TSDI-16UNI

Safe digital input FTA (24/48 Vdc, NAMUR, 16 channels)

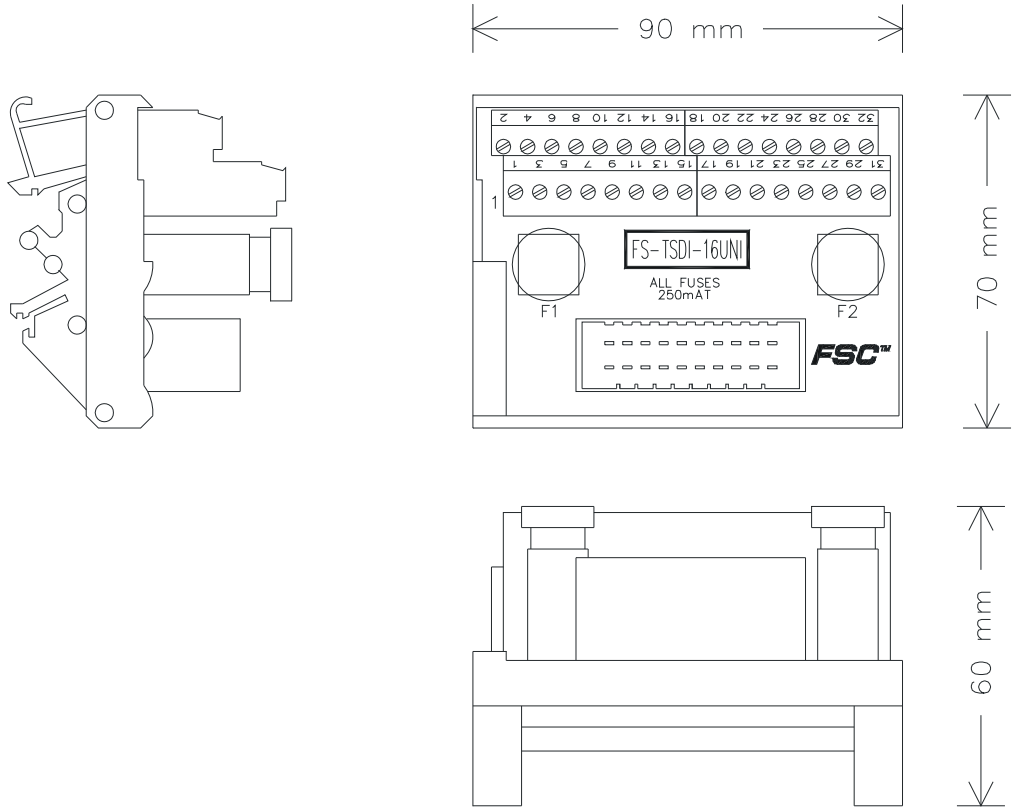
Description

Field termination assembly module TSDI-16UNI is the interface between system interconnection cable SICC-0001/Lx and the external field wiring (screw terminals).

Sixteen channels (separated into two groups of eight channels with a 250 mA fuse in the common +) can be connected to the TSDI-16UNI module via a system interconnection cable (SICC-0001/Lx). This cable is plugged into the SIC connector on the FTA module, and connects to a (redundant pair of) SDIL-1608 module(s).

The FTA module has a universal snap-in provision for standard DIN EN rails, and screw terminals for connecting field wiring.

Figure 304 Mechanical layout



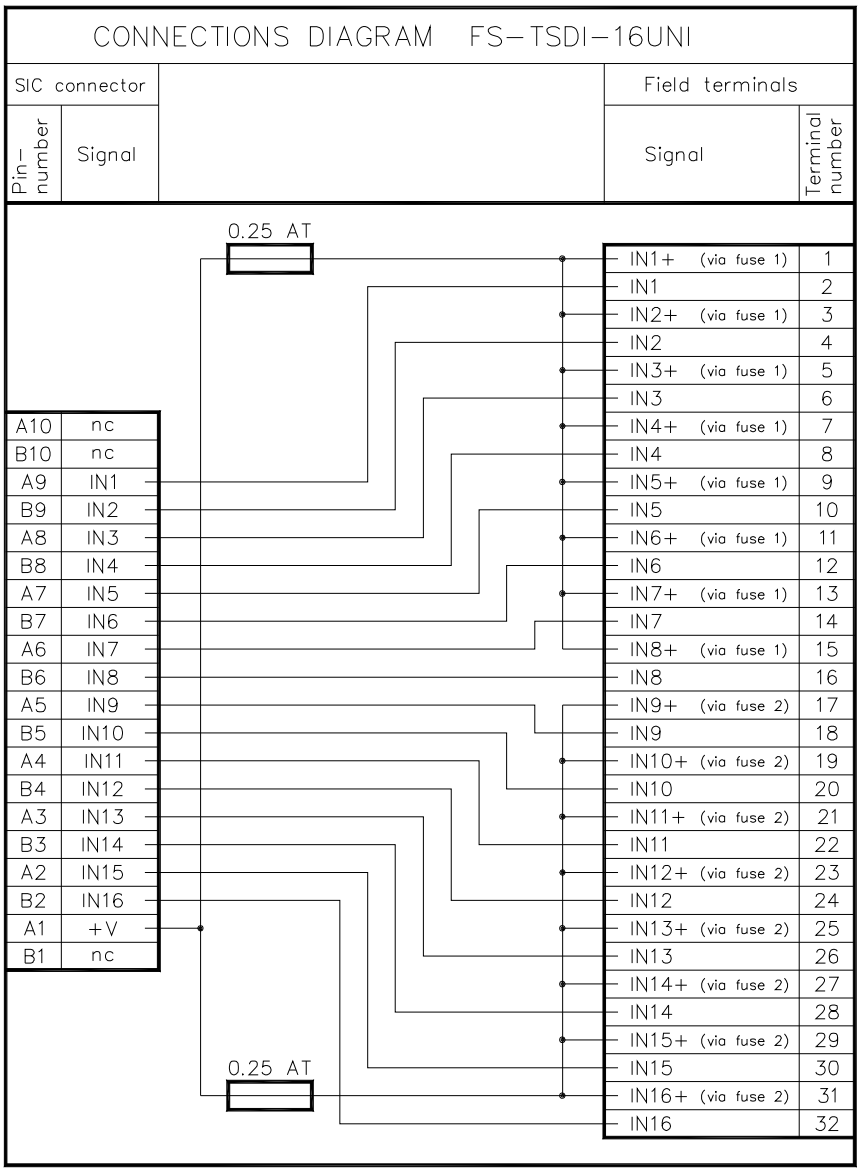
Applications

For details on applications and connection options for the TSDI-16UNI module see section “SICC-0001/Lx” on page 715.

Connections

The connections diagram of the TSDI-16UNI module is as follows:

Figure 305 Connections diagram



Technical data

The TSDI-16UNI module has the following specifications:

General	Type numbers[1] :	FS-TSDI-16UNI
		FC-TSDI-16UNI
	Approvals:	CE, TUV, UL, CSA, FM
Power	Number of channels:	16 (2 groups of 8)
	Maximum voltage:	50 Vdc – IEC 61010-1 (1990), over voltage category 3 (Table D.12) 150 Vdc – IEC 61010-1 (1990), over voltage category 2 (Table D.10)
	Actual maximum voltage defined by the connected input module	
Physical	Module dimensions:	90 × 70 × 60 mm (L × W × H) 3.54 × 2.76 × 2.36 in (L × W × H)
	DIN EN rails:	TS32 / TS35 × 7.5
	Used rail length:	91 mm (3.58 in)
Fuse	Rating:	250 mAT (slow-acting)
	Dimensions:	5 × 20 mm (0.2 × 0.79 in)
Termination	Screw terminals:	
	• Max. wire diameter	2.5 mm² (AWG 14)
	• Strip length	7 mm (0.28 in)
	• Tightening torque	0.5 Nm (0.37 ft.-lb.)

1 FS-type modules are non conformal coated modules.
FC-type modules are conformal coated modules.

TSDI-1624C

Safe current-limited digital input FTA (24 Vdc, 16 channels)

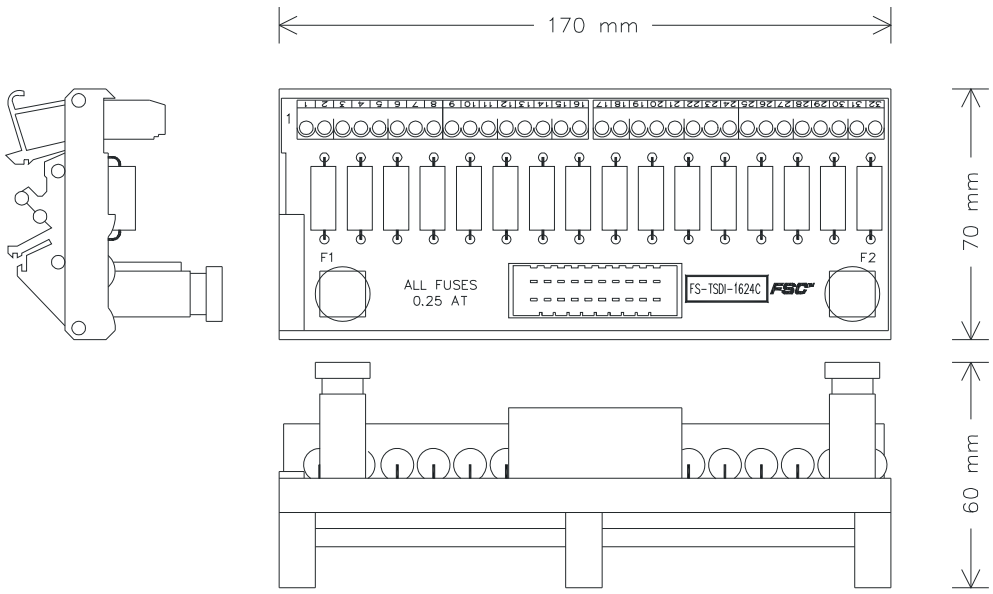
Description

Field termination assembly module TSDI-1624C is the interface between system interconnection cable SICC-0001/Lx and the external field wiring (screw terminals). It can be used for interfacing digital input signals from Class I, Division 2 Hazardous Locations.

Sixteen channels (separated into two groups of eight channels with a 250 mA fuse in the common +) can be connected to the TSDI-1624C module via a system interconnection cable (SICC-0001/Lx). This cable is plugged into the SIC connector on the FTA module, and connects to a (redundant pair of) SDI-1624 module(s).

The FTA module has a universal snap-in provision for standard DIN EN rails, and screw terminals for connecting field wiring.

Figure 306 Mechanical layout



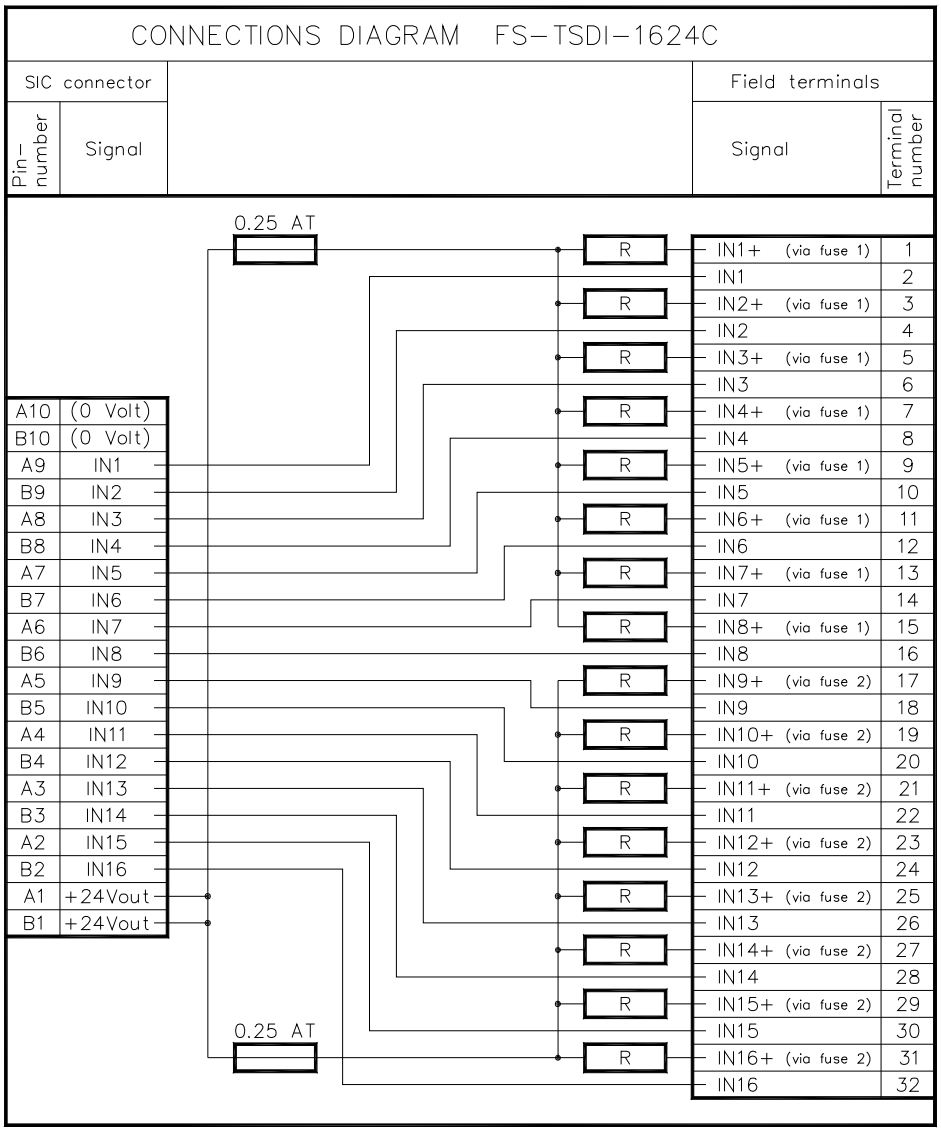
Applications

For details on applications and connection options for the TSDI-1624C module, see section “SICC-0001/Lx” on page 715.

Connections

The connections diagram of the TSDI-1624C module:

Figure 307 Connections diagram



Technical data

The TSDI-1624C module has the following specifications:

General	Type numbers[1] :	FS-TSDI-1624C
		FC-TSDI-1624C
	Approvals:	CE, TUV, UL, CSA, FM
Input	Number of input channels:	16 (2 groups of 8)
	Input voltage:	24 Vdc, –15%—+30%
	Input current:	≤ 15 mA at 24 Vdc (with a redundant pair of safe digital input modules SDI-1624 as load)
	Igniting current per channel:	< 100 mA at 24 Vdc +30%
Physical	Module dimensions:	170 × 70 × 60 mm (L × W × H) 6.69 × 2.76 × 2.36 in (L × W × H)
	DIN EN rails:	TS32 / TS35 × 7.5
	Used rail length:	171 mm
Fuse	Rating:	250 mAT (slow acting)
	Dimensions:	5 × 20 mm (0.2 × 0.79 in)
Termination	Screw terminals:	
	• Max. wire diameter	2.5 mm² (AWG 14)
	• Strip length	7 mm (0.28 in)
	• Tightening torque	0.5 Nm (0.37 ft.-lb.)
Field signal specifications for non-incendiary field circuits to Class 1 Division 2	Max. closed loop resistance:	250 Ω
	Min. open loop resistance:	15 kΩ
	HYDROGEN (Group A & B):	
	• Max. loop inductance	8 mH
	• Max. loop capacitance	0.3 µF
	NON-HYDROGEN (Group C & D):	
	• Max. loop inductance	22 mH
	• Max. loop capacitance	7 µF

1 FS-type modules are non conformal coated modules.
FC-type modules are conformal coated modules.