

Junction box for connection of actuator(s), low pressure, pressure switch.

Item numbers covered by this datasheet

540351 Ci Junction box basic

540351-60 Ci Junction box basic UL

General

The junction box is for connection of solenoid (Ci IS8*) and low pressure 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 auxiliary device, example a pressure switch. The box is also available in a special UL version(-60).

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

Specifications

Terminals:	Springs
(Use a screwdriver to open the springs)	
Cable entries:	0.08 - 1.5 mm ²
H×L×D	80x120x56 mm
Weight	0.3 kg
Box Material (540351)	ABS plast.
Box Material (540351-60)	PC plast.
Ingress protection	IP67
Cable entry	M16 (range 4-8 mm)
Flammability	540351-60 is flammability to UL94

Default resistors □

ACT1/ACT2 2x 6K8Ω (Not for SigmaXT+)

LEAK 5K6Ω

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

Electrical/Power specifications

Max. Voltage/Current 40V/4A

Max. rising temperature@+25°C +2°C

(Inside the box, when outputs short at max. current).

Marking

The box is marked with a product label.

Installation

Before installation, the power must be off.

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

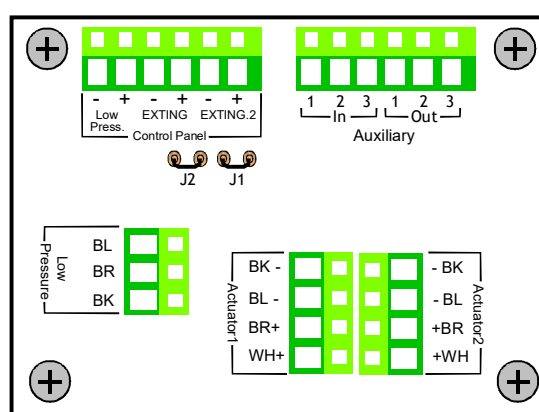
The shown (+) and (-) are when the control panel is activated (discharged).

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

When the wires are connected to the 'spring' terminal, a special tool or a screwdriver at 3.5 mm must be used to 'release' the spring.

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

Fig. 1 Junction box board



Document:

540351 Ci Junction box basic

Text

Category:

Electrical comp.

Id: MRP

Rev: 2018.05.22



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Installation continued

Before installation, the power must be off.

Fig. 2 Control panel with one activation output

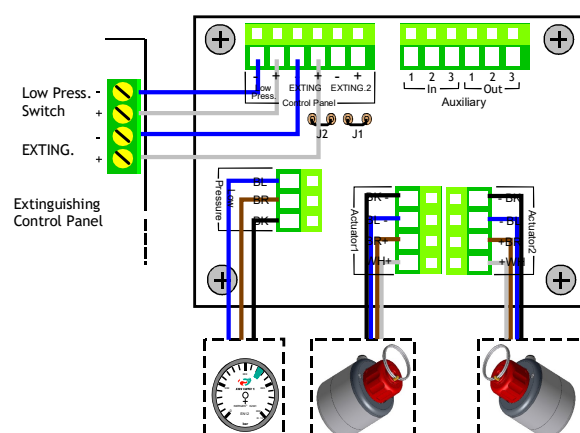
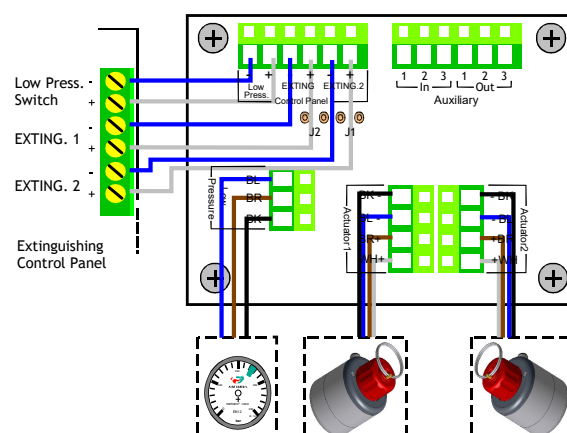


Fig. 3 Control panel with dual activation output



Please note, when used with IS8 actuator and Sigma XT:

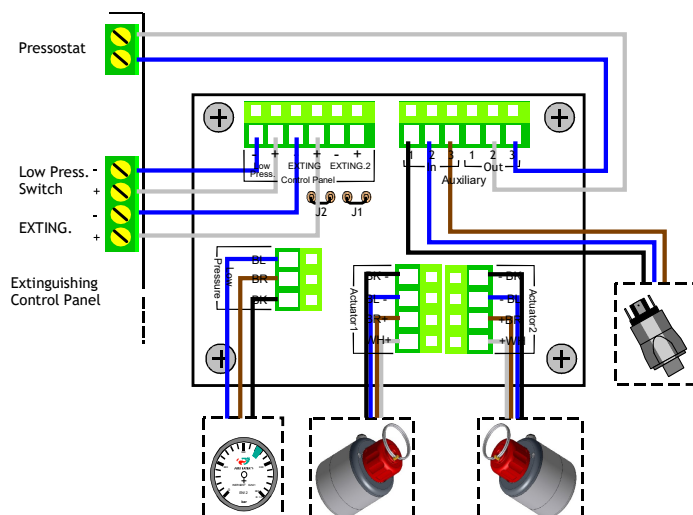
The actuators are connected to "ACTUATOR 1" and "ACTUATOR 2".

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

If only one IS8 actuator is connected 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. 4 Control panel with one activation from the control panel and pressure switch



Document:
540351 Ci Junction box basic

Category:
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Text

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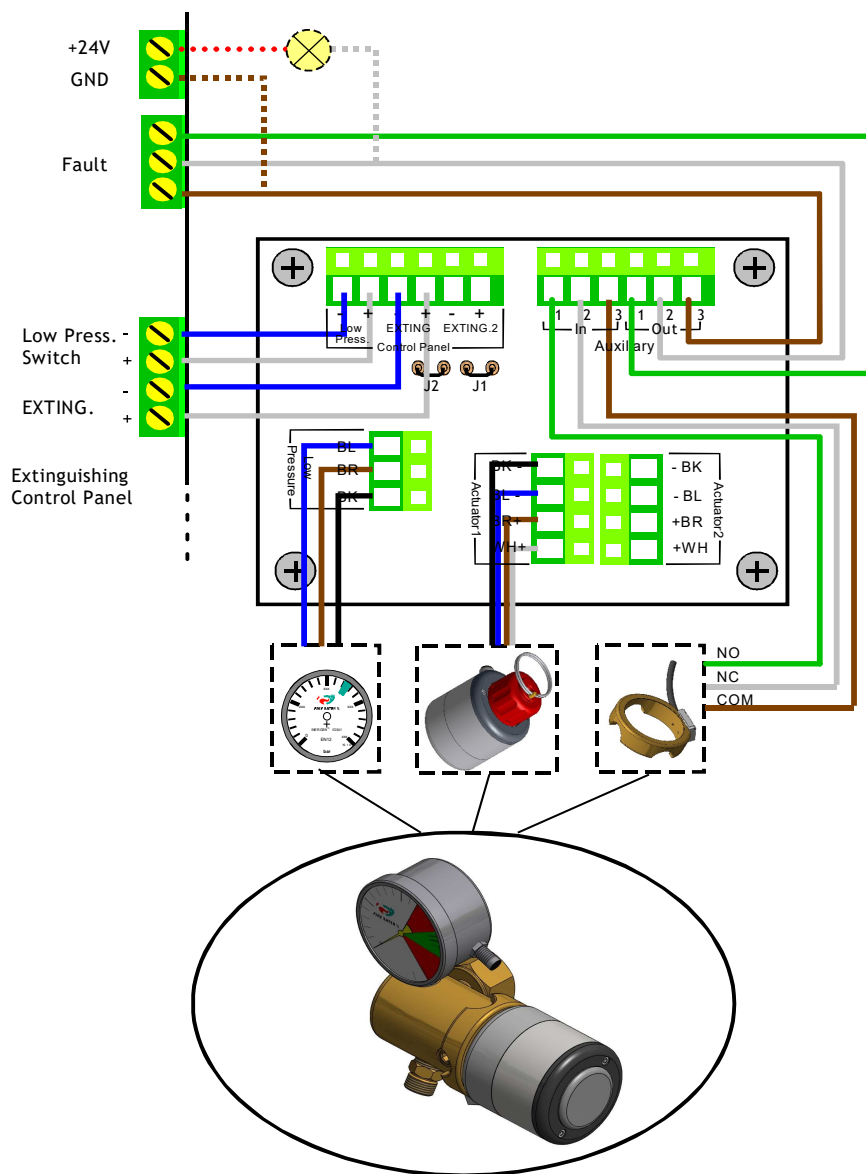
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Fig. 5 Control panel with one activation and NFPA switch

Note, the dotted lines indicate how to connect the NFPA switch directly to a lamp. It is only possible to do one of the options.



Document:
540351 Ci Junction box basic

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Rev: 2018.05.22

Text

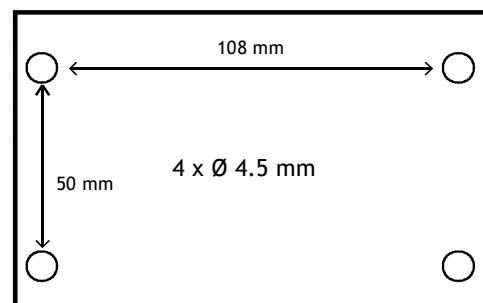
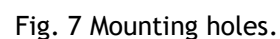
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Fig. 6 Control panel with one activation and NFPA switch in series with the manometer.

If there is a fault from the manoswitch or the NFPA switch, the control panel will activate a common fault on the 'Low Pressure' switch input. That mean there is no separate indication from the NFPA switch, as it is common with the 'Low Pressure' switch.



Document: 540351 Ci Junction box basic		Text
Category: Electrical comp.	Id: MRP	1
	Rev: 2018.05.22	2
 <p>Vølundsvej 17 DK- 3400 Hillerød Tel +45 7022 2769 www.fire-eater.com</p>		3
		4
		5
		6
		7
		8
		9