

10A and 25A DIN rail type

AQ-K RELAYS



FEATURES

1. Combined with heat sink for vertical profile
Helps to save space on control panel
2. Dielectric voltage of 2,500V or 4,000V
3. Both screw-on installation or one-touch DIN rail installation available
4. Includes operation LED (red)
5. Built-in varistor

APPLICATIONS

1. Molding machine (heater control)
2. Temperature controlled bath (heater control)
3. Printing machine (heater control)
4. Machine tool (motor control)

TYPES

Type	Load current	Load voltage	Breakdown voltage	Part No.
Zero-cross	15 A	75 to 250 V AC	2,500 V AC	AQK1211
			4,000 V AC	AQK1231
	25 A	75 to 250 V AC	2,500 V AC	AQK2211
			4,000 V AC	AQK2231

ORDERING INFORMATION

Ex. AQK

Load current	Load voltage	Type	Input voltage
1: 15 A 2: 25 A	2: 75 to 250 V AC	1: Zero-cross type (2,500 V) 3: Zero-cross type (4,000 V)	1: 4.5 to 30 V DC

Note: Standard packing: Carton 10 pcs., Case: 60 pcs.

SPECIFICATIONS

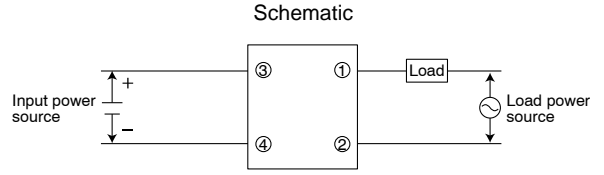
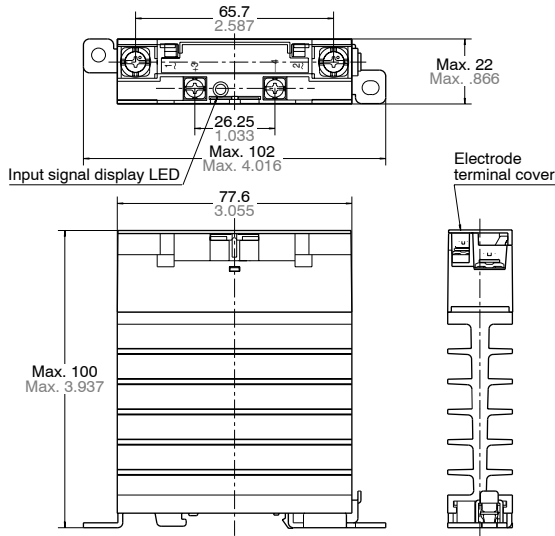
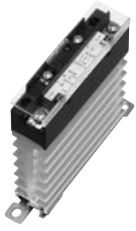
1. Ratings (at 20°C 68°F, Input ripple: 1% or less)

1) 10 A type

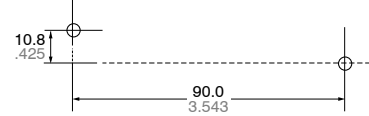
Items	Type	AQK1211	AQK1231	AQK2211	AQK2231	Remarks
Input side	Input voltage	4.5 to 30 V DC				
	Input current, max.	10 mA				
	Drop-out voltage, min.	1 V				
Load side	Max. load current	15 A		25 A		See "REFERENCE DATA 1"
	Load voltage	75 to 250 V AC				
	Frequency	45 to 65 Hz				
	Non-repetitive surge current	150 A		250 A		In one cycle at 60 Hz
	Max. "OFF-state" leakage current	9 mA (when 200 V applied)				at 60 Hz
	Max. "ON-state" voltage drop	1.6 V				at max. carrying current
	Min. load current	100 mA				

2. Characteristics (at 20°C 68°F, Input ripple: 1% or less)

Part No.	AQK1211	AQK1231	AQK2211	AQK2231	Remarks
Operate time, max.	(1/2 cycle of voltage sine wave) + 1 ms				
Release time, max.	(1/2 cycle of voltage sine wave) + 1 ms				
Breakdown voltage	2,500 V AC	4,000 V AC	2,500 V AC	4,000 V AC	
Ambient temperature	-30°C to +80°C -22°F to +176°F				Non-condensing at low temperatures
Insulation resistance, min., Initial	100 M Ω between input, output and case				by 500V DC megger
Vibration resistance	10 to 55 Hz at double amplitude of 0.75 mm				For 1 min.
Shock resistance	Min. 294 m/s ²				
Storage temperature	-35°C to +100°C -31°F to +212°F				
Operational method	Zero-cross (Turn-ON and Turn-OFF)				

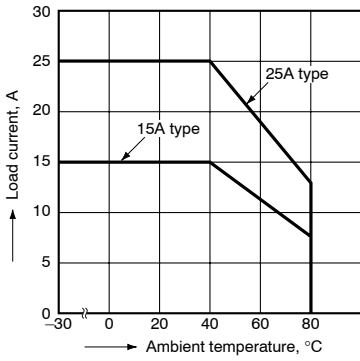


Mounting dimensions (Bottom view)
35-mm DIN rail installation, or 2-4.6/M4 dia. Screws

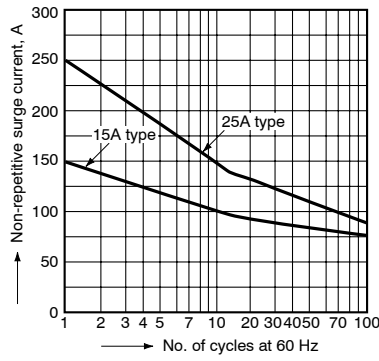


REFERENCE DATA

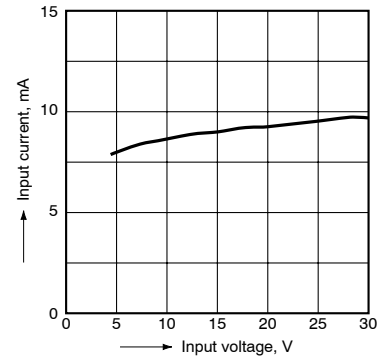
1. Load current vs. ambient temperature characteristics



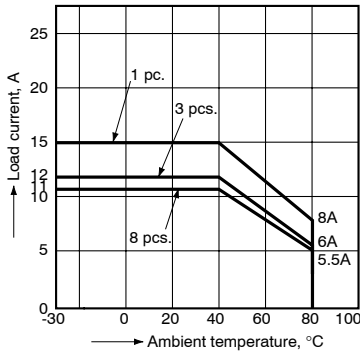
2. Non-repetitive surge current vs. carrying time (15 A, 25 A type)



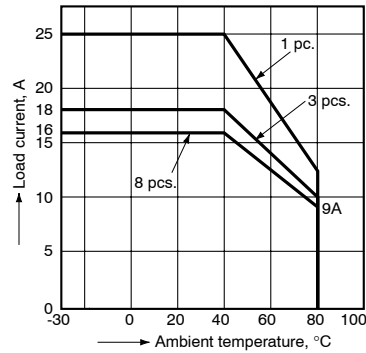
3. Input current vs. input voltage characteristics



4-(1) Load current when contact mounted vs. ambient temperature characteristics
Tested sample: AQK1211, AQK1231



4-(2) Load current when contact mounted vs. ambient temperature characteristics
Tested sample: AQK2211, AQK2231



Cautions for Use