

Supplemental Motor Protection Devices Specifications

Bulletin Numbers 809S, 813S, 814S, 817S, 1409, 1410

Topic	Page
Bulletin 809S/813S/814S/817S	2
Product Line Overview	2
Cat. No. Explanation	3
Specifications	4
Standards Compliance and Certifications	7
Function and Wiring Diagrams	8
Approximate Dimensions	14
Bulletin 1409 Arcing Ground Fault Detection System	15
Specifications	15
Standards Compliance and Certifications	15
Typical Wiring Diagrams	16
Approximate Dimensions	17
Bulletin 1410 Motor Winding Heater	18
Specifications	18
Standards Compliance and Certifications	18
Approximate Dimensions	18

Additional Resources





These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, http://www.ab.com	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.



Product Line Overview

	Bulletin 809S Current Monitoring Relay	Bulletin 813S Voltage Relay		Bulletin 814S Power Factor Relay	Bulletin 814S Power (kW) Relay	Bulletin 817S Thermistor Relay
						
Type	Single-Phase	Single-Phase	Three-Phase	Three-Phase	Three-Phase	—
Operating range	1...10 A AC/DC	2...500V AC/DC	110...115V AC 208...240V AC	1...10 A AC	1...10 A AC	24/48V AC/DC
	24/48V AC/DC	24/48V AC/DC	380...415V AC 440...480V AC	380...480V AC	380...480V AC	115V AC
	115/230V AC	115/230V AC	600...690V AC	600...690V AC	600...690V AC	230V AC
Under- and overcurrent protection	√	—	—	—	—	—
Under- and overvoltage protection	—	√	√	—	—	—
Phase loss protection	—	—	√	—	—	—
Phase imbalance	—	—	√	—	—	—
Phase reversal	—	—	√	—	—	—
Minimum and maximum cos (φ) protection	—	—	—	√	—	—
Under- and over active power (kW) protection	—	—	—	—	√	—
Overtemperature protection	—	—	—	—	—	√
Adjustable time delay settings	√	√	√	√	√	—
Programmable latching or inhibit at set level	√	√	—	√	√	—
Changeover Contacts (SPDT)	1	1	2	1	1	1
Automatic Reset	√	√	√	√	√	—
LED status indicator	√	√	√	√	√	√
Dimensions (W x H x D)	22.5 x 80 x 99.5 mm	22.5 x 80 x 99.5 mm	45 x 80 x 99.5 mm	45 x 80 x 99.5 mm	45 x 80 x 99.5 mm	22.5 x 80 x 99.5 mm

Cat. No. Explanation

Examples given in this section are for reference purposes. This basic explanation should not be used for product selection; not all combinations will produce a valid catalog number.

809S – C1 – 10A – 48

a b c d

<i>a</i>	
Bulletin Number	
Code	Description
809S	Current Monitoring Relay
813S	Voltage Monitoring Relay
814S	Power Monitoring Relay
817S	Thermistor Monitoring Relay

<i>d</i>	
External Power Code	
Code	Description
Bulletin 809S	
48	24/48V AC/DC
230	115/230V AC
Bulletin 813S	
48	24/48V AC/DC (Type V1 only)
230	115/230V AC (Type V1 only)
Bulletin 814S	
—	—
Bulletin 817S	
48	24/48V AC/DC
115	115V AC
230	230V AC

<i>b</i>	
Type	
Code	Description
Bulletin 809S	
C1	Single-Phase Current Monitoring Relay
Bulletin 813S	
V1	Single-Phase Voltage Monitoring Relay
V3	Three-Phase Voltage Monitoring Relay
Bulletin 814S	
W3	Three-Phase Power (kW) Monitoring Relay
PF3	Three-Phase Power Factor Monitoring Relay
Bulletin 817S	
PTC	Thermistor Monitoring Relay

<i>c</i>	
Measurement Rating	
Code	Description
Bulletin 809S	
10A	1...10 A AC/DC
Bulletin 813S	
500V	2...500V AC/DC (Type V1)
110V	110...115V AC (Type V3)
230V	208...240V AC (Type V3)
400V	380...415V AC (Type V3)
480V	440...480V AC (Type V3)
690V	600...690V AC (Type V3)
Bulletin 814S	
480V-10A	380...480V AC & 1...10 A AC
690V-10A	600...690V AC & 1...10 A AC
Bulletin 817S	
—	—