SIGMA ZXT

Extinguishant Control Panel

Features

▸ Single area extinguishing panel
▸ Dual extinguishing outputs with main/reserve configuration option
▸ Secure Event logging 1000 events
▸ Dynamic LCD Display
▸ 4 configurable user passcodes
▸ Compatible with I.S. barriers
▸ 6 x Programmable relay outputs
▸ Countdown timer displays time remaining until release
▸ Supports up to seven, Sigma ZXT four-wire status indicators (also compatible with Sigma SI status units for retrofit applications)
▸ Larger enclosure available with option of 2.6A or 5.25A PSU
▸ Approved and certified to EN12094-1, EN54-2 and EN54-4
▸ Compatible with LE2 configuration software

Overview

Sigma ZXT provides controls and indications for a single area extinguishing release system. Three conventional detection zones provide the alarm stimulus required to activate the release of extinguishant. Any single zone or a combination of multiple zones can be configured to contribute to the release of the extinguishant.

Event Log

Sigma ZXT provides a log of all events which occur on the control panel from alarms, faults, disablements, activations etc. Events are logged by time and date even if an active event is cleared. The event log can be downloaded onto a computer via a USB link and the Loop Explorer 2 programming software.

Programmable Outputs

Six programmable volt-free changeover outputs are provided within the Sigma ZXT which can be used for controlling remote devices or signal system status remotely. Each relay can be programmed for one of fourteen possible functions such as Alarm, Fault, Hold, Abort, Released, etc.

Dual Extinguishing Outputs

Sigma ZXT can be configured to provide two extinguishing outputs, these can either work together as common outputs or can be configured as main and reserve outputs. Main and reserve outputs allow connection to two sets of extinguishing cylinders, enabling a user to return a system to a functional state quickly following a release.

Dynamic LCD Display

To support standard LED status indicators and as a further visual aid, the 'Dynamic mode' feature changes the LCD display colour depending on control panel status:

White – Normal condition

Red – Fire condition, Released condition

Red flashing – During countdown to the released condition

Yellow – Fault condition, Disabled condition and Test condition

Turquoise – Access level 2

Turquoise - Access level 3

Panel Configuration

The panel configuration can be downloaded onto a computer via a USB link. Through Loop Explorer 2 programming software, a full record of the configuration can be provided for commissioning documentation. Regular service testing records can be kept using the same technique.

On-screen Programming Menus

Sigma ZXT is fully programmable through the front fascia. Clear password accessed menu structure allow for easy configuration. Password access separates 'User' controls and settings from 'Engineer' configuration options.

Status units and Ancillary Card

The full range of Kentec Electronics Sigma Status Indicators, Switches and Ancillaries can be connected to the Sigma ZXT for remote indication and

Backward Compatibility

Sigma ZXT is fully backward compatible with existing Sigma SI status units and ancillaries.

Sigma ZXT range: Standard Panel, Large Panel and Status Indicators

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For further information visit www.kentec.co.uk

Specifications

Construction	1.2mm/1.5mm mild sheet steel
IP rating	IP30
Finish	Epoxy powder coated
Colour - lid & box	BS 00 A 05 fine texture
Colour - fascia	RAL 7016
Weight	6-7kg
Operating temperature range	-10°C to +40°C
Mains supply	230V AC +10%/-15% (100 W maximum)
Mains supply fuse (2.6A / 5.25A)	T2.0 A 20mm, 250V AC HRC / T3.0 A 20mm, 250V AC HRC
Power supply rating (2.6A / 5.25A)	2.6 A / 5.25A (total including battery charge 28V +/- 1V)
Maximum ripple current	<200 mV peak to peak @ rated voltage
Battery options (Two 12V batteries connected in-series. Batteries not to be mixed)	
2.6A	Yuasa model: NP7-12 (7Ah)
5.25A	Yuasa model: NP12-12 (12Ah), NP17-12 (17Ah)
Battery charge voltage	27.6V DC nominal (temperature compensated)
Battery charge current (2.6A / 5.25A)	0.6A / 1.25A
Battery fuse (2.6A / 5.25A)	20mm F2.5A 250V/ electronic over-current prottection circuit pressent
Maximum current draw from batteries (2.6A / 5.25A)	2A / 5.5A
Current draw in mains fail condition (2.6A / 5.25A)	0.11A / 0.14A
Current draw in second stage alarm (2.6A / 5.25A)	0.19A / 0.23A
Current draw in post discharge condition (2.6A/5.25A)	0.21A / 0.26A
R0V output	Fused at 500mA with electronic fuse
Sounder outputs	21 - 28V DC fused at 500mA with electronic fuse
Fault relay contact rating	5 to 30VDC 1A maximum for each
Fire relay contact rating	5 to 30VDC 1A maximum for each
Released relay contact rating	5 to 30VDC 1A maximum for each
Mode relay contact rating	5 to 30VDC 1A maximum for each
Hold relay contact rating	5 to 30VDC 1A maximum for each
Abort relay contact rating	5 to 30VDC 1A maximum for each
Zone quiescent current	0mA minimum, 2mA maximum
Terminal capacity	0.5mm² to 2.5mm² solid or stranded wire
Number of detectors per zone	Maximum 32 (Dependant on current consumption)
Number of sounders per circuit	Dependent on type
Detection circuit end of line	6K8 +/- 5% ½ W resistor
Monitored input end of line	6K8 +/- 5% ½ W resistor
Sounder circuit end of line	1N4004 diode
Zone detection circuits	21V DC (nominal)
Extinguishant output end of line	1N4004 Diode
No. of detection circuits	3
No. of sounder circuits	2 x 1st stage, 1 x 2nd stage
No. of extinguishant outputs	1 (or 2 with S2 sounder output reconfigured)
Extinguishant release output	Fused at 1A continuous or 3A max (for 50ms)
Extinguishant release delay	Adjustable 0 to 60 seconds (in 5 second steps)

Specifications (continued)

Sounder circuits	21 to 28V DC @ 500mA
Extinguishant release duration	Adjustable 60 to 300 seconds
Zone normal threshold (Allowable EOL)	10K Ohm to 2K Ohm
Detector alarm threshold	1K Ohms to 390 Ohm
Call point alarm threshold	370 Ohm to 150 Ohm
Short circuit threshold	130 Ohm to 0 Ohm
Head removal condition	15.5V to 17.5V
Cabling	FP200 or equivalent (max. capacitance 1uF max inductance 1 millihenry)
Monitored inputs normal threshold	10K Ohm to 2K Ohm
Monitored inputs alarm threshold	2K Ohm to 150 Ohm +/- 5%
Monitored inputs Short circuit threshold	140 Ohm to 0 Ohm +/- 5%
Status unit/Ancillary board connection	Two wire RS485 connection (EIA-485 specification)
Status unit power output (AUX 24V)	21 to 28V DC @ 300mA

Panel Connections

Sigma ZXT PCB
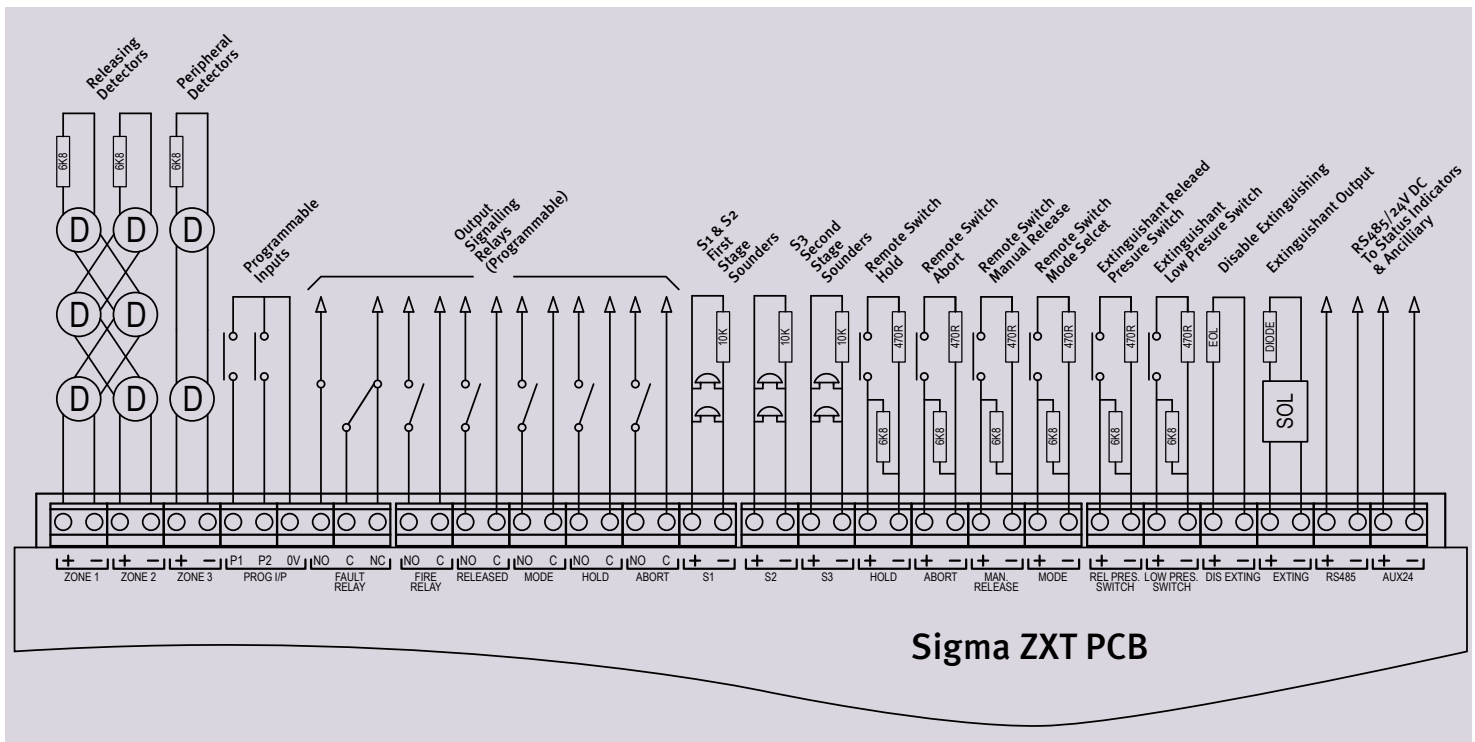
Panels

Product Code	Description	Size (mm)
K192311XM2	Standard panel 2.6A	368 (w) x 324 (h) x 100 (d)
K192311XM3	Large panel 2.6A	368 (w) x 434 (h) x 133 (d)
K195311XM3	Large panel 5.25A	368 (w) x 434 (h) x 133 (d)

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