

Description

The FyreLine type EF-ZI01 has been designed as an optional low power single zone interface unit for exclusive use in conjunction with up to 2000m/650ft of the proline type “TH” digital linear heat sensor cable range. The unit can be powered either by the central fire alarm control panel loop (12-36Vdc) or from a dedicated (18-36Vdc) supply. The back light and RS232 option are disabled when using the Central Fire Alarm Control Panel loop to provide the EF-ZI01 operating supply, due to limitation in available power from the loop.

The LCD display will indicate the abbreviation: “STBY” with a continuous GREEN back light to confirm supply available and normal operating condition status for the interface, its associated type “TH” digital linear heat sensor cable and non heat sensitive inter-connecting cable where used.

Under open circuit FAULT conditions the display will change to read “HIGH or OPEN” (depending on the version) and the GREEN back light will flash.

In an alarm state, the backlit display will change in colour from GREEN to RED, and visually indicate alternating non-latching “FIRE” and an “xxxx” message (where “xxxx” indicates the location of the alarm along the heat sensor cable in feet or metres). The FIRE signal WILL be latched at the Central Fire Alarm Control Panel to which the interface has been connected.

Where non heat sensitive cable is installed (as between the sensor cable protected risk area and remotely installed interface unit) the electrical resistance of any interconnecting cable can be zero offset during site commissioning by way of a single “push button” operation.

In the event interconnecting cable is installed in lengths with electrical resistance in excess of the allowed 50 ohms, the LCD display will register “CABLE” with a flashing green back light as a calibration error signal.

General

The FyreLine single “zone” OPTIONAL interface unit type EF-ZI01 provides end user customers with:

- Alarm Point Location
- Colour coded LCD display
- Volt free contact output signalling for fire & fault conditions – with RS232 serial link (model ZI-01RS only)
- Ease of Integration with Central Fire Alarm Control and Building Management Panels

Hazardous Area Use

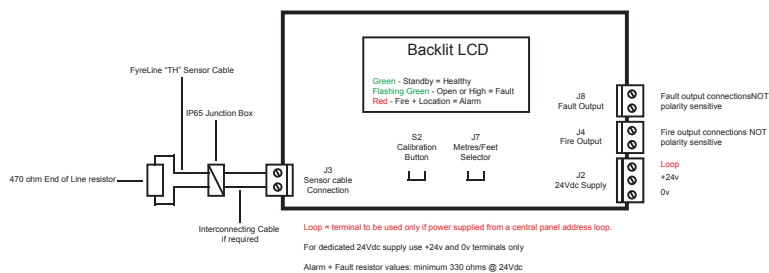
EF-ZI01 and EF-ZI01RS interface units MUST be installed within a site designated “SAFE” area – using short term fire-proof interconnecting cable between the interface and hazardous area installed Eexe junction box and “TH” linear heat sensor cable.

An MTL 7758+ zener barrier – ATEX approval BAS01ATEX7217/EX01E2219/3010737 is to be connected between the EF-ZI01 or EF-ZI01RS sensor cable connection terminals and interconnecting/linear heat sensing cable.

Features	
Single zone monitoring	2,000m (6500ft) FyreLine type "TH" digital linear heat sensor cable
Alarm point location	Displayed in metres or feet
Coloured coded back lit lcd display	Green to Red (Alarm)
Solid-state volt-free contact outputs	Alarm and Fault (Fault contacts N/C or N/O-C-N/C to be specified on order)
2 part terminal blocks	For ease of wire connection in restricted locations
Where necessary, interconnection cabling can be used	Max. 50 ohms resistance
IP65 rated enclosure	NEMA 4X equivalent
May be powered from Central Fire Alarm Control Panel loop or dedicated 24Vdc supply	Back lit display will not operate with Loop Power – insufficient current available
EF-ZI01RS version provides RS232 serial interface	Repeat onto customer panel or PC of information displayed on LCD
Tested to EN61000-6-2; 2001 and EN61000-6-3; 2001	For emissions and immunity
Certificate MTL02ATEX7700CX	ATEX II3 when used with MTL 7758+ zener barrier

Specification	
Supply	Current limited from central panel loop OR dedicated nominal 24Vdc input
Operating Currents	Loop Supply: 1.2mA @ 24Vdc – RS232 option incl:)
Alarm Current	ZI-01: Maximum 15mA @ 24Vdc
Monitoring current on associated "TH" sensor cable	ZI-01RS: Maximum 40mA @ 24Vdc
On board surge/transient/EMC and EMI protection	3ma @ 1V
Tested to EN61000-6-2; 2001 and EN61000-6-3; 2001	
Read out in Metric or Imperial units	For emissions and immunity
Solid-state volt-free output contacts	Jumper J7 setting
Fault monitoring either N/C contacts (open on fault)	FIRE and FAULT: 250 ohms/Max 60Vdc/100ma
Over current/voltage protected	N/C contacts (open on fault) or N/O – C – N/C contacts (requirements to be specified on order)
Ambient Temperature Range	
Humidity	0°C to +70°C
Enclosure dimensions in mms	Max 95%
Unit Weight (gross)	120 (H) x 200 (W) x 75(D)
	2kgs

EF-ZI01 Interface Connection Diagram



EF-ZI01RS Interface Connection Diagram

