

Galvanic Isolator

Y72221

Instruction Sheet

R10084GB0

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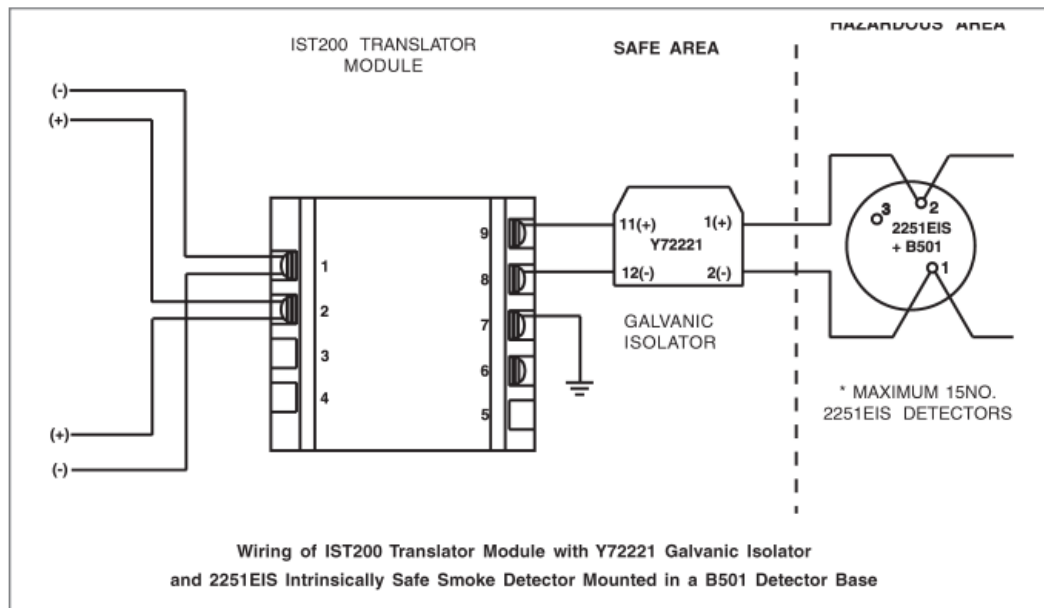
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1 Galvanic Isolator Y72221

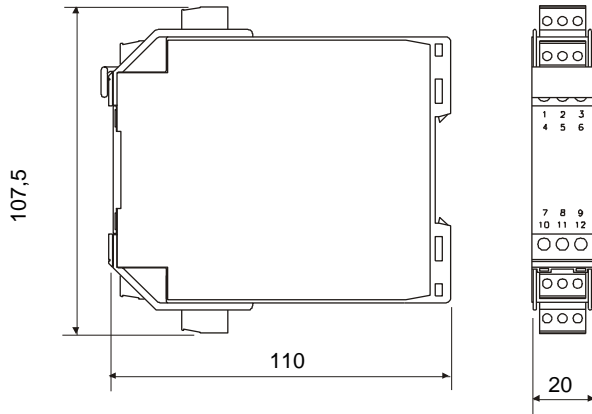
The Y72221 Galvanic Isolator (FFS06710247) is a single channel isolated repeater. It is suitable for use as an intrinsically safe isolator between an IST200 translator module and up to a maximum of 15 x 2251EIS intrinsically safe photoelectric smoke sensors. The Y72221 is designed to transfer a DC current from a safe area to the hazardous area load, from a 24V DC nominal voltage. An AC signal ranging from 0.6 to 24V will then be transferred, allowing communication to the 2251EIS sensors in the hazardous area.

We would recommend the use of the Y72221 with all installations of 2251EIS sensors. We do not recommend the use of zener barriers, as they need to be tied to a high integrity earth, which can lead to earth fault indications on some Fire Control Panels. Please refer to the Fire Control Panel manufacturer for compatibility information. The Y72221 is certified intrinsically safe to EEx ia IIC, (Baseefa00ATEX087X).

The Y72221 is suitable for DIN rail mounting and can therefore be mounted within any electrical box with suitable DIN rail.



1.1 Architect/Engineer Specifications



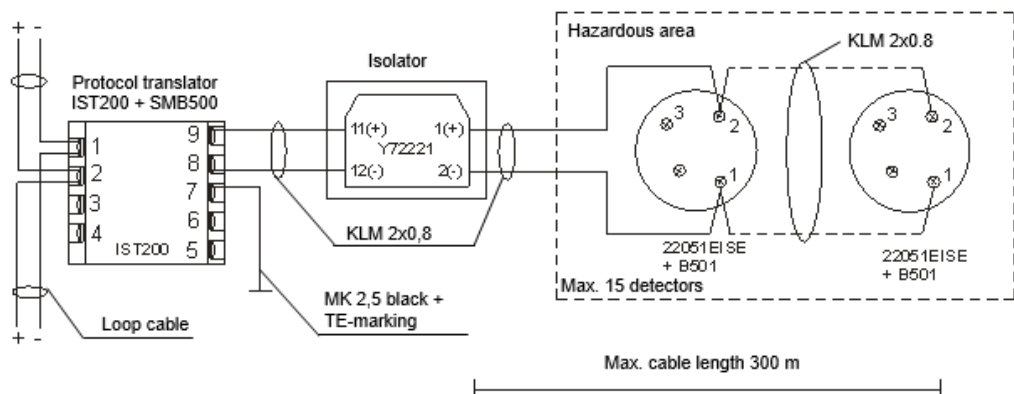
1.2 Wiring

The capacitance and inductance or inductance/resistance (L/R) ratio of the cable connected to the hazardous area between the 22051EISE base's (B501) power terminals (1 and 2) must not exceed the following values:

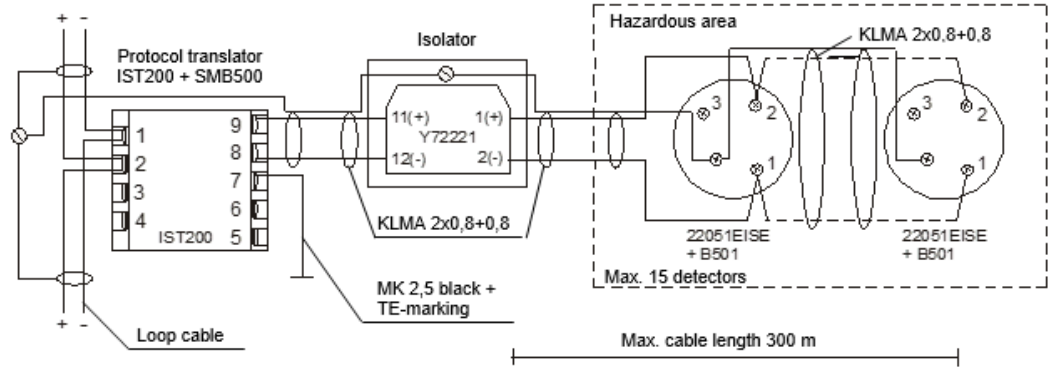
Group	Capacitance (µF)	Inductance (mH)	L/R Ratio (µH/ohm)
IIC	0.083	4.2	55
IIB	0.65	12.6	210
IIA	2.15	33.6	444

Maximum number of 22051EISE detectors connected to one IST200 = 15. Maximum cable length of the IS circuit = 300 m. This assumes a cable capacitance no greater than 260pF/m and a maximum wiring resistance of 40 ohms from the barrier output to the end of the IS loop.

1.3 Non shielded cable



1.4 Shielded cable



Note!

Hazardous area loop is a branch of the addressable loop.
 Remote indicator can not be connected to 22051EISE detectors.