

## CS Current Sensor Series Switch Sets

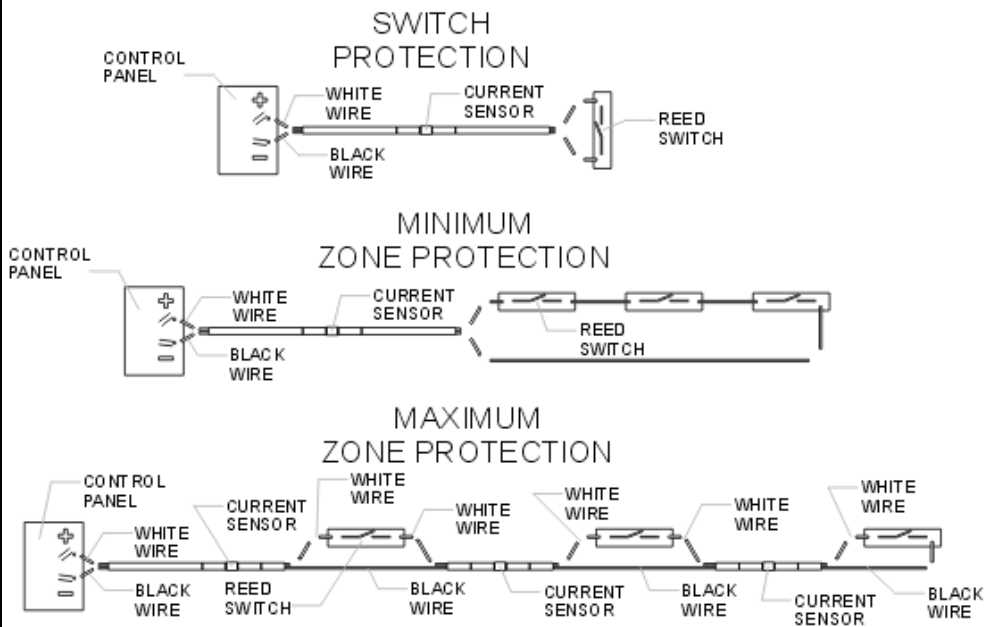


CS-1

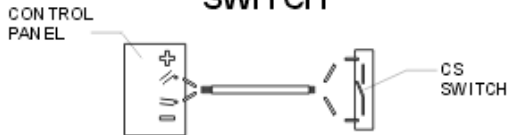


CS-100-12

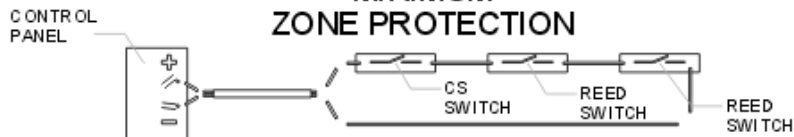
- Fails Safe With Excessive Current
- Micro-Weld Switch Protection
- Channels Voltage Above 60 V To Ground
- Available In Recessed & Surface Styles
- Plus Heat Shrink For In-Line Installations



## CURRENT PROTECTION SWITCH



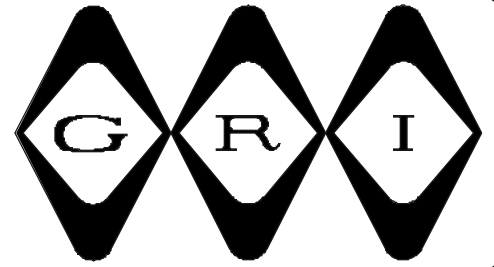
## MINIMUM ZONE PROTECTION



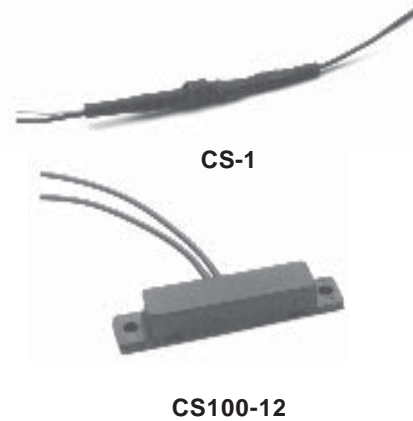
## MAXIMUM ZONE PROTECTION



# CURRENT SENSORS



- ◆ Fails Safe With Excessive Current
- ◆ Micro-Weld Switch Protection
- ◆ Channels Voltage Above 60 V To Ground
- ◆ Available In Recessed & Surface Styles
- ◆ Plus Heat Shrink For In-Line Installations



Two things cause switch failure:

- 1) Excessive Current: Switch protected from excessive current by Quick Blow fuse. Maximum reed switch rating is .5 amp. = 500 mA switching. If current exceeds .5 amp. fuse will blow. In Fail Safe condition, switch must be replaced.
- 2) High Voltage: SIDActor threshold 60 AC/DC volts. If voltage exceeds 60 volts, SIDActor will clamp down, channeling any voltage above 60 directly to ground but will not cause switch device to fail or mis-operate and will continue to work.

The new sensors can be purchased with the protection built directly into your reed switch or you may prefer the G.R.I. CS-1 heat shrink version, which you connect in-line with your switches.

Please see diagrams on reverse for installation information on switch protection plus minimum and maximum zone protection. When using the CS-1, it should be installed directly in front of the contact(s).

<b>CIRCUIT</b>	Fuse and SIDActor
Internal Fuse	.500 A
Break Over Voltage	60 to 100 Volts

**PART NUMBERS:**

Heat Shrink:	CS-1		
Fused Switch:	CS2020-12	CS2020-T	CS100-12
	CS29A	CS4400	CS400
	CS200-36		

**GRI products meet or exceed these minimum general specifications:**

PART NUMBER	LOOP TYPE	ELECTRICAL CONFIG.	REED FORM	MAXIMUM INITIAL CONTACT RESISTANCE (Ω)	MAXIMUM CONTACT RATING (W)	MAXIMUM SWITCHING VOLTAGE (VDC)	MAXIMUM SWITCHING CURRENT (A)
CS400	Closed	N/O	A	.100	10	100	.500
CS4400-A	Closed	N/O	A	.100	10	100	.500
CS100-12	Closed	N/O	A	.100	10	100	.500
CS29A	Closed	N/O	A	.100	10	100	.500
CS2020-12	Closed	N/O	A	.100	10	100	.500
CS2020-T	Closed	N/O	A	.100	10	100	.500
CS200-36	Closed	N/O	A	.100	10	100	.500

**WARRANTY:** One year warranty against workmanship, material and factory defects.

GEORGE RISK INDUSTRIES, INC.  
GRI PLAZA  
KIMBALL, NE 69145



MADE IN U.S.A.

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# CURRENT SENSORS

## Switch and Zone Protection

### CURRENT PROTECTION SWITCH



### MINIMUM ZONE PROTECTION



### MAXIMUM ZONE PROTECTION

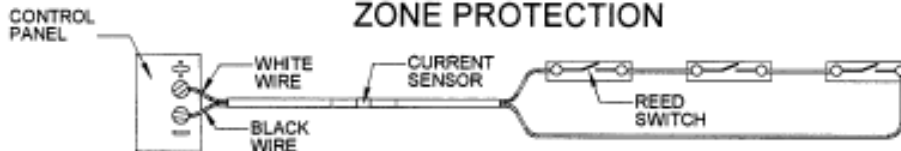


CS-1

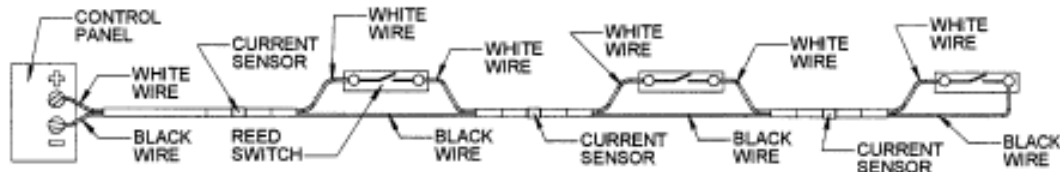
### SWITCH PROTECTION



### MINIMUM ZONE PROTECTION



### MAXIMUM ZONE PROTECTION



CS2020-12, CS2020-T, CS100-12, CS29A, CS4400

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