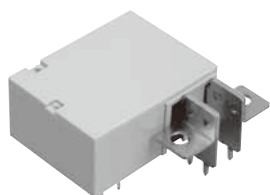


**!** To Be Discontinued  
Last time buy: September 30, 2019

### 1 Form A 60A power latching relays

### DQ-M RELAYS (ADQM)



RoHS compliant

Protective construction: Flux-resistant type

### FEATURES

#### 1. Miniature and high capacity

Miniature relay capable of high 60 A capacity control.

Size: 29.0(L)×38.0(W)×17.3(H) mm  
1.142(L)×1.496(W)×.681(H) inch

Nominal switching capacity:  
60A 250V AC

#### 2. Latching type

Latching type contributes to device energy efficiency.

Nominal operating power

- 500mW (1 coil latching)
- 1,000mW (2 coil latching)

#### 3. High insulation

Between contact and coil

Breakdown voltage: 4,000 V AC

Surge breakdown voltage: 10,000 V

### TYPICAL APPLICATIONS

1. Remote control of electric power meters
2. Time switches

### ORDERING INFORMATION

	<b>ADQM</b>	<input type="text"/>	<b>6</b>	<input type="text"/>	<b>0</b>	<input type="text"/>	<input type="text"/>
DQ-M relays							
Operating function							
1: 1 coil latching (1 Form A)							
2: 2 coil latching (1 Form A)							
Contact capacity							
6: 60 A							
Terminal shape							
Nil: M4 securing screw							
Contact material							
0: Standard contact (AgNi type)							
Nominal coil voltage (DC)							
4H: 4.5 V, 06: 6 V, 09: 9 V, 12: 12 V, 24: 24 V							

### TYPES

Contact arrangement	Nominal coil voltage	Part No.	
		1 coil latching	2 coil latching
1 Form A	4.5V DC	ADQM1604H	ADQM2604H
	6V DC	ADQM16006	ADQM26006
	9V DC	ADQM16009	ADQM26009
	12V DC	ADQM16012	ADQM26012
	24V DC	ADQM16024	ADQM26024

Standard packing: Carton: 20 pcs.; Case: 200 pcs.

## RATING

### 1. Coil data

#### 1) 1 coil latching

Nominal coil voltage	Set voltage (at 20°C 68°F)	Reset voltage (at 20°C 68°F)	Nominal operating current [ $\pm 10\%$ ] (at 20°C 68°F)	Coil resistance [ $\pm 10\%$ ] (at 20°C 68°F)	Nominal operating power	Max. applied voltage (at 20°C 68°F)
4.5V DC	80%V or less of nominal voltage (Initial)	80%V or less of nominal voltage (Initial)	111.1mA	40.5 $\Omega$	500mW	130%V of nominal voltage
6V DC			83.3mA	72 $\Omega$		
9V DC			55.6mA	162 $\Omega$		
12V DC			41.7mA	288 $\Omega$		
24V DC			20.8mA	1,152 $\Omega$		

#### 2) 2 coil latching

Nominal coil voltage	Set voltage (at 20°C 68°F)	Reset voltage (at 20°C 68°F)	Nominal operating current [ $\pm 10\%$ ] (at 20°C 68°F)	Coil resistance [ $\pm 10\%$ ] (at 20°C 68°F)	Nominal operating power	Max. applied voltage (at 20°C 68°F)
4.5V DC	80%V or less of nominal voltage (Initial)	80%V or less of nominal voltage (Initial)	221.7mA	20.3 $\Omega$	1,000mW	130%V of nominal voltage
6V DC			166.7mA	36 $\Omega$		
9V DC			111.1mA	81 $\Omega$		
12V DC			83.3mA	144 $\Omega$		
24V DC			41.7mA	576 $\Omega$		

### 2. Specifications

Characteristics	Item	Specifications	
Contact	Arrangement	1 Form A	
	Contact resistance (Initial)	Max. 30 m $\Omega$ (By voltage drop 6 V DC 1A)	
	Contact material	AgNi type	
Rating	Nominal switching capacity (resistive load)	60 A 250V AC	
	Max. switching power (resistive load)	15,000 V A	
	Max. switching voltage	250V AC	
	Max. switching current	60 A AC	
	Nominal operating power	500mW (1 coil latching), 1,000mW (2 coil latching)	
	Min. switching capacity (Reference value)*1	100mA 5 V DC	
Electrical characteristics	Insulation resistance (Initial)	Min. 1,000M $\Omega$ (at 500V DC) Measurement at same location as "Breakdown voltage" section.	
	Breakdown voltage (Initial)	Between open contacts	1,500 Vrms for 1min. (Detection current: 10mA.)
		Between contact and coil	4,000 Vrms for 1min. (Detection current: 10mA.)
	Surge breakdown voltage*2 (Initial)	Between contact and coil	Min. 10,000 V
	Set time (at 20°C 68°F) (Initial)		Max. 20 ms (Nominal voltage applied to the coil, excluding contact bounce time.)
Reset time (at 20°C 68°F) (Initial)		Max. 20 ms (Nominal voltage applied to the coil, excluding contact bounce time.)	
Mechanical characteristics	Shock resistance	Functional	Min. 200 m/s <sup>2</sup> (Half-wave pulse of sine wave: 11 ms; detection time: 10 $\mu$ s.)
		Destructive	Min. 1,000 m/s <sup>2</sup> (Half-wave pulse of sine wave: 6 ms.)
	Vibration resistance	Functional	10 to 55 Hz at double amplitude of 1.5 mm (Detection time: 10 $\mu$ s.)
		Destructive	10 to 55 Hz at double amplitude of 2.0 mm
Expected life	Mechanical	Min. 10 <sup>8</sup> (at 180 times/min.)	
	Electrical	60A 250V AC Min. 10 <sup>3</sup> (resistive load, operating frequency: 15s ON, 45s OFF) 50A 250V AC Min. 10 <sup>4</sup> (resistive load, operating frequency: 15s ON, 45s OFF)	
Conditions	Conditions for operation, transport and storage*3	Ambient temperature: -40 to +70°C -40 to +158°F Humidity: 5 to 75% R.H. (Not freezing and condensing at low temperature)	
	Max. operating speed	1 times/min. (at rated load)	
Unit weight		Approx. 35 g 1.23 oz	

Notes: \*1. This value can change due to the switching frequency, environmental conditions, and desired reliability level, therefore it is recommended to check this with the actual load.

\*2. Wave is standard shock voltage of  $\pm 1.2 \times 50\mu$ s according to JEC-212-1981

\*3. The upper limit of the ambient temperature is the maximum temperature that can satisfy the coil temperature rise value. Refer to Usage, transport and storage conditions in NOTES.



---

Please contact .....

**Panasonic Corporation**

Electromechanical Control Business Division

■ 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8506, Japan  
[industrial.panasonic.com/ac/e/](http://industrial.panasonic.com/ac/e/)

**Panasonic**<sup>®</sup>

©Panasonic Corporation 2018