

# Relay Specification for approval

## Type Model

1 Kinds: Electromagnetic Relay

1.2 Type: CMA3-1U 12VDC (792H) 40A

1.3 Outline: 28mm×28mm×25mm (+11.5mm)

1.4 Contact Arrangement: A/B/C

1.5 Contact Material: Silver



## 2 Coil

### Rating

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
				Ω	
12	≤8.4	≥1.2	15.6	85 × (1 ± 10%)	1.7

## 3 Contact Specification

3.1 Contact Rating: 40 A 13.5 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,

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cycle/min,

duty factor 50%).

(2) Mechanical Endurance

$1 \times 10^7$  o.

$1 \times 10^7$  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. Storage Condition

7.1 Temperature: 0 °C ~ 40 °C

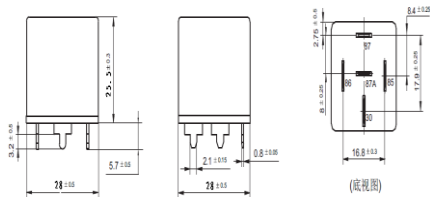
7.2 Humidity: 20% ~ 80 %

## 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.

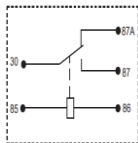
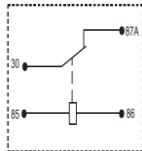
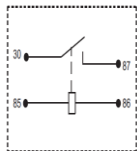
## Configuration



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)

**RUICHI**







