



BS-EN12094-1  
KM 96761

# Sigma XT+

## Multi-Area Extinguishant Control Panels

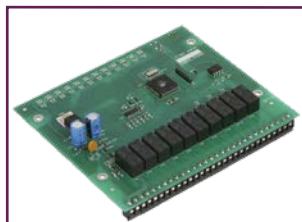


### Product Overview

- Sigma XT+ control panels are multi-area extinguishant control panels complying with EN12094-1, EN54-2 and EN54-4. 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 and DS48.
- For compatible status units see Sigma Si data sheet DS41.

### Features

- Approved to EN12094-1, EN54-2 and EN54-4
- 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)



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>Construction</b>                                      | - 1.2mm mild sheet steel   |
| <b>IP Rating</b>   | - IP30   |
| <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>Weight</b>  | - 8kg (standard panel)   |
| <b>Mains supply</b>                                      | - 230V AC, 50Hz +10% - 15% (100 Watts maximum)                       |
| <b>Mains supply fuse</b>                                 | - 1.6 Amp ( F1.6A L250V)   |
| <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>        | - 5.25 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)<br>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                  |