



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 ² to 2.5mm ² 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