

## Faulted Circuit Indicators

Cooper Power Systems offers a wide variety of faulted circuit indicators (FCIs) ranging from basic circuitry models in the Delayed Reset style to the more sophisticated circuitry of the Test Point Reset and Electrostatic Reset types. The Cooper Power Systems S.T.A.R.<sup>™</sup> Faulted Circuit Indicator product line offers six basic types of FCIs and each unit is tailored to be the most reliable for the intended application. Each type varies by reset method and the type of system it connects to. Standard S.T.A.R. features include:

- **LO/Hi Trip Rating Selection** – Innovative trip ratings greatly simplify FCI selection application
- **Current Transformer Sensing Design** – For maximum trip accuracy and elimination of false tripping on adjacent cable events
- **Inrush Restraint** – Won't allow tripping due to inrush currents
- **Low-Pass Filter Technology** – Prevents false tripping due to capacitive cable discharge
- **Design Tested to ANSI/IEEE 495 and Manufactured in ISO 9001 Facility** – To ensure highest performance and quality

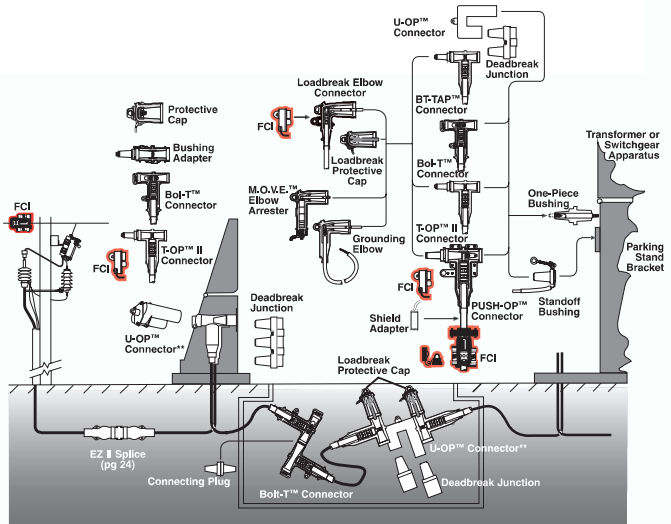
In addition to the above features, the PATHFINDER<sup>™</sup> FCIs include:









- **Variable Trip Technology** – Single trip rating for one-size-fits-all application
- **Self Adjusting Reset Restraint** (test point mounted model) – “Learns” your system voltage and won't allow false resetting due to backfeed voltage
- **BLOC<sup>™</sup>** – Battery Life Optimization Circuitry for maximizing battery life
- **Remote Fiber Optic Cable** (test point mounted model) – Optional remote for convenient remote indication



### Pathfinder Test Point Faulted Circuit Indicator Specification Information

- Fault indication on minimum 100 A di/dt within 100 ms.
- Response time of 3 ms or less, for coordination with current-limiting fuses.
- Current transformer fault sensing design.
- Inrush restraint to prevent false tripping due to current inrush conditions.
- Low pass filter specifically tuned to prevent false tripping on high frequency transients, but to allow proper indication on systems using current-limiting fuses.
- Temperature compensation for accurate and reliable performance over a temperature range of -40° C to +85° C.
- Reset restraint to prevent false reset due to excessive voltage feedback levels up to 80% of nominal system voltage.
- Installation using single hotstick.



Catalog Section	Description	kV Class	Base Part Number	Notes
	<b>TEST POINT RESET</b>			
	Adapter Kit	15/25/35 kV	STAK	
	Hi-Trip	15/25/35 kV	STHI	1
	Hi-Trip w/Aux. Contact	15/25/35 kV	STHIA	1
	Hi-Trip w/Adapter Kit	15/25/35 kV	STHIK	
	Lo-Trip	15/25/35 kV	STLO	1
	Lo-Trip w/Aux. Contact	15/25/35 kV	STLOA	1
320-40	Lo-Trip w/Adapter Kit	15/25/35 kV	STLOK	
	<b>PATHFINDER™ TEST POINT RESET</b>			
	Variable Trip	15/25/35 kV	STVT	
	Variable Trip w/Aux. Contact	15/25/35 kV	STVTA	
	Fiber Optic Remote Cable (6 ft.)	15/25/35 kV	SFOC	2
	Reset Tool	15/25/35 kV	SMRT	
320-42				
	<b>LOW VOLTAGE RESET</b>			
	Hi-Trip	15/25/35 kV	SLHI	3
	Hi-Trip w/Aux. Contact	15/25/35 kV	SLHIA	3
	Lo-Trip	15/25/35 kV	SLLO	3
	Lo-Trip w/Aux. Contact	15/25/35 kV	SLLOA	3
320-50				
	<b>ELECTROSTATIC</b>			
	Hi-Trip	15/25/35 kV	SEHI	
	Lo-Trip	15/25/35 kV	SELO	
320-60				
320-62	Variable Trip	15/25/35 kV	SEVT	
	<b>DELAYED RESET</b>			
	Hi-Trip	15/25/35 kV	SDHI1	4
	1-Hour Reset	15/25/35 kV		
	Lo-Trip	15/25/35 kV	SDLO1	4
	1-Hour Reset	15/25/35 kV		
	Fiber Optic Remote	15/25/35 kV	SFOC	2
320-65	Reset Tool	15/25/35 kV	SMRT	
	<b>MANUAL RESET</b>			
	Hi-Trip	15/25/35 kV	SMHI	
	Lo-Trip	15/25/35 kV	SMLO	
	Reset Tool	15/25/35 kV	SMRT	
320-70				
	<b>CURRENT RESET</b>			
	Hi-Trip	15/25/35 kV	SCHI	1
	Lo-Trip	15/25/35 kV	SCLO	1
320-75				
	<b>TEST POINT HOT LINE INDICATOR</b>			
	Hot Line Indicator	15/25/35 kV	STHL	
320-80				

- To add remote FISHEYE™ display add an "R" as the last character in the part number, or a "S" for the small remote display.
- SFOC standard length is 6 ft. add "09" for 9 ft. fiber optic display, "12" for 12 ft., "25" for 25 ft.
- To add universal power supply (120, 208 or 277 VAC power connection), add a "U" as the last character in the part number.
- To change the reset time, change the "1" in digit five to a "2" for 2-hours, a "4" for 4-hours or to a "6" for 6-hours.

Type Description	Typical System Application	Physical Mounting Location	Voltage/Current Requirements
Test Point Reset	Underground	On the test point of the connector	Min 5 kV L-G (2.4 kV for Pathfinder)
Low-Voltage Reset	Underground	On the URD shielded cable below the connector	A secondary voltage source (min. 105 volts)
Electrostatic Reset	Overhead	On bare or insulated non-shielded cable	Min. 6.9 kV L-G (2.4 kV for Pathfinder)
Current Reset	Underground and Overhead	On the URD shielded cable below the connector and on bare or insulated non-shielded cable	Min. 2.4 A continuous
Delayed Reset	Underground and Overhead	On the URD shielded cable below the connector and on bare or insulated non-shielded cable	None (Lithium Ion battery powered with timed reset)
Manual Reset	Underground and Overhead	On the URD shielded cable below the connector and on bare or insulated non-shielded cable	None (Lithium Ion battery powered manually reset)

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