



BS-EN12094-1  
KM 96761

# SIGMA XT+

## Multi-Area Extinguishant Control Panels

### 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
- ▶ 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.



### Description

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 datasheet DS39 and DS48.

For compatible status units see Sigma Si datasheet DS41.

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

## Specification

|  |   |
|--|---|
| Construction                           | 1.2mm mild sheet steel  |
| IP Rating                              | IP30  |
| Finish                                 | Epoxy powder coated   |
| Colour- lid & box                      | BS 00 A 05 grey - fine texture                                  |
| Colour- controls plate & labels        | RAL 7047 light grey - satin                                     |
| Weight                                 | 8kg (standard panel)  |
| Mains supply                           | 230V AC, 50Hz +10% - 15% (100 watts maximum)                    |
| Mains supply fuse                      | 1.6 Amp (FL.6A L250V)   |
| Power supply rating (1 & 2 area units) | 3 Amps total total including battery charge 28V +/- 2V          |
| Power Supply rating (3 & 4 area units) | 5.25 Amps including battery charge 28v +/- 2V                   |
| Maximum ripple current                 | 200 millivolts  |
| Battery charge voltage                 | 27.6VDC nominal (temperature compensated)                       |
| Battery charge current                 | 0.7A maximum  |
| Battery fuse                           | 20mm, 3.15A glass   |
| Current draw in mains fail condition   | 54 milliamps per module   |
| Max. current draw from batteries       | 3A (K21021, K21041, K21042, K21081, K21082) 4A (K21083, 421084) |
| Sigma XT+ module Aux 24V output        | Fused at 500mA with electronic fuse - 1 per extinguishant area  |
| Sigma CP Aux 24V output                | Fused at 2.5A - not available to user                           |
| 1st and 2nd stage sounder outputs      | 21 to 28V DC Fused at 1A with electronic fuse                   |
| Fault relay contact rating             | 5 to 30VDC 1A Amp maximum for each                              |
| Fire relay contact rating              | 5 to 30VDC 1A Amp maximum for each                              |
| Local fire relay contact rating        | 5 to 30VDC 1A Amp maximum for each                              |
| First stage contact rating             | 5 to 30VDC 1A Amp maximum for each                              |
| Second stage contact rating            | 5 to 30VDC 1A Amp maximum for each                              |
| Extract contact rating                 | 5 to 30VDC 1A Amp maximum for each                              |
| Zone quiescent current                 | 0mA minimum, 2mA maximum  |
| Terminal capacity                      | 0.5mm <sup>2</sup> to 2.5mm <sup>2</sup> solid or stranded wire |
| Number of detectors per zone           | Dependent on type- typically 20                                 |
| Number of sounders per circuit         | Dependent on type and current consumption- typically 20+        |
| Detection circuit end of line          | 6K8 +/- 5% 1/2 Watt resistor                                    |
| Monitored input end of line            | 6K8 +/- 5% 1/2 Watt resistor                                    |
| Sounder circuit end of line            | 10K +/- 5% 1/4 Watt resistor                                    |
| Extinguishant output end of line       | 1N4004 Diode  |
| No. of detection circuits              | Two to eight. 21 to 28V DC                                      |
| No. of sounder circuits                | Dependent on model 21 to 28V DC                                 |
| Extinguishant release output           | 21 to 28V DC. Fused at 1 Amp                                    |
| Extinguishant release delay            | Adjustable 0 to 60 seconds (+/- 10%)                            |
| Extinguishant release duration         | Adjustable 60 to 300 seconds                                    |
| SIL, AL, FLT, RST inputs               | Switched -ve, min resistance 0 ohms, max resistance 100 ohms    |

## Specification

|   |   |
|---|---|
| Zone normal threshold (Allowable EOL)             | 10K ohm to 2K ohm   |
| Detector alarm threshold                          | 1K ohms to 390 ohms   |
| Call point alarm threshold                        | 370 ohms to 150 ohms  |
| Short circuit threshold                           | 130 ohms to 0 ohms  |
| Head removal condition                            | 15.5 to 17.5 volts  |
| Cabling   | FP200 or equivalent (max capacitance 1uF max inductance 1 mH) |
| Monitored inputs normal threshold (Allowable EOL) | 10K ohm to 2K ohm   |
| Monitored inputs alarm threshold                  | 2K ohms to 150 ohms +/- 5%                                    |
| Monitored inputs short circuit threshold          | 140 ohms to 0 ohms +/- 5%                                     |
| Status unit/ Ancillary board connection           | Two wire RS485 connection (EIA-485 specification)             |
| Status unit power output                          | 21 to 28V DC. Fused at 500mA with electronic fuse             |