

SAFETY RELAY MODULES

SAFETY RELAY MODULES 6 Pole Relays, 8 or 10 Amps

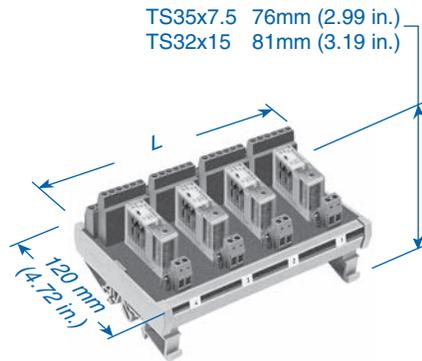
Altech Safety Relay Modules utilize Relays with Force-Guided-Contacts that meet or exceed international standards, TÜV and UL. They are designed to protect man and machine as specified in OSHA CFR1910 Regulations, which is a mandatory requirement of the European Machinery Directive EMD 89.392 EEC.

Altech Safety Relays are electro-mechanical relays that are mechanically linked together, causing all contacts to move together when the coil is energized. Force-Guided-contacts are also known as positive-guided-contacts, captive contacts or locked contacts. In addition, our Safety Relays have Crown Contacts which provides two locations per contacts to improve switching conditions. The Safety Relays are used in Safety Devices such as Emergency Stop Modules, Safety Gate Monitors, 2-Hand Safety Modules, Safety Light Curtains, etc.

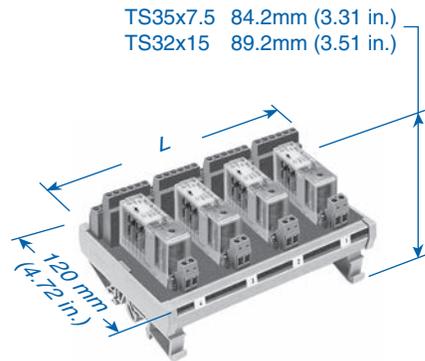
This series of Safety Relay Modules consist of 6 pole relays with three configuration choices (2NO+4NC, 3NO+3NC, 4NO+2NC), 8 or 10 Amp contacts and either 1, 2 and 4 isolated channels with 12 or 24 VDC coils. Isolated channels allow control of each relay by a different logic system, if necessary. There are two inputs for each relay coil channel. Modules can ordered with three contact materials, dependent upon the actual current load. The standard contact material is $\text{AgSnO}_2 + 0.2\mu\text{mAu}$.

- Screw-Cage clamp Connections
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression With DC Coil
- Din Rail Mount, Panel Mount Available

6 Pole, 8 Amps



6 Pole, 10 Amps



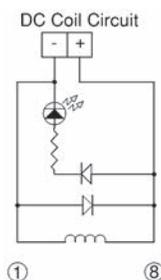
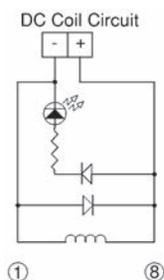
Ordering Information	Length (L) mm (in.)	Contact Material*: $\text{AgSnO}_2 + 0.2\mu\text{mAu}$			Contact Material*: $\text{AgSnO}_2 + 0.2\mu\text{mAu}$		
		Contact Ratings: 8A(2x5A) 250VDC, 400VAC			Contact Ratings: 10A(2x5A) 250VDC, 400VAC		
		2N.O + 4N.C	3N.O + 3N.C	4N.O + 2N.C	2N.O + 4N.C	3N.O + 3N.C	4N.O + 2N.C
Type/ Cat. No.		Type/ Cat. No.	Type/ Cat. No.	Type/ Cat. No.	Type/ Cat. No.	Type/ Cat. No.	Type/ Cat. No.
1 Channel, Coil Voltage 12V 24V	46.45 (1.83)	156.0A12.1224C	156.0A12.1233C	156.0A12.1242C	156.0A02.1224C	156.0A02.1233C	156.0A02.1242C
		156.0A12.2424C	156.0A12.2433C	156.0A12.2442C	156.0A02.2424C	156.0A02.2433C	156.0A02.2442C
2 Channel, Coil Voltage 12V 24V	90.90 (3.58)	256.0A12.1224C	256.0A12.1233C	256.0A12.1242C	256.0A02.1224C	256.0A02.1233C	256.0A02.1242C
		256.0A12.2424C	256.0A12.2433C	256.0A12.2442C	256.0A02.2424C	256.0A02.2433C	256.0A02.2442C
4 Channel, Coil Voltage 12V 24V	179.80 (7.08)	456.0A12.1224C	456.0A12.1233C	456.0A12.1242C	456.0A02.1224C	456.0A02.1233C	456.0A02.1242C
		456.0A12.2424C	456.0A12.2433C	456.0A12.2442C	456.0A02.2424C	456.0A02.2433C	456.0A02.2442C

* Note: Additional relay contact materials are available upon request. Please contact Altech for additional information.

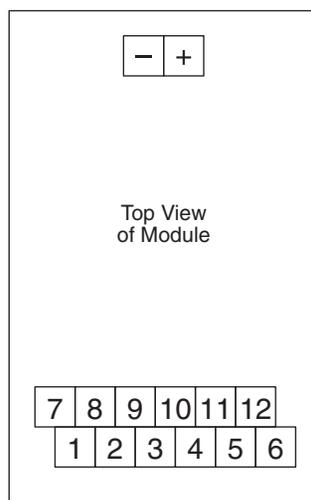
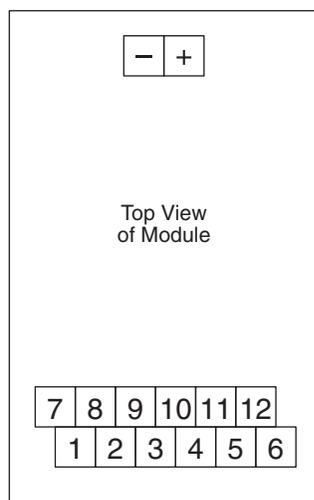
6 Pole, 8 Amps

6 Pole, 10 Amps

DC Coil Circuits



Contact Circuits



Relay Configurations

2N.0 + 4N.C
 NO Pin (1,2), (7,8)
 NC Pin (3,4), (5,6), (9,10), (11,12)

3N.0 + 3N.C
 NO Pin (1,2), (7,8), (9,10)
 NC Pin (3,4), (5,6), (11,12)

4N.0 + 2N.C
 NO Pin (1,2), (3,4), (7,8), (9,10)
 NC Pin (5,6), (11,12)

Relay Configurations

2N.0 + 4N.C
 NO Pin (5,6), (11,12)
 NC Pin (1,2), (3,4), (7,8), (9,10)

3N.0 + 3N.C
 NO Pin (3,4), (5,6), (11,12)
 NC Pin (1,2), (7,8), (9,10)

4N.0 + 2N.C
 NO Pin (3,4), (5,6), (9,10), (11,12)
 NC Pin (1,2), (7,8)

Relay Specifications - 8 Amps

-Normal Coil Voltage: 12,24 VDC
 -Coil Power Dissipation: 0.8-1.0 W
 -Max. Switching Voltage: 250VDC, 400VAC
 -Max. Switching Current: 8A

-Max. Switching Power
 DC 200W (2x160W simultaneous)
 AC 2000VA (2x1250VA simultaneous)

-Contact Switching Rate: 10 operations/ sec.
 -Relay Operate Time \leq 20 ms
 -Relay Release Time \leq 6 ms
 -Contact Arrangements 2NO/4NC, 3NO/3NC, 4NO/2NC

-Contact Material:
 Standard AgSnO₂+0.2 μ mAu
 Optional AgNi10+0.2 μ mAu
 AgNi10+5 μ mAu

-Mechanical Life: \geq 50x10⁶ operation cycles
 -Ambient Temperature: -40° + 85°C
 -Cover Material: Thermoplast
 -Weight: 38g

Coil Specifications

Rated Voltage	Voltage Range	Coil Resistance
12VDC	8.4V-16.8V	145 Ω \pm 10%
24VDC	16.8V-33.6V	600 Ω \pm 10%

Relay Specifications - 10 Amps

-Normal Coil Voltage: 12,24 VDC
 -Coil Power Dissipation: 1.0 W
 -Max. Switching Voltage: 250VDC, 400VAC
 -Max. Switching Current: 10A

-Max. Switching Power
 DC 240W
 AC 2500VA

-Contact Switching Rate: 10 operations/ sec.
 -Relay Operate Time \leq 27 ms
 -Relay Release Time \leq 5 ms
 -Contact Arrangements 2NO/4NC, 3NO/3NC, 4NO/2NC

-Contact Material:
 Standard AgSnO₂+0.2 μ mAu
 Optional AgNi10+0.2 μ mAu
 AgNi10+5 μ mAu

-Mechanical Life: $>$ 30x10⁶ operation cycles
 -Ambient Temperature: -40° + 80°C
 -Cover Material: Thermoplast
 -Weight: 85g

Coil Specifications

Rated Voltage	Voltage Range	Coil Resistance
12VDC	8.4V-19.2V	140 Ω \pm 10%
24VDC	16.8V-38.4V	570 Ω \pm 10%