

Phase-sequence Phase-loss Relay

K8AK-PH

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



- 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.
- 5 A (resistive load) at 250 VAC, DPDT x 1.
- 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	DPDT x1	K8AK-PH1

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

K8AK-PH

Ratings and Specifications

Ratings

Rated input voltage	3-phase, 200 to 480 VAC (3-wire)	
Input load	Approx. 4.1 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 DPDT relay (NC operation)	
Output relay ratings	Rated load Resistive load 5 A at 250 VAC 5 A at 30 VDC Minimum load: 24 VDC, 4 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 and ABS, UL 94 V-0	
Weight	Approx. 130 g	
Mounting	Mounts to DIN Track.	
Dimensions	22.5 × 90 × 100 mm (W×H×D)	