

Single-phase Current Relay

K8DT-AS

Detect errors in motors and other equipment through current changes.


Use in either overcurrent or undercurrent mode.

- Monitor AC or DC currents with one Relay.
- Use with commercially available CTs (CT secondary side: 0 to 1 A or 0 to 5 A).
- Settings for the operating value, hysteresis, startup lock time, and operating time.
- Width of 17.5 mm to reduce space required in panels.
- Push-In Plus Terminal that reduce wiring work.

The use of cage clamps enables wiring with bare stranded wires.

Double-insertion holes for crossover wiring (all terminals).

- UL listed for easy shipping to North America.
- Models added with transistor outputs for superior contact reliability.

 Refer to *Safety Precautions* on page 10.
Refer to page 9 for commonly asked questions.



For the most recent information on models that have been certified for safety standards, refer to your OMRON website.


Ordering Information

Single-phase Current Relay


Setting range	Power supply voltage	Output	Model
2 to 20 mA AC/DC, 10 to 100 mA AC/DC, 50 to 500 mA AC/DC	24 VAC/DC	Relay: SPDT contact output	K8DT-AS1CD
		Transistor	K8DT-AS1TD
	100 to 240 VAC	Relay: SPDT contact output	K8DT-AS1CA
		Transistor	K8DT-AS1TA
0.1 to 1 A AC/DC, 0.5 to 5 A AC/DC	24 VAC/DC	Relay: SPDT contact output	K8DT-AS2CD
		Transistor	K8DT-AS2TD
	100 to 240 VAC	Relay: SPDT contact output	K8DT-AS2CA
		Transistor	K8DT-AS2TA
	24 VAC/DC	Relay: SPDT contact output	K8DT-AS3CD
		Transistor	K8DT-AS3TD
100 to 240 VAC	Relay: SPDT contact output	K8DT-AS3CA	
	Transistor	K8DT-AS3TA	

* The K8DT-AS3□□ is designed to be used in combination with an OMRON K8AC-CT200L Current Transformer (CT). (Direct input is not possible.)

OMRON CT

Appearance	Input range	Applicable Relay	Model
	10 to 100 A AC, 20 to 200 A AC	K8DT-AS3	K8AC-CT200L

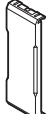
Commercially Available CTs *

Appearance	CT current on secondary side	Applicable Relay
	0 to 1 A AC, 0 to 5 A AC	K8DT-AS2

* If you use a commercially available CT, do not exceed the overload capacity of the K8DT-AS2.

Options (Order Separately)

Front Cover

Appearance	Model
	Y92A-D1A

K8DT-AS

Ratings and Specifications

Input Range

Model	Range #1	Connection terminal	Setting range	Input impedance	Input type	Overload capacity
K8DT-AS1□□	20 mA AC/DC	I1-COM	2 to 20 mA AC/DC	Approx. 5 Ω	Direct input	Continuous input at 120% of maximum input. 1 s at 150%
	100 mA AC/DC	I2-COM	10 to 100 mA AC/DC	Approx. 1 Ω	Direct input	
	500 mA AC/DC	I3-COM	50 to 500 mA AC/DC	Approx. 0.2 Ω	Direct input	
K8DT-AS2□□	1 A AC/DC	I1-COM	0.1 to 1 A AC/DC	Approx. 0.12 Ω (Load: 0.5 VA)	Direct input or commercially available CT	
	5 A AC/DC	I2-COM	0.5 to 5 A AC/DC	Approx. 0.02 Ω (Load: 1.5 VA)		
K8DT-AS3□□	100 A AC	I2-COM	10 to 100 A AC *2	---	OMRON CT	
	200 A AC	I3-COM	20 to 200 A AC *2	---	OMRON CT	

*1. The range is selected using connected terminals.

*2. The K8DT-AS3 is designed to be used in combination with an OMRON K8AC-CT200L Current Transformer (CT). (Direct input is not possible.)