

Specifications

Allowable operating voltage range		85% to 110% of rated power supply voltage
Allowable operating frequency range		50/60 Hz \pm 5 Hz
Input frequency		40 to 500 Hz
Overload capacity		Continuous input at 115% of maximum input, 10 s at 125% (up to 600 VAC).
Repeat accuracy	Operating value	\pm 0.5% full scale (at 25°C and 65% humidity, rated power supply voltage, DC or 50/60 Hz sine wave input)
	Operating time	\pm 50 ms (at 25°C and 65% humidity, rated power supply voltage)
Applicable standards	Conforming standards	EN 60947-5-1 Installation environment (pollution level 2, installation category III)
	EMC	EN 60947-5-1
	Safety standards	UL 508 (Recognition), Korean Radio Waves Act (Act 10564), CSA: C22.2 No.14, CCC: GB/T 14048.5
Insulation resistance		20 M Ω min. Between external terminals and case Between power supply terminals and input terminals Between power supply terminals and output terminals Between input terminals and output terminals
Dielectric strength		2,000 VAC for one minute Between external terminals and case Between power supply terminals and input terminals Between power supply terminals and output terminals Between input terminals and output terminals
Noise immunity		1,500 V power supply terminal common/normal mode Square-wave noise of \pm 1 μ s/100 ns pulse width with 1-ns rise time
Vibration resistance		Frequency: 10 to 55 Hz, 0.35-mm single amplitude 10 sweeps of 5 min each in X, Y, and Z directions
Shock resistance		100 m/s ² , 3 times each in 6 directions along 3 axes
Degree of protection		Terminals: IP20

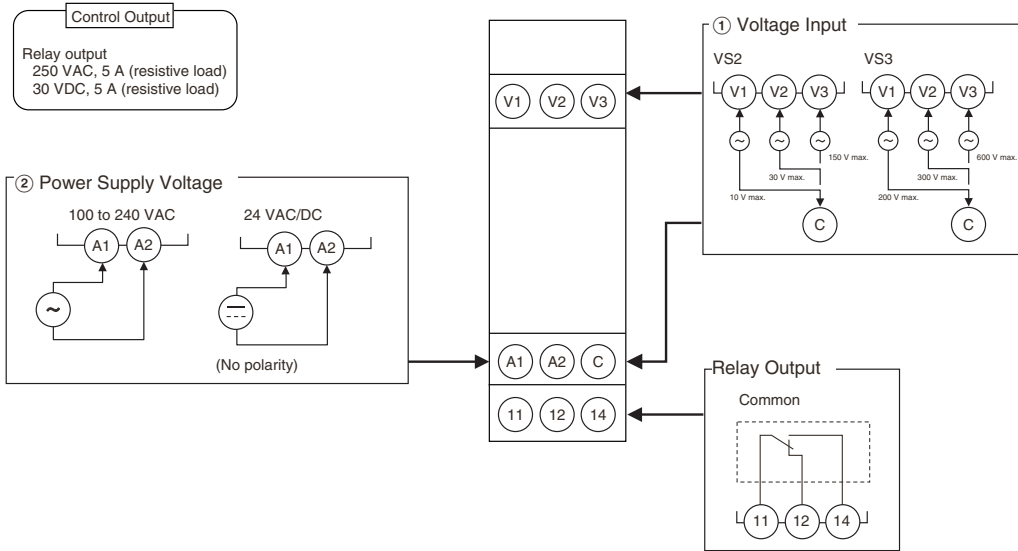
K8AK-VS

Connections

Terminal Diagram

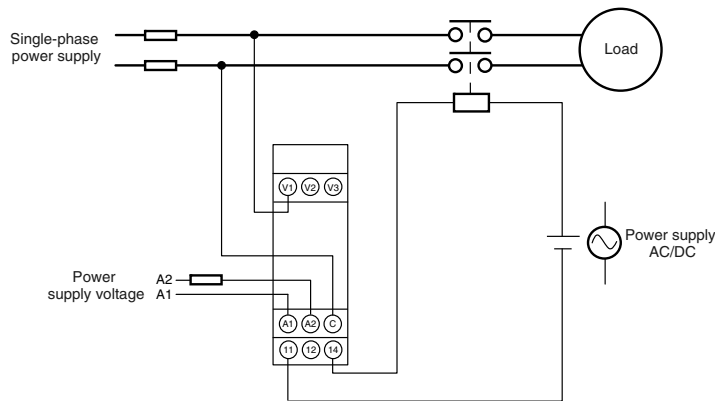
K8AK-VS2 100-240VAC

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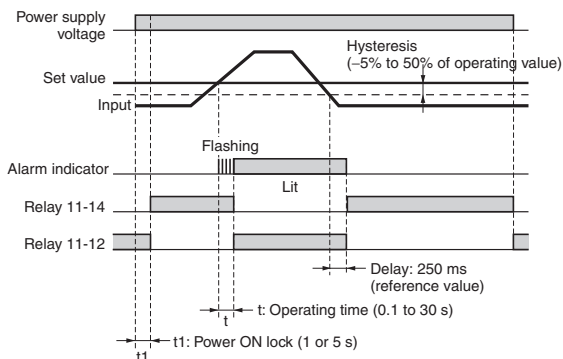
- Note:**
1. There is no polarity for the DC power supply input.
 2. For the voltage input, you can input only from the C terminal and one other terminal.
 3. Refer to *Setting Ranges and Wiring Connections* for information on the V1, V2, and V3 voltage input terminals.
 4. Use the recommended ferrules if you use twisted wires.

Wiring Example



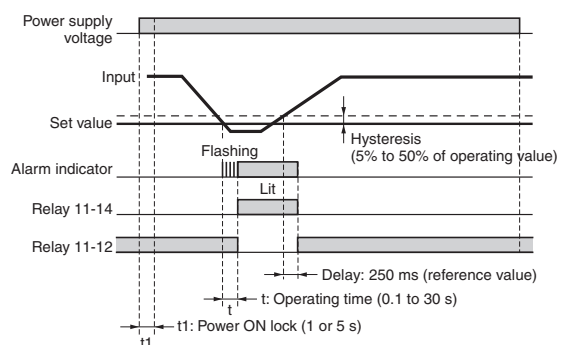
Timing Charts

● **Overvoltage Operation Diagram**
(Output Relay Drive Method: Normally Closed)
 DIP switch setting: SW3 ON.



Note: The power ON lock prevents unnecessary alarms from being generated during the instable period when the power is first turned on. There is no relay output during timer operation.

● **Undervoltage Operation Diagram**
(Output Relay Drive Method: Normally Open)
 DIP switch setting: SW3 OFF.



Note: The power ON lock prevents unnecessary alarms from being generated during the instable period when the power is first turned on. There is no relay output during timer operation.