




TIR

TRIP INDICATION RELAYS

- High Reliability
- Millisecond Actuation
- Low Coil Resistance
- Simple Installation
- Low Cost
- RoHS Compliant (Directive 2002/95/EC)
-  Recognized Models

The TIR relays are designed for event recording circuit applications, where high speed event monitoring is required. The TIR relay contacts are used to record breaker functions, relay, communication and control system operations. The TIR contacts are also used to activate alarm and/or annunciator contacts.












The E-MAX Trip Indication Relays detect the presence of current in power system circuit breaker trip coils. The TIR has a current coil designed for installation in circuit breaker trip coil circuits. The coil is designed for extreme overloads to ensure safe operation. The relay high-speed contact closure assures positive indication of breaker coil currents where slower speed devices may fail to actuate. Contact speed is 3 milliseconds or less.

All E-MAX TIRs are RoHS compliant. RoHS is the acronym for Restriction of Hazardous Substances. RoHS, also known as Directive 2002/95/EC, originated in the European Union and restricts the use of specific hazardous materials found in electrical and electronic products.

The TIR-1K operates identically to the TIR, but includes an internal 1k-ohm resistor in series with the relay contacts. This resistor limits inrush current due to the capacitors used for surge protection on the inputs of some monitoring devices.

All Trip Indication Relays are molded of rugged glass-filled polycarbonate having high dielectric strength and rigid terminal studs for ease in mounting and connection. Terminal to mounting surface insulation will withstand more than 2500 Vrms.

TIR ORDER INFORMATION

Part No.	Coil Parameters				Relay Rating			Contact Rating Switching
	Maximum Continuous Current (DC amps)	Operate Current (DC amps)	Maximum Resistance @25° C Ohms	Max Response Time (Msecs) Including Bounce	Breakdown Voltage (Vdc)	Switch Form	UL Recognized	
6319201	13.00	5.0	0.01	3.0	1000	C		100 W 3.0 A max. 500 Vdc
6319202	10.00	2.5	0.015	3.0	1000	C		
6319203	3.30	1.0	0.01	3.0	1000	C		
6319204	1.60	0.5	0.3	3.0	1000	C		
6319205	0.50	0.15	3.0	3.0	1000	C		
6319206	0.18	0.06	50.0	3.0	1000	C		
6319207	13.00	5.0	0.01	1.5	1000	A		50 W 2.5 A max. 1000 Vdc
6319208	10.00	2.5	0.015	1.5	1000	A		
6319209	3.30	1.0	0.1	1.5	1000	A		
6319210	1.60	0.5	0.3	1.5	1000	A		
6319211	0.50	0.15	3.0	1.5	1000	A		
6319212	0.18	0.06	50.0	1.5	1000	A		
6319213	13.00	5.0	0.01	1.0	600	A		50 W 2.0 A max. 250 Vdc
6319214	10.00	2.5	0.015	1.0	600	A		
6319215	3.30	1.0	0.01	1.0	600	A		
6319216	1.60	0.5	0.3	1.0	600	A		
6319217	0.50	0.15	3.0	1.0	600	A		
6319218	0.18	0.06	50.0	1.0	600	A		
6319219	13.00	5.0	0.01	0.5	500	A		50 W 1.0 A max. 250 Vdc
6319220	10.00	2.5	0.015	0.5	500	A		
6319221	3.30	1.0	0.1	0.5	500	A		
6319222	1.60	0.5	0.3	0.5	500	A		
6319223	0.50	0.15	3.0	0.5	500	A		
6319224	0.18	0.06	50.0	0.5	500	A		
6319228	0.18	0.02	90.0	0.5	500	A		
6319231	13.00	5.0	0.015	3.0	1000	2A		50 W 2.5 A max. 1000 Vdc
6319232	10.00	2.50	0.02	3.0	1000	2A		
6319233	3.30	1.0	0.15	3.0	1000	2A		
6319234	1.60	0.50	0.4	3.0	1000	2A		
6319235	0.50	0.15	4.0	3.0	1000	2A		
6319236	0.18	0.06	70.0	3.0	1000	2A		

Operating Temperature: 0° to 50° Centigrade
 Storage Temperature: -54° to 85° Centigrade
 Altitude Range: 0 to 50,000 feet
 Moisture Resistance: 95% Relative Humidity

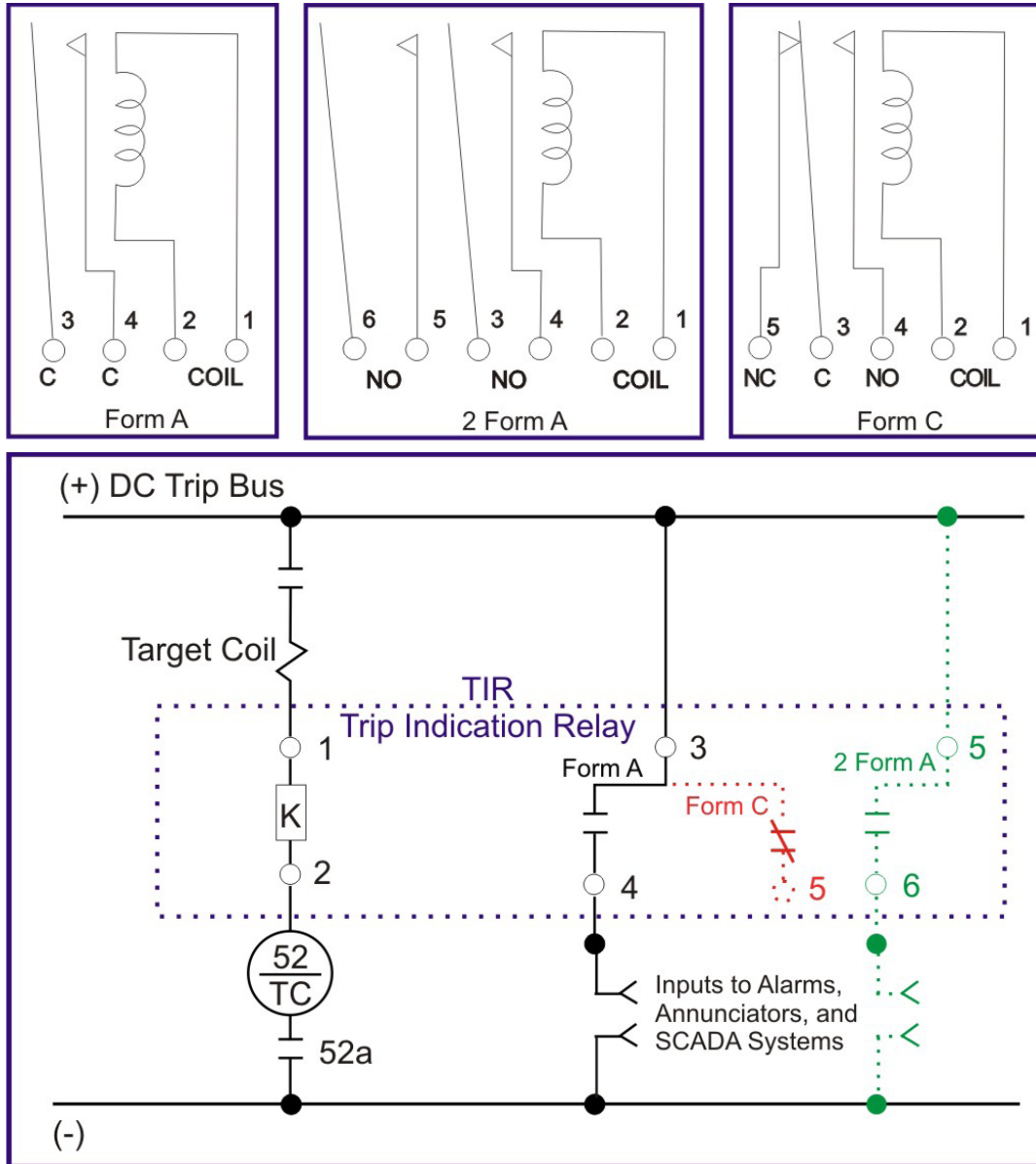
Life Expectancy: 1 x 10⁶ Operations Minimum
 Weight: 12 oz maximum Form C, Form A
 14 oz maximum 2 Form A
 Cycling Rate: 60 cps maximum

Note: A variety of "Special Application" relays P/Ns 6319237 - 6319280 are available. Please contact E-MAX for your requirements.

E-MAX Trip Indication Relays are RoHS Compliant

The substances banned under RoHS are lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (CrVI), polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).

SCHEMATICS AND APPLICATION



ACCESSORIES

DIN Rail Mounting Kit - Snap-on / Snap/Off Rail Clips

P/N 632A050



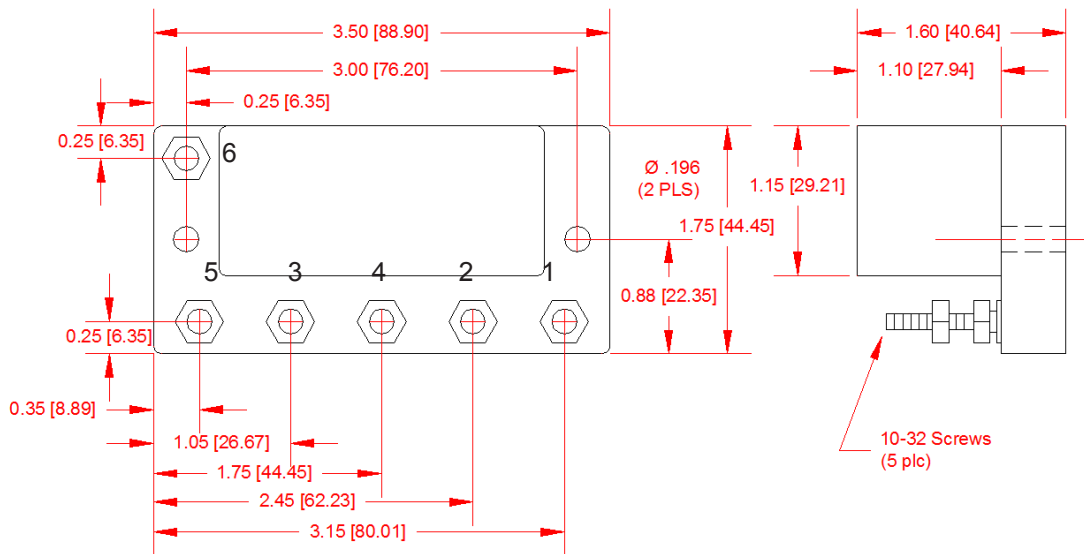
Each kit contains two screws and two mounting clips.

Attach the clips to the relay using the standard relay mounting holes and the included screws.

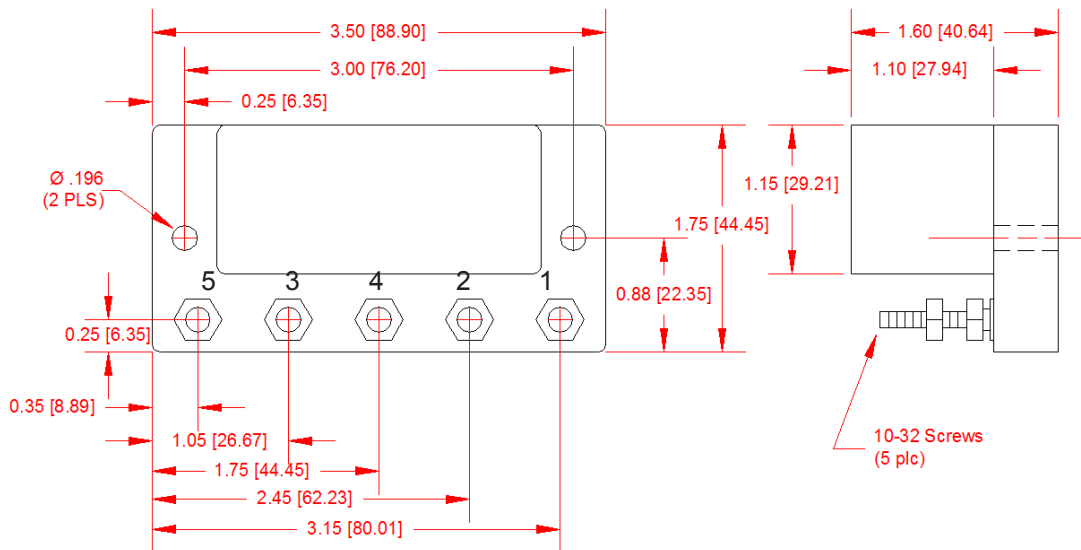
Snap the relay in place on the rail!



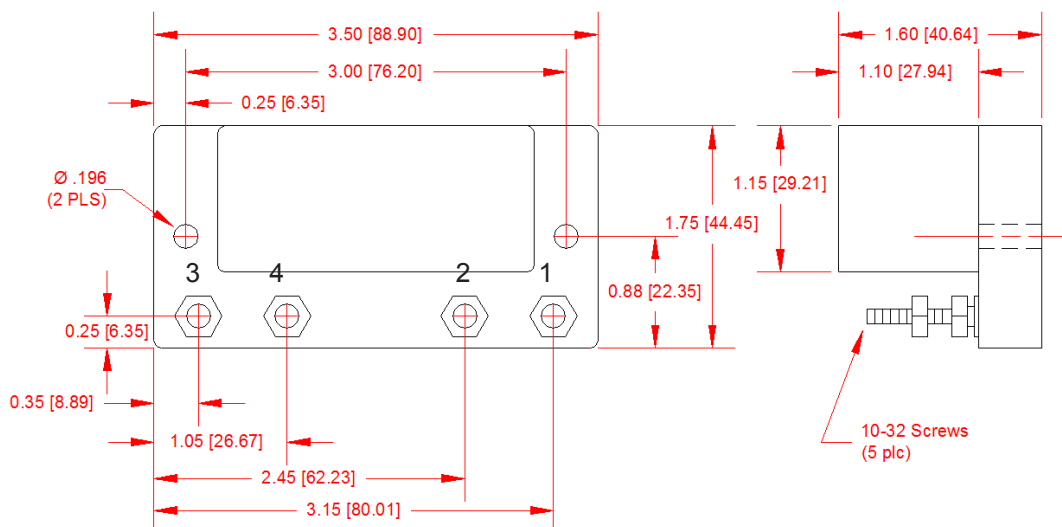
TRIP INDICATION RELAY DIMENSIONS



2 Form A



Form C



Form A