

Bulletin 1409
Arcing Ground Fault Detection System
Specifications

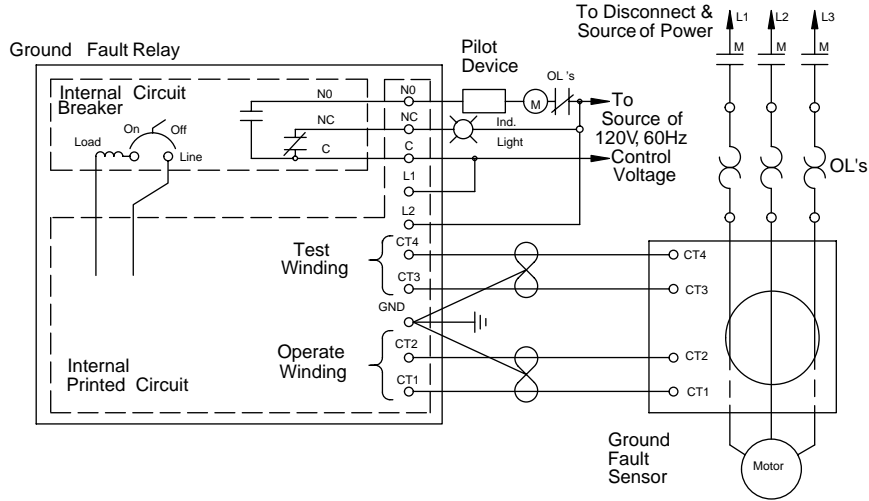
Technical Data

Response Time	50 ms nominal plus the controller drop-out time
Supply Voltage	120V AC, 60 Hz
Power Input	3VA
Temperature Range	The operating ambient temperature range for the sensor is $-40...+85^{\circ}\text{C}$ ($-40...+184^{\circ}\text{F}$) and for the relay is $0...+65^{\circ}\text{C}$ ($+32...+149^{\circ}\text{F}$)
Output Contact Rating	Make 30 A; Break 3 A; Continuous carrying current 5 A at 120V

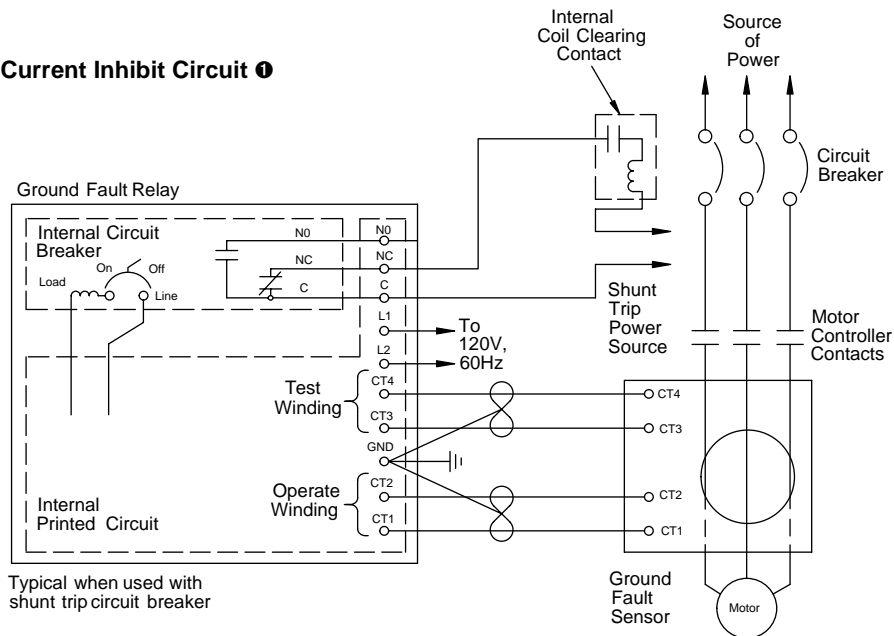
Typical Wiring Diagrams

See Applicable Codes and Laws.

Class II with High Current Inhibit Circuit ❶



Class I without High Current Inhibit Circuit ❶



Typical when used with shunt trip circuit breaker

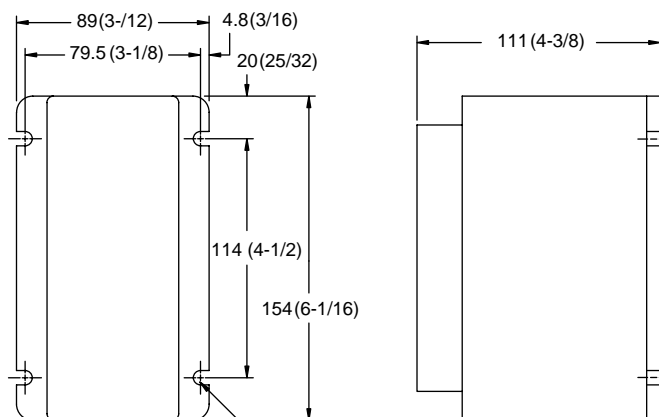
❶ Wiring diagrams are shown in the tripped condition.

Arcing Ground Fault Detection System

Approximate Dimensions

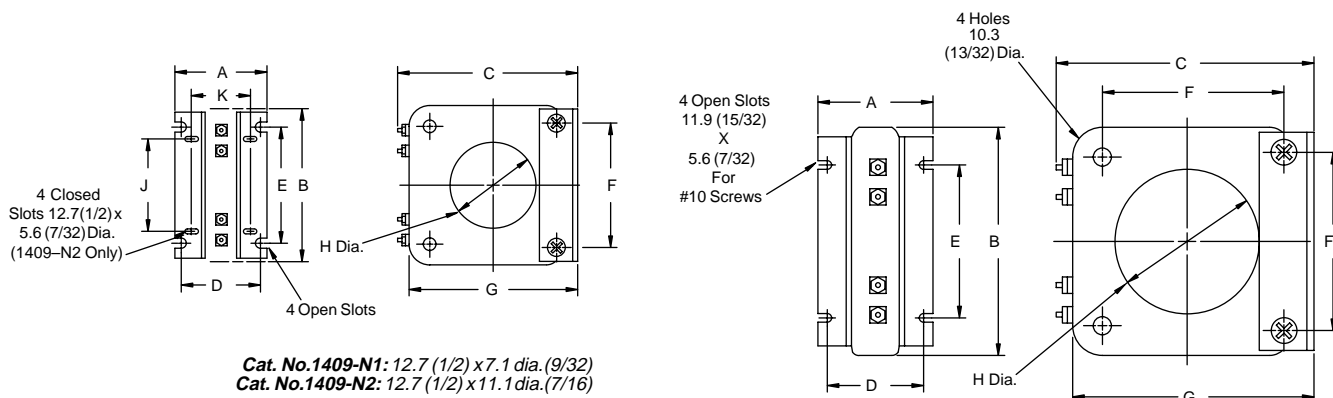
Dimensions are shown in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Arcing Ground Fault Relay



Use (4) #8-32 Screws for Mounting

Arcing Ground Fault Sensors



Cat. No.1409-N1: 12.7 (1/2) x7.1 dia.(9/32)
Cat. No.1409-N2: 12.7 (1/2) x11.1 dia.(7/16)

Cat. No.1409-N3
Cat. No.1409-N4

Cat. No.	A	B	C	D	E	F	G	H	J	K
1409-N1	92.6 (3-21/32)	88.9 (3-1/2)	104 (4-3/32)	74 (2-15/16)	67.3 (2-21/32)	56.4 (2-7/32)	92.9 (3-21/32)	39.6 (1-9/16)	—	—
1409-N2	91.4 (3-19/32)	115.8 (4-9/16)	131.8 (5-3/16)	77 (3-1/32)	88.9 (3-1/2)	88.9 (3-1/2)	120.6 (4-3/4)	63.5 (2-1/2)	69.8 (2-3/4)	54.9 (2-5/32)
1409-N3	73.2 (2-7/8)	144 (5-11/16)	157.2 (6-3/16)	54.9 (2-5/32)	96.8 (3-13/16)	119.4 (4-23/32)	146.1 (5-3/4)	82.6 (3-1/4)	—	—
1409-N4	77.2 (3-1/32)	169.9 (6-11/16)	182.6 (7-3/16)	59.5 (2-11/32)	123.7 (4-7/8)	138.2 (5-7/16)	171.5 (6-3/4)	108 (4-1/4)	—	—