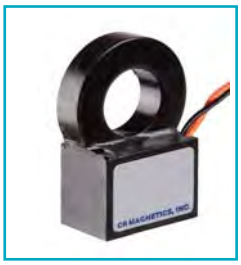
Current Switch - Normally Closed

CR9400 Series



The **CR9400** Series is a low cost, self powered, fixed set-point Current Switch designed for applications that require an on-off indication of current flow.

The normal state of the switch is On when the current level is zero. Current levels above the guaranteed full-off level will turn the output to Off. The Current Switch is recommended only for applications where the continuous operating level is above the rated full on level of 350 mA. Operation below this point will not drive the output device full-on and derate the output ratings.

The unit available with a SCR output for switching AC. Connections can be made directly to items such as a PLC or electro-mechanical relay. Note that connections made directly to an inductive device such as an electro-mechanical relay will require a customer supplied clamping diode for DC operation or a snubber network for AC operation.

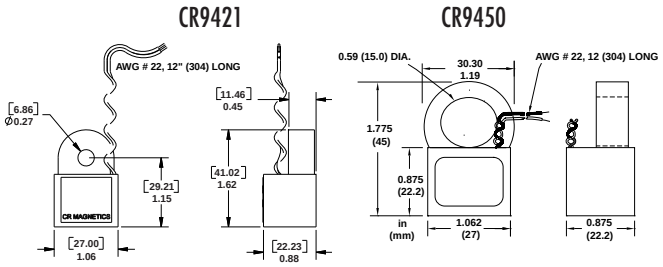
DC SWITCHING (-NPN or -PNP)

Vce (full off): 30 VDC max.
Isink (full on): 120 mADC max.@ rated full-on
Vce (reverse polarity voltage): 1.2 VDC @ 100 mADC
Vce (full on): 1.5 VDC @ 120 mADC Isink
Off state leakage current: 5ua @ 30 VDC (typical)

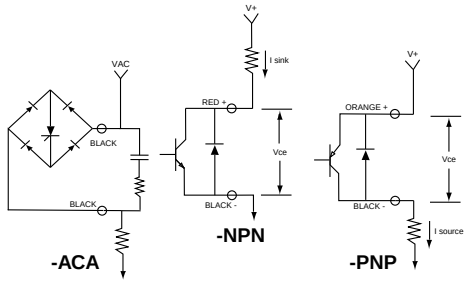
AC SWITCHING (-ACA)

Off state voltage: 240 VAC RMS max.
Minimum holding current: 10 mA
On state current: 0.8 AAC RMS max. continuous
Off state leakage: 50 ua @ 240 VAC max.
Peak Non-Repetitive Surge Current: 8 AAC RMS (1 cycle, 60 Hz.)

OUTLINE DRAWING



ELECTRICAL CONNECTIONS



Applications

Continuity
Proving Switch

Features

Low Cost
Low Fixed Trip Point
Fully Isolated
Self-Powered

Specifications

Rated Full-off: 0.400 AAC RMS
Turn-on Time: 100 ms. max. @ rated full-on
Turn-off Time: 250 ms. max. to 80% of Vce
Maximum sense current: Continuous: 100 AAC
1 Second: 500 AAC
Frequency*: 50 to 400 Hz
Operating Temperature: -30° C to +60° C
Storage Temperature: -55° C to +85° C
Weight 0.08 LBS.

*All specifications for operation at 60 Hz only

Regulatory Agencies

c UL us E234389

RoHS

PART NUMBER

CR					-				-		CURRENT SWITCH

9421	.27 dia. Window
9450	.61 dia. Window

NPN	Transistor Output
PNP	Transistor Output
ACA	AC Output

M	Mounting Case (Optional)

D

Relays, Switches, & Sensors