

# Three-phase Undervoltage and Phase-sequence Phase-loss Relay

## K8DS-PU

**Ideal for Monitoring 3-phase Power Supplies for Industrial Facilities and Equipment.**



- Greater resistance to inverter noise. *NEW*
- Monitor undervoltages, phase sequence, and phase loss in three-phase three-wire circuits with one unit.
- One SPDT output relay, 5 A at 250 VAC (resistive load).
- World-wide power specifications supported by one unit. (Set with a rotary switch.)
- Relay status can be monitored using LED indicator.



Refer to *Safety Precautions* on page 9.  
Refer to page 7 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

### List of Models

	Rated input voltage*	Model
3-phase 3-wire mode	200, 220, 230, or 240 VAC	<b>K8DS-PU1</b>
	380, 400, 415, or 480 VAC	<b>K8DS-PU2</b>

**Note:** The input range is set with a rotary switch.

\* The power supply voltage is the same as the rated input voltage.

# K8DS-PU

## Ratings and Specifications

### Ratings

Rated input voltage	K8DS-PU1	3-wire 3-phase mode: 200, 220, 230, or 240 VAC
	K8DS-PU2	3-wire 3-phase mode: 380, 400, 415, or 480 VAC
Input load		K8DS-PU1: Approx. 1.7 VA K8DS-PU2: Approx. 2.8 VA
Operating value setting range (UNDER)		Undervoltage –30% to 25% of rated input voltage
Operating value		Operates at 100% of set value.
Reset value		5% of operating value (fixed)
Reset method		Automatic reset
Operating time setting range (T)	Undervoltage	0.1 to 30 s
	Phase sequence	0.1 s±0.05 s
	Phase loss	0.1 s max.
Power ON lock time (LOCK)		1 s±0.5 s
Indicators		Power (PWR): Green, Relay output (RY): Yellow, UNDER: Red
Output relays		One SPDT relay output
Output relay ratings		Rated load Resistive load 5 A at 250 VAC 5 A at 30 VDC Maximum switching capacity: 1,250 VA, 150 W Minimum load: 5 VDC, 10 mA (reference values) Mechanical life: 10 million operations min. Electrical life: 5 A at 250 VAC: 50,000 operations 3 A at 250 VAC: 100,000 operations
Ambient operating temperature		–20 to 60°C (with no condensation or icing)
Storage temperature		–25 to 65°C (with no condensation or icing)
Ambient operating humidity		25% to 85% (with no condensation)
Storage humidity		25% to 85% (with no condensation)
Altitude		2,000 m max.
Terminal screw tightening torque		0.49 to 0.59 N·m
Terminal wiring method		Recommended wire Solid wire: 2.5 mm <sup>2</sup> Twisted wires: AWG16, AWG18 <b>Note:</b> 1. Ferrules with insulating sleeves must be used with twisted wires. 2. Two wires can be twisted together. Recommended ferrules Al 1,5-8BK (for AWG16) manufactured by Phoenix Contact Al 1-8RD (for AWG18) manufactured by Phoenix Contact Al 0,75-8GY (for AWG18) manufactured by Phoenix Contact
Case color		N1.5
Case material		PC and ABS, UL 94 V-0
Weight		Approx. 65 g
Mounting		Mounts to DIN Track.
Dimensions		17.5 × 80 × 74 mm (W×D×H)