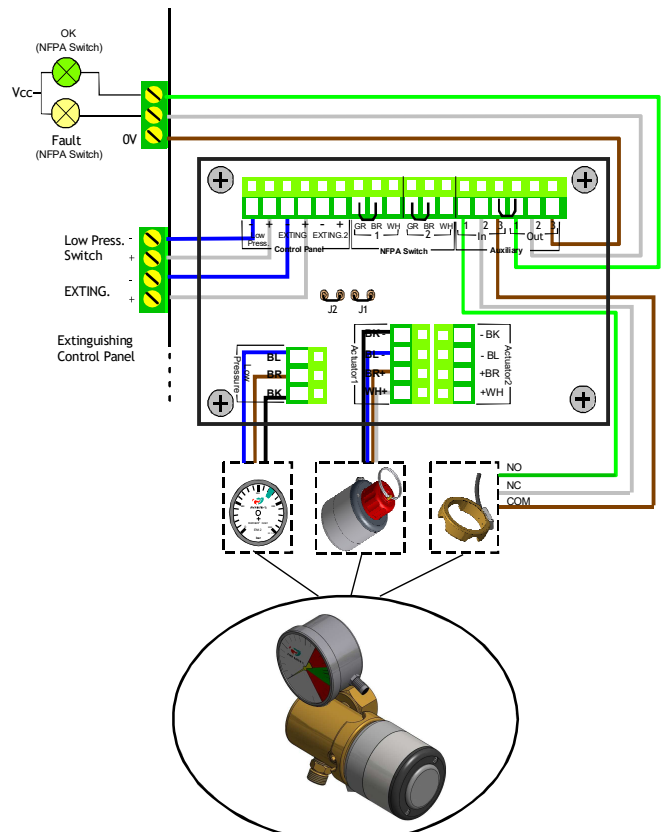


Fig. 7 Control panel with one activation and one NFPA switch connect via AUX.



Document: 540352 Ci Junction box NFPA		Text
		1
		2
Category: Electrical comp.	Id: MRP	3
	Rev: 2023-03-17	4
		5
		6
		7
		8
		9

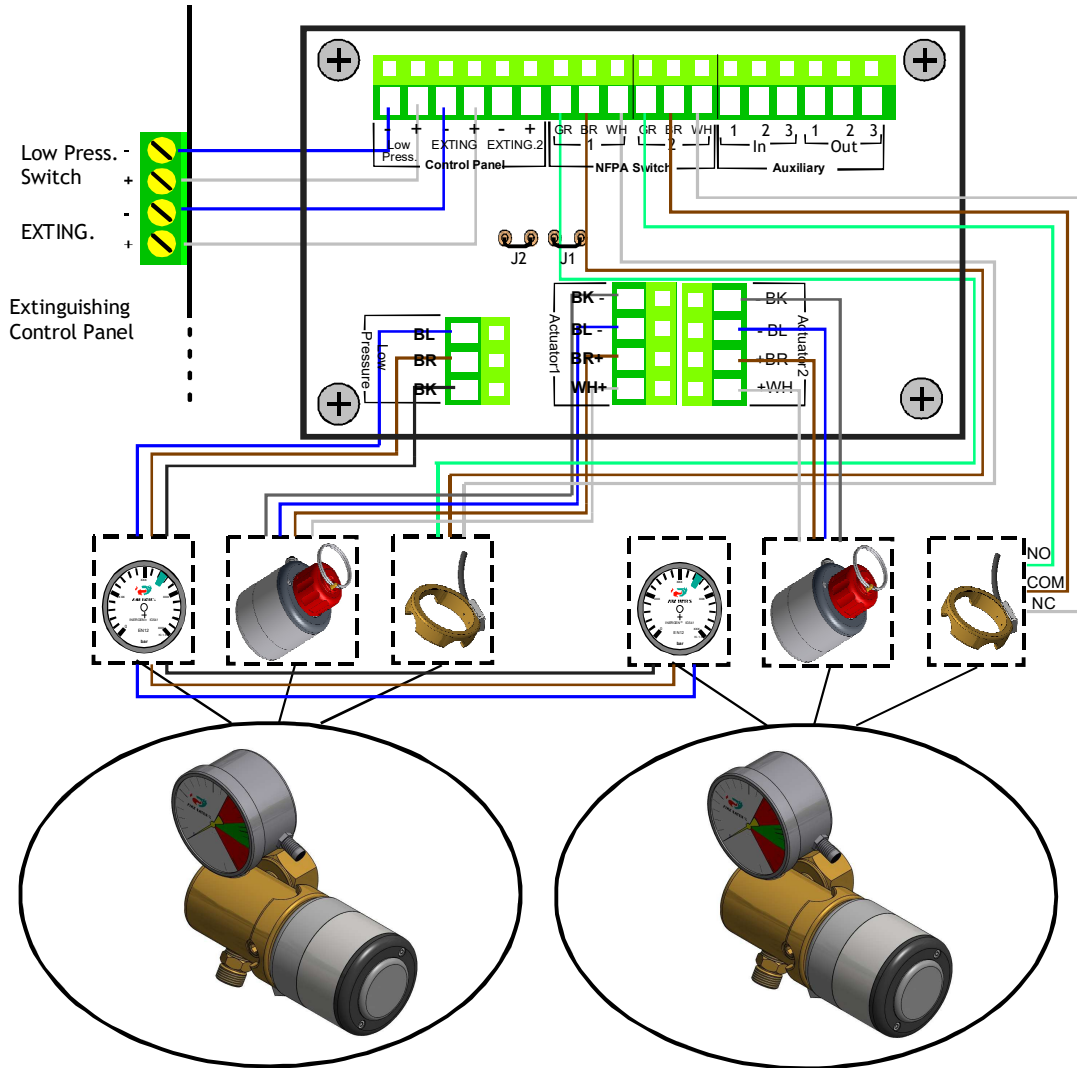


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Installation continued

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Fig 8. Control panel with dual activation and dual NFPA switch



Document:
540352 Ci Junction box NFPA

Category: Electrical comp.
Id: MRP
Rev: 2023-03-17



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Text

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2	
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