

# Relay Specification for approval

## Type Model

- 1 Kinds: Electromagnetic Relay
- 1.2 Type: CMA3-1U 24VDC (792H) 40A
- 1.3 Outline: 28mm×28mm×25mm (+11.5mm)
- 1.4 Contact Arrangement: A/B/C
- 1.5 Contact Material: Silver



## 2 Coil

at 23 °C

Nominal Voltage	Pick-up Voltage	Drop-out Voltage	Max. Allowable Voltage	Coil Resistance	Coil Power
Vd. c.	Vd. c.	Vd. c.	Vd. c.		W
				$\Omega$	
<b>24</b>	<b><math>\leq 8.4</math></b>	<b><math>\geq 1.2</math></b>	<b>15.6</b>	<b><math>85 \times (1 \pm 10\%)</math></b>	<b>1.7</b>

## 3 Contact Specification

- 3.1 Contact Rating: 40 A 27 Vd. c.
- 3.2 Max. Contact Current: NO:40A
- 3.3 Max. Contact Voltage: 75 Vd. c.
- 3.4 Min. Applicable Load: 6 V d. c. 1 A

## 4 Performance

4.1 Contact Resistance: 50 mΩ max. (at 6 Vd.c. 1A)

4.2 Operate Time: ≤ 10 ms

4.3 Release Time: ≤ 5 ms

4.4 Life

(1) Electrical Endurance

100000 (40A/13.5Vd.c. 85°C,

100000 times (40A/13.5Vd.c. 85°C, resistive load, operating frequency 15 cycle/min, duty factor 50%).

(2) Mechanical Endurance

1×10<sup>7</sup>.

1×10<sup>7</sup> times (no load at operating frequency of 18000 ops/hour).

4.5 Dielectric Strength ( Leak Current: 1 mA)

(1) Between Contacts: 500 Va.c. (50/60 Hz 1 min)

(2) Between Coil To Contacts: 500 Va.c. (50/60 Hz 1 min)

4.6 Insulation Resistance

(2) Between Coil To Contacts: 100 MΩ (500 Vd.c.)

4.7 Vibration

Durability 10mm DA, frequency 5 Hz to 22.5 Hz.

4. 8 Shock

Malfunction acceleration 98 m/s<sup>2</sup>(Duration 11 ms).

Durability Acceleration 294 m/s<sup>2</sup>(Duration 11 ms).

## 5 Standards Test Condition

5.1 Temperature: 15 °C ~ 35 °C

5.2 Humidity: 25 % ~ 75 %

## 6. Operating Condition

6.1 Temperature: -30 °C ~ 70 °C

6.2 Humidity: 35 % ~ 85 %

## 7. 0Storage Condition

7.1 Temperature: 0 °C ~ 40 °C

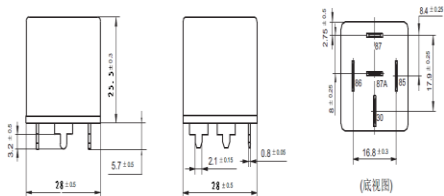
7.2 Humidity: 20% ~ 80 %

### 7.3 Environment

(1) Store in locations where the product is not exposed to corrosive gas.

(2) Keep product is not exposed to the direct ray of the sun.

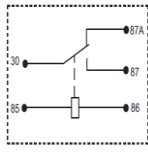
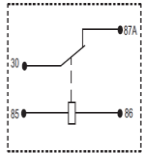
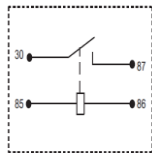
## 8 Configuration



A型

B型

C型



## 9 Ordering

Information

HY603 - 12VDC - C - S - R

①      ②

③      ④

⑤

- ① Type : HY603  
② Coil voltage : 12: 12Vd. c.  
③ Contact arrangement : (A/B/C)  
④ Structure form : /PCB (G/S/T/P)







