

TRO-0824

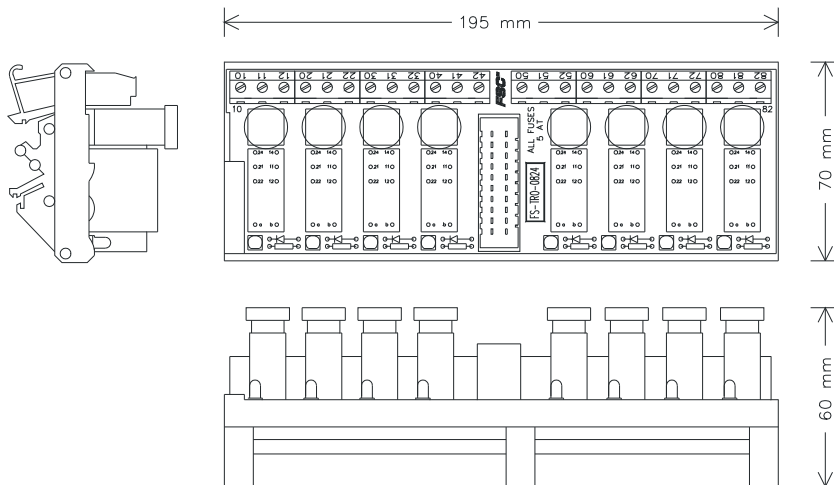
Non-safe dry digital output FTA (8 channels, NO/NC)

Description

Field termination assembly module TRO-0824 is the interface between system interconnection cable SICC-0001/Lx and external field wiring (screw terminals). It has eight non-safe potential-free relay changeover contacts (NO/NC). The energized relay state is indicated by a LED on the module. You can connect up to eight channels to TRO-0824 via the 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) SDO-0824 module(s).

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

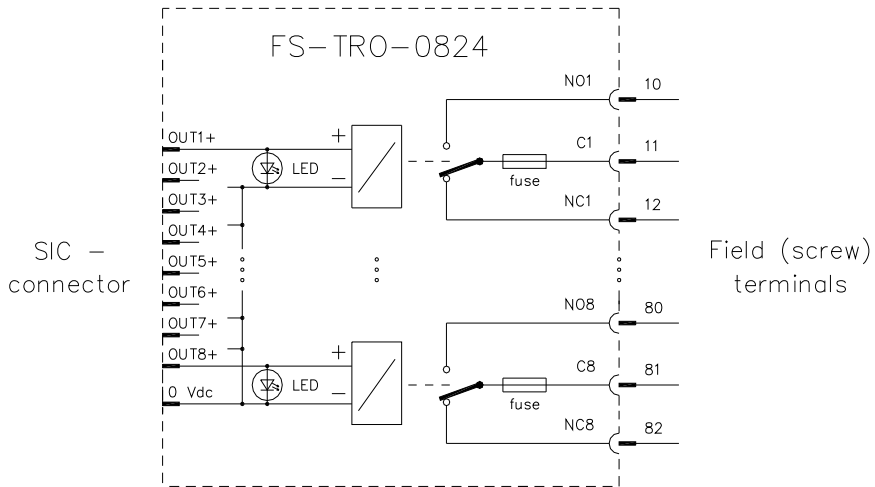
Figure 404 Mechanical layout



Each channel consists of:

- One relay
- A changeover contact with a fused (5 AT) common
- A status indicator LED

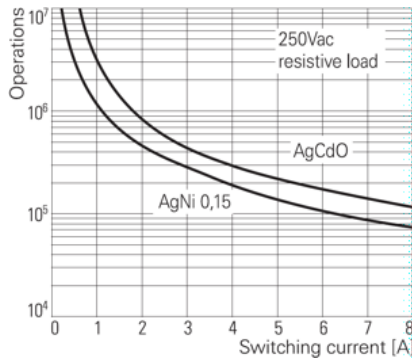
Figure 405 Schematic diagram



Relay life

The electrical life of the relays heavily depends on the contact rating the relay is exposed to. Figure 406 on page 652 shows the expected relay life versus contact current.

Figure 406 Life curve of the applied relays



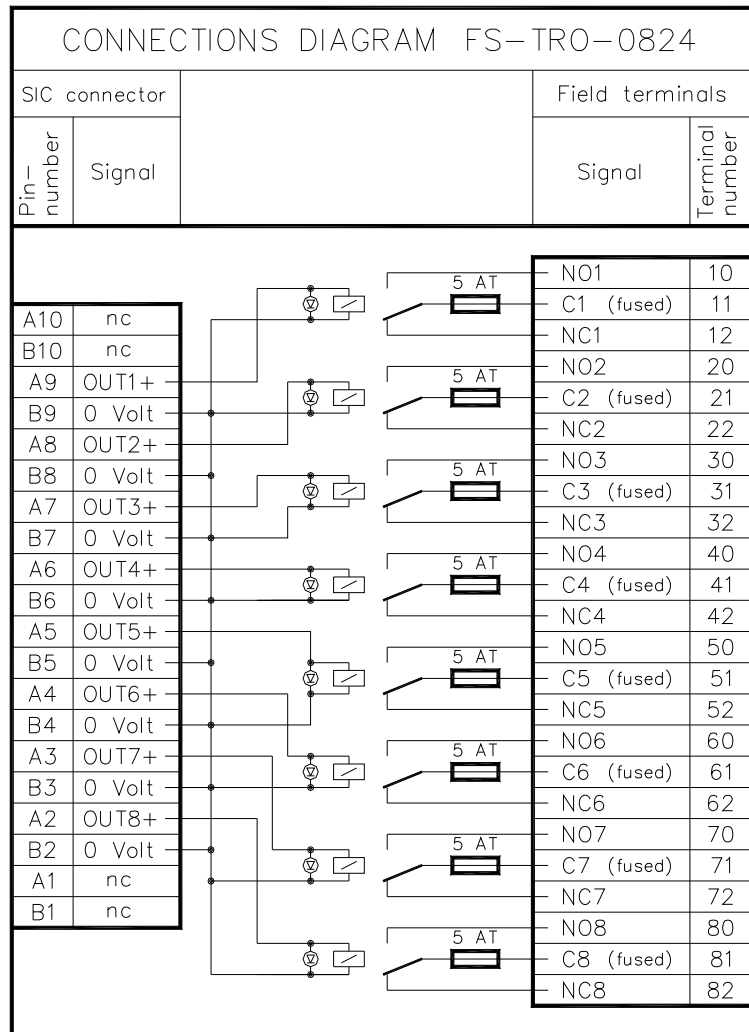
Applications

For details on applications and connection options for TRO-0824, see “SICC-0001/Lx” on page 715.

Connections

The connections diagram of the TRO-0824 module:

Figure 407 Connections diagram



Technical data

The TRO-0824 module has the following specifications:

General	Type numbers ¹ :	FS-TRO-0824
		FC-TRO-0824
	Approvals:	CE, UL, TUV, CSA
Input	Nominal input voltage:	24 Vdc
	Max. input voltage:	31 Vdc
	Relay cut-in voltage:	19 Vdc
	Input current:	typically 27 mA at 24 Vdc
Output	Number of output channels:	8
	Max. output current:	5 A
	Max. output voltage:	250 Vac / 300 Vdc
	Max. switched load:	1250 VA / 150 W at 30 Vdc (see Figure 408 on page 655)
Fuses	Rating:	5 AT (slow-acting)
	Dimensions	5 × 20 mm (0.20 × 0.79 in)
Physical	Module dimensions:	195 × 70 × 60 mm (L × W × H) 7.68 × 2.76 × 2.36 in (L × W × H)
	DIN EN rails:	TS32 / TS35 × 7.5
	Used rail length:	196 mm (7.72 in)
Termination	Screw terminals:	
	• Max. wire diameter	2.5 mm ² (AWG 14)
	• Strip length	7 mm (0.28 in)
	• Tightening torque	0.5 Nm (0.37 ft.-lb.)

Relay contacts	Max. current:	8 A
	Max. switched voltage:	250 Vac / 300 Vdc
	Max. switched load:	2000 VA / 192 W at 24 Vdc (see Figure 408 on page 655)
	Max. switching frequency:	20 Hz
	Expected life:	See Figure 406 on page 652
	Isolation:	
	• Coil to contact	4000 Vac
	• Contact to contact	1000 Vac
	Ambient temperature:	-40°C—+70°C (-40°F—+158°F)
Contact material:	Silver-cadmium oxide (AgCdO)	

- 1 FS-type modules are non conformal coated modules.
 FC-type modules are conformal coated modules. Conformal coated modules have the letters "CC" preceding the version number.

Figure 408 Maximum DC switched power curve for TRO-0824 module

