

## Multi- Area Extinguishant Control Panels

### Features

- Complies with EN12094-1
- 2, 4 or 8 detection zones
- 1 to 4 extinguishant areas
- Dual extinguishant outputs for each area (configurable as Main/Reserve)
- First and second stage sounder outputs for each area
- First and second stage volt free changeover contacts for each area
- Released volt free contact per area
- Fault volt free contact per area
- Programmable extinguishant delays
- Programmable output duration
- Extract fan control
- Countdown indicator shows time until release in seconds
- Mode select and manual release controls per area
- Monitored remote manual release input
- Monitored remote Hold input
- Monitored remote Mode select (door interlock) input
- Monitored remote Released pressure switch input
- Monitored remote Low Pressure switch input
- Monitored Abort input
- Serial connection for Sigma Si status units and ancillary boards. (K588)

### Product Overview

- Sigma XT+ control panels are multi-area extinguishant control panels complying with EN12094-1. Up to 8 zones of conventional detection with up to 4 extinguishant areas are available. Stand alone extinguishant control units are also available with 2 monitored inputs to receive initiating signals from remote fire detection control panels or addressable modules.
- Each extinguishant area has a comprehensive set of inputs and outputs and is configurable via a simple programming interface. All extinguishant areas may have up to 7, serially connected Sigma Si status indication and control units or ancillary relay boards connected via a simple 4 core cable.
- The versatility of the control panel can be enhanced further by the fitting of up to 7 Sigma CP Ancillary boards (K580) or Sigma CP Sounder boards (K461) to the RS485 serial bus. See data sheet DS39 (page 46-47) and DS48 (page 76-77).
- For compatible status units see Sigma Si data sheet DS41 (page 66-67).



Model No. K21082M3



Sigma XT Ancillary Board - K588



Sigma CP Ancillary Board - K580



Sigma CP Sounder Board - K461

## Panels

Product Code	Zones	Areas	Size (mm)
K21021M3	2	1	385 x 520 x 110
K21041M3	4	1	385 x 520 x 110
K21042M3	4	2	385 x 520 x 110
K21081M3	8	1	385 x 520 x 110
K21082M3	8	2	385 x 520 x 110
K21083M4	8	3	385 x 700 x 145
K21084M4	8	4	385 x 700 x 145

## Technical

<b>Mains supply</b>	- 230V AC, 50Hz +10% - 15% (100 Watts maximum)
<b>Mains supply fuse</b>	- 1.6 Amp ( F1.6A L250V)
<b>Finish</b>	- Epoxy powder coated
<b>Colour - lid &amp; box</b>	- BS 00 A 05 grey - fine texture
<b>Colour - controls plate &amp; labels</b>	- RAL 7047 light grey - satin
<b>Power supply rating (1 &amp; 2 area units)</b>	- 3 Amps total including battery charge 28V +/- 2V
<b>Power supply rating (3 &amp; 4 area units)</b>	- 4 Amps including battery charge 28V +/- 2V
<b>Maximum ripple current</b>	- 200 millivolts
<b>Battery charge voltage</b>	- 27.6VDC nominal (temperature compensated)
<b>Battery charge current</b>	- 0.7A maximum
<b>Battery fuse</b>	- 20mm, 3.15A glass
<b>Current draw in mains fail condition</b>	- 54 milliamps per module
<b>Max. current draw from batteries</b>	- 3A (K21021, K21041, K21042, K21081, K21082) 4A (K21083, K21084)
<b>Sigma XT+ module Aux 24V output</b>	- Fused at 500mA with electronic fuse - 1 per extinguishant area
<b>Sigma CP Aux 24V output</b>	- Fused at 2.5A - not available to user
<b>1st and 2nd stage Sounder outputs</b>	- 21 to 28V DC Fused at 1A with electronic fuse
<b>Fault relay contact rating</b>	- 5 to 30VDC 1A Amp maximum for each
<b>Fire relay contact rating</b>	- 5 to 30VDC 1A Amp maximum for each
<b>Local fire relay contact rating</b>	- 5 to 30VDC 1A Amp maximum for each
<b>First stage contact rating</b>	- 5 to 30VDC 1A Amp maximum for each
<b>Second stage contact rating</b>	- 5 to 30VDC 1A Amp maximum for each
<b>Extract contact rating</b>	- 5 to 30VDC 1A Amp maximum for each
<b>Zone quiescent current</b>	- 0mA minimum, 2mA maximum
<b>Terminal capacity</b>	- 0.5mm <sup>2</sup> to 2.5mm <sup>2</sup> solid or stranded wire
<b>Number of detectors per zone</b>	- Dependent on type - typically 20
<b>Number of sounders per circuit</b>	- Dependent on type and current consumption - typically 20+
<b>Detection circuit end of line</b>	- 6K8 +/- 5% ½ Watt resistor
<b>Monitored input end of line</b>	- 6K8 +/- 5% ½ Watt resistor
<b>Sounder circuit end of line</b>	- 10K +/- 5% ¼ Watt resistor
<b>Extinguishant output end of line</b>	- 1N4004 Diode
<b>No. of detection circuits</b>	- Two to eight. 21 to 28V DC
<b>No. of sounder circuits</b>	- Dependent on model 21 to 28V DC
<b>Extinguishant release output</b>	- 21 to 28V DC. Fused at 1 Amp
<b>Extinguishant release delay</b>	- Adjustable 0 to 60 seconds (+/- 10%)
<b>Extinguishant release duration</b>	- Adjustable 60 to 300 seconds
<b>SIL, AL, FLT, RST inputs</b>	- Switched -ve, min resistance 0 ohms, max resistance 100 Ohms
<b>Zone normal threshold (Allowable EOL)</b>	- 10K ohm to 2K ohm
<b>Detector alarm threshold</b>	- 1K ohms to 390 ohms
<b>Call point alarm threshold</b>	- 370 ohms to 150 ohms
<b>Short circuit threshold</b>	- 130 ohms to 0 ohms
<b>Head removal condition</b>	- 15.5 to 17.5 volts
<b>Cabling</b>	- FP200 or equivalent (max capacitance 1uF max inductance 1 mH)
<b>Monitored inputs normal threshold (Allowable EOL)</b>	- 10K ohm to 2K ohm
<b>Monitored inputs alarm threshold</b>	- 2K ohms to 150 ohms +/- 5%
<b>Monitored inputs Short circuit threshold</b>	- 140 ohms to 0 ohms +/- 5%
<b>Status unit/Ancillary board connection</b>	- Two wire RS485 connection (EIA-485 specification)
<b>Status unit power output</b>	- 21 to 28V DC. Fused at 500mA with electronic fuse