SAFETY RELAY MODULES
4 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.

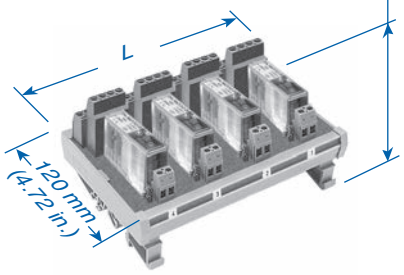
Altech Safety Relays are electro-mechanical relays that are mechanically linked together, causing all contacts to move together when the coil is energized. Force-Guided-contacts are also known as positive-guided-contacts, captive contacts or locked contacts. In addition, our Safety Relays have Crown Contacts which provide 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 4 pole relays with two choices of configurations (2NO/2NC or 3NO/1NC), with 8 or 10 Amp contacts, and are available as 1,2, and 4 isolated channels with 12, or 24 VDC coils. Isolated channels allows control of each relay by a different logic system, if necessary. There are two inputs for each relay coil per channel. Safety Relay Modules may be ordered with three different types of relay contact material, depending on the actual load current. The part numbers shown in this data sheet are for our standard contact material, which is $AgSn0_2$ + 0.2µmAu.

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

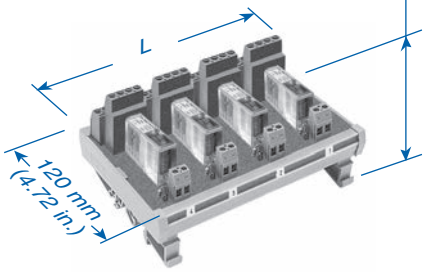
4 Pole, 8 Amp

TS35x7.5 76mm (2.99 in.)
TS32x15 81mm (3.19 in.)



4 Pole, 10 A

TS35x7.5 84.2mm (3.31 in.)
TS32x15 89.2mm (3.50 in.)



		Contact Material*: $AgSn0_2$ + 0.2µmAu Contact Ratings: 8A(2x5A) 250VDC,400VAC Contacts:		Contact Material*: $AgSn0_2$ + 0.2µmAu Contact Ratings: 10A(2x5A) 250VDC, 400VAC Contacts:	
Ordering Information	**Length (L) mm (in.)**	2N.O + 2N.C	3N.O + 1N.C	2N.O + 2N.C	3N.O +1N.C
		Type/ Cat. No.	**Type/ Cat. No.**	**Type/ Cat. No.**	**Type/ Cat. No.**
1 Channel, Coil Voltage	40.10 (1.58)				
12V		**156.0A11.1222C**	**156.0A11.1231C**	**156.0A01.1222C**	**156.0A01.1231C**
24V		**156.0A11.2422C**	**156.0A11.2431C**	**156.0A01.2422C**	**156.0A01.2431C**
2 Channel, Coil Voltage	78.20 (3.08)				
12V		**256.0A11.1222C**	**256.0A11.1231C**	**256.0A01.1222C**	**256.0A01.1231C**
24V		**256.0A11.2422C**	**256.0A11.2431C**	**256.0A01.2422C**	**256.0A01.2431C**
4 Channel, Coil Voltage	154.40 (6.08)				
12V		**456.0A11.1222C**	**456.0A11.1231C**	**456.0A01.1222C**	**456.0A01.1231C**
24V		**456.0A11.2422C**	**456.0A11.2431C**	**456.0A01.2422C**	**456.0A01.2431C**

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

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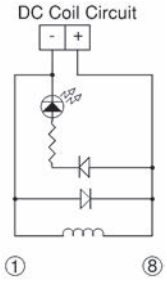
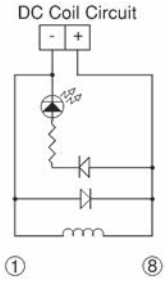
4 Pole, 8 Amps

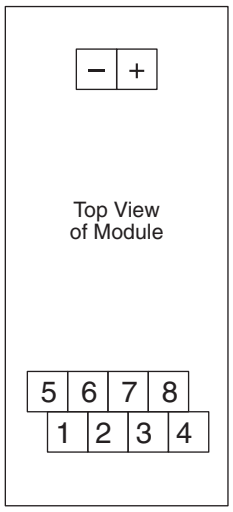
4 Pole, 10 Amps

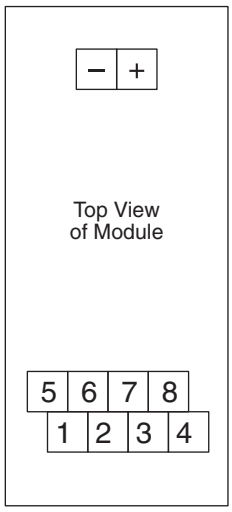
DC Coil Circuits





Contact Circuits





Relay Configurations
2 N.O + 2 N.C
NO Pin (1,2), (5,6)
NC Pin (3,4), (7,8)

3 N.O + 1 N.C
NO Pin (1,2), (5,6), (7,8)
NC Pin (3,4)

Relay Configurations
2 N.O + 2 N.C
NO Pin (3,4), (7,8)
NC Pin (1,2), (5,6)

3 N.O + 1 N.C
NO Pin (3,4), (5,6), (7,8)
NC Pin (1,2)

Relay Specifications - 8 Amps

-Normal Coil Voltage:	12,24 VDC
-Coil Power Dissipation:	0.6W
-Max. Switching Voltage:	250VDC, 400VAC
-Max. Switching Current:	8A
-Max. Switching Power:	
DC:	200W
AC:	2000VA
-Contact Switching Rate:	10 operations/ sec.
-Relay Operate Time:	≤ 20 ms
-Relay Release Time:	≤ 6 ms
-Contact Arrangements:	2NO/2NC, 3NO/1NC
-Contact Material:	
Standard:	$AgSnO_2$+0.2µmAu
Optional:	AgNi10+0.2µmAu
	AgNi10+5µmAu
-Mechanical Life:	≥ $50x10^6$ operation cycles
-Ambient Temperature:	-40°+ 85°C
-Cover Material:	Thermoplast
-Weight:	35g

Coil Specifications

Rated Voltage	Voltage Range	Coil Resistance
12VDC	8.4V-16.8V	240Ω ± 10%
24VDC	16.8V-33.6V	960Ω ± 10%

Relay Specifications - 10 Amps

-Normal Coil Voltage:	12,24 VDC
-Coil Power Dissipation:	0.75W
-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:	≤ 27 ms
-Relay Release Time:	≤ 5 ms
-Contact Arrangements:	2NO/2NC, 3NO/1NC
-Contact Material:	
Standard:	$AgSnO_2$+0.2µmAu
Optional:	AgNi10+0.2µmAu
	AgNi10+5µmAu
-Mechanical Life:	> $30x10^6$ operation cycles
-Ambient Temperature:	-40°+ 80°C
-Cover Material:	Thermoplast
-Weight:	78g

Coil Specifications

Rated Voltage	Voltage Range	Coil Resistance
12VDC	8.4V-19.2V	192Ω ± 10%
24VDC	16.8V-38.4V	770Ω ± 10%