

Phase-sequence Phase-loss Relay

K8DS-PH

Three-phase Phase-sequence Phase-loss Relay Using Voltage Detection Method



- Lineup includes a 17.5-mm slim, compact model. **NEW**
- Greater resistance to inverter noise. **NEW**
- Distinguishes between correct phases, phase sequence, and phase loss when power is turned ON.
- Supports phase loss detection when the motor is operating.
- Output status can be monitored using LED indicator.
- Ideal to prevent reverse operation of motors.



Refer to *Safety Precautions* on page 8.
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

Function	Rated input voltage*	Relay output	Model
Phase sequence and phase loss monitoring	3-phase, 3-wire 200 to 480 VAC	SPDT × 1	K8DS-PH1

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

Ratings and Specifications

Ratings

Rated input voltage		3-phase, 200 to 480 VAC (3-wire)
Input load		Approx. 2.7 VA
Operating time	Phase sequence	0.1 s±0.05 s
	Phase loss	0.1 s max. (when the voltage changes rapidly from 100% to 0% of rated voltage)
Reset method		Automatic reset
Indicators		Power (PWR): Green, Relay output (RY): Yellow
Output relays		One SPDT relay (NC operation)
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 or 30 VDC:50,000 operations 3 A at 250 VAC/30 VDC: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 ² Twisted wires: AWG16, AWG18 Note: 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, UL 94 V-0
Weight		Approx. 60 g
Mounting		Mounts to DIN Track.
Dimensions		17.5 × 80 × 74 mm (W×D×H)