

## BETA ELECTRIC INDUSTRY CO., LTD. RELAYS & COMPONENTS

### FEATURES

- Shows relay status in manual or powered condition.
- Shows coil “on” or “off” status ideal in low light conditions.
- Allows for manual operation of relay without the need for coil power. ideal for field service personnel to test control circuits
- When activated, holds push button and contacts in the operate position. Excellent for analyzing circuit problems
- The full feature relay includes the combination for rotary button or plain button or light or indicator flag. They can be chosen for every combination
- Allows operator to remove relays from sockets more easily than conventional relays
- Used for identification of relays in multi-relay circuits



### LINEUP

■ STANDARD COIL POLARITY

Type	Contact form	Standard	With LED and flag	With LED, push button and flag	With LED, lock down push button and flag
S type terminal	DPDT	BTA7-2C-S-CW	BTA7-2C-S-CL	BTA7-2C-S-CML	BTA7-2C-S-CM4L
	3PDT	BTA7-3C-S-CW	BTA7-3C-S-CL	BTA7-3C-S-CML	BTA7-3C-S-CM4L
P type terminal	DPDT	BTA7-2C-P-CW	BTA7-2C-P-CL	BTA7-2C-P-CML	BTA7-2C-P-CM4L
	3PDT	BTA7-3C-P-CW	BTA7-3C-P-CL	BTA7-3C-P-CML	BTA7-3C-P-CM4L

■ SOCKETS & ACCESSARIES

Poles	SOCKET
DPDT/3PDT	BTA3-11A
	BTA3-11AN

Note: Above sockets are only applied to type “S” terminal



## SPECIFICATIONS

■ COIL RATINGS

Rated voltage	Rated current		Coil resistance (Ω)	Must operate voltage	Must release voltage	Max. voltage	Power consumption (approx.)
	50 Hz	60 Hz		% of rated voltage			
AC	6 V*	684	597	85	30	110	2.0-2.75VA
	12 V	294	240				
	24 V	114.7	95.9				
	48V	73.8	65.3				
	110/120V	22.5	19.2				
	220V	15.5	13.1				
	230V	13.4	11.1				
	240V	11.4	10.1				
DC	6 V*	169.6		80	10	110	1.2-2.0W
	12 V	106					
	24 V	52					
	48V*	25.1					
	110 V	10.6					

**Note:**

1. The coil resistance is measured at a coil temperature of 25°C and 35%-70% of humidity.
2. The operating parameter is measured at a coil temperature of 25°C indicated in the percentage of the rated voltages.
3. The coil rated current is measured as the real current consumption under the rated voltages.



## BETA ELECTRIC INDUSTRY CO., LTD. RELAYS & COMPONENTS

### ■ CONTACT RATINGS

Item	2C/3C	
Resistive load (CosΦ=1)	10A 240VAC	10A 28VDC
Inductive load (cosΦ=0.4L/R=7ms)	5A 240VAC	5A 24VDC
Motor	1/3HP 120VAC	1/2HP 240VAC
Carry current	10A	
Max. switching voltage	250VAC	125VDC
Max. switching current	10A	
Max. switching power	2400VA	280W

### ■ CHARACTERISTICS

Item	All Relays
Contact resistance	50mΩ Maximum.
Operate time	20mS Maximum.
Release time	15mS Maximum.
Max. operating frequency	Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr (under rated load)
Insulation resistance	500MΩ Minimum. At 500VDC.
Dielectric strength	Between open contact: 1500 VAC for 1 minute.
	Between contact and coil: 1500VAC for 1 minute.
	Between live parts and ground: 1500VAC for 1 minute.
Vibration resistance	Destruction: 10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude) Malfunction: 10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude)
Shock resistance	Destruction: 1,000 m/s <sup>2</sup> Malfunction: 200 m/s <sup>2</sup>
Endurance	Mechanical life: 10,000,000 operations. Electrical life: 100,000 operations.
Ambient temperature	-30°C TO +50°C (AC); -30°C TO +55°C (DC).
Ambient humidity	5% to 85%
Weight	88g

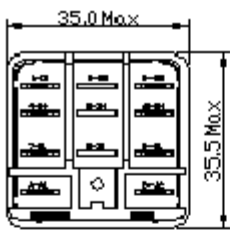
■ SOCKETS Dielectric strength, Insulation resistance

Pole	Model	Carry current	Dielectric withstand voltage	Insulation resistance
DPDT	BTA3-11AN/BTA3-11A	30A	1500 VAC for 1 minute.	500MΩ Minimum. At 500VDC.
3PDT	BTA3-11AN/BTA3-11A	30A		

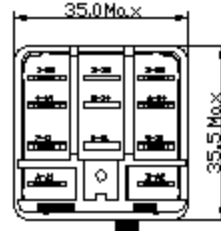
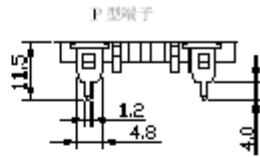
## DIMENSION

■ Relays with Solder/Plug-in Terminals

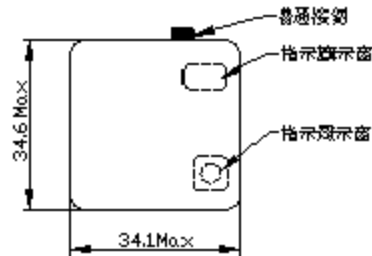
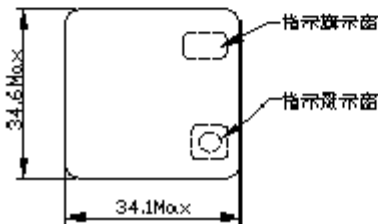
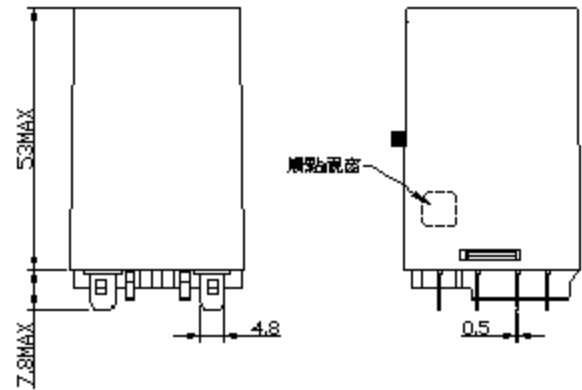
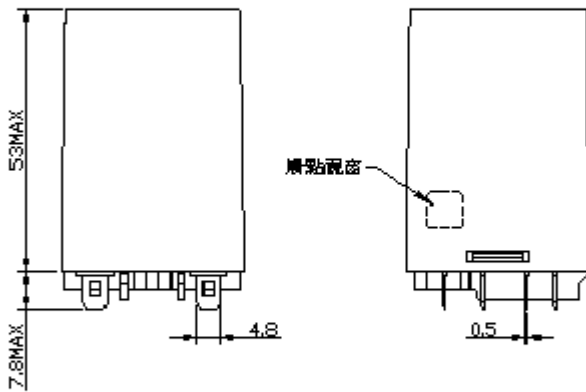
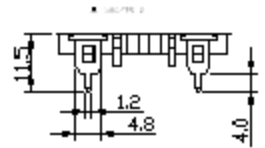
### BTA7- 2C (8 pin)



**CL(2C)**



**CML(2C)**

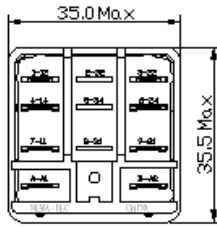




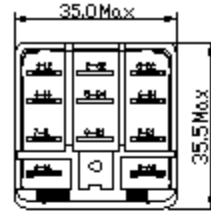
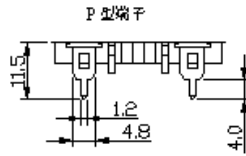
# BTA7 SERIES

BETA ELECTRIC INDUSTRY CO., LTD. RELAYS & COMPONENTS

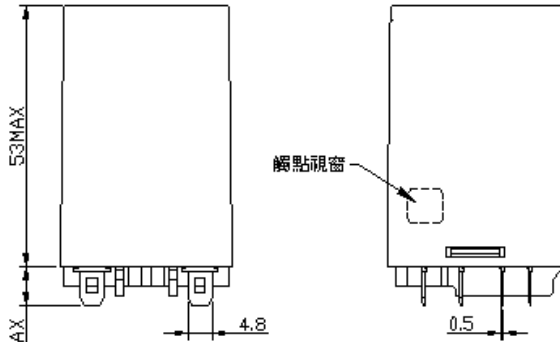
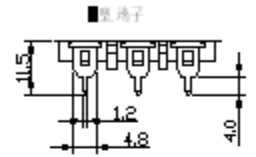
## BTA7- 3C (11 pin)



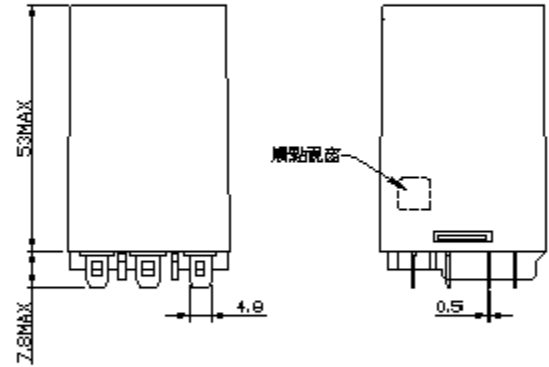
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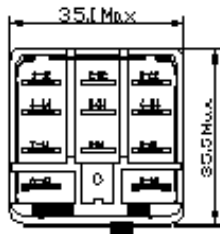
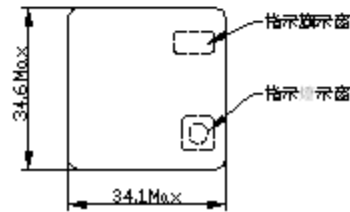
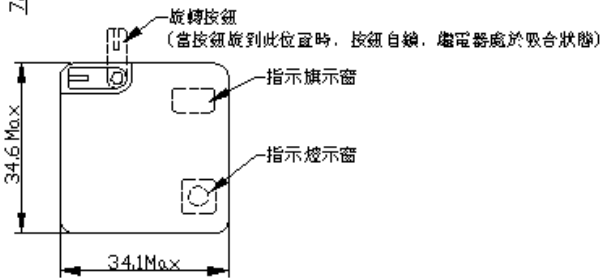
**CL(3C)**



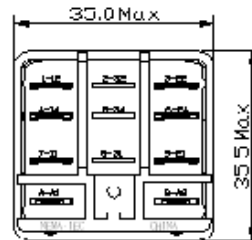
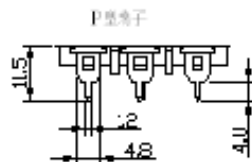
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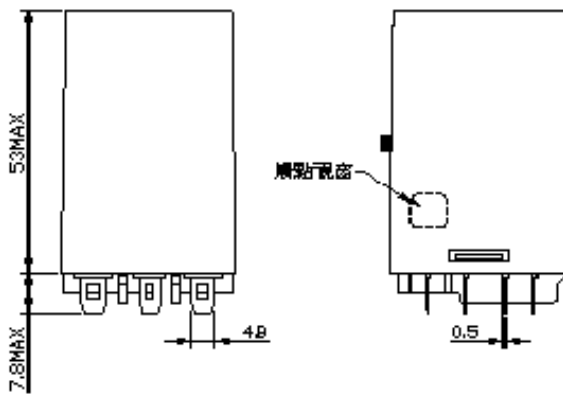
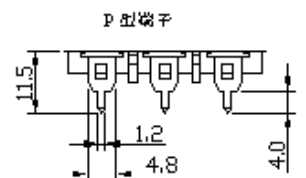
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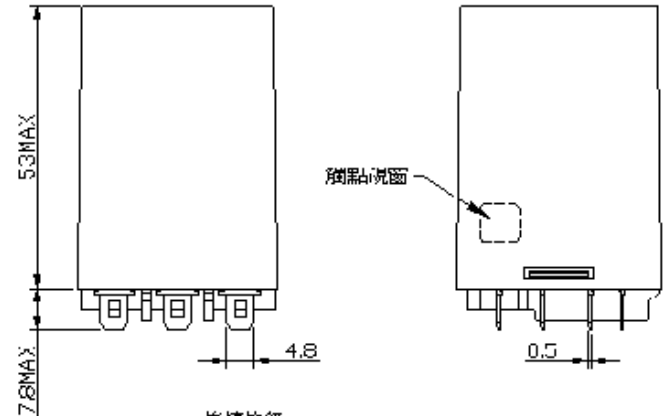
**CML(3C)**



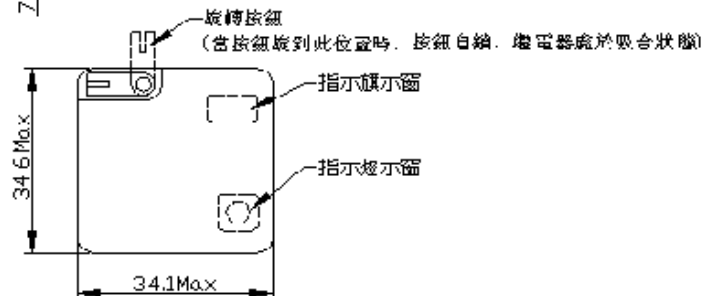
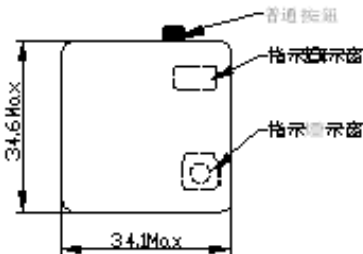
**CM4L(3C)**



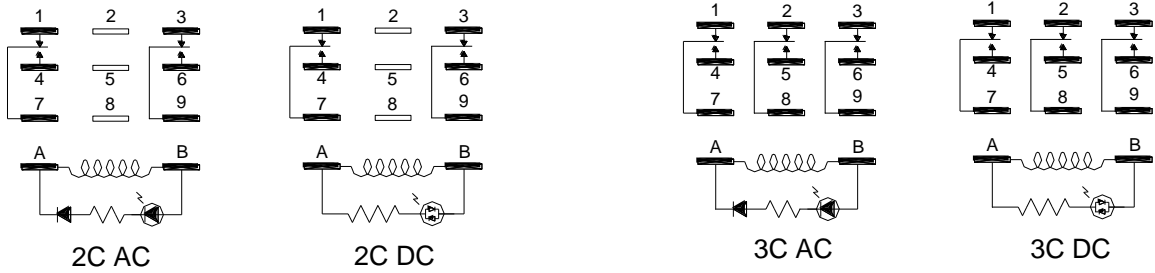
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## Wiring diagram



■ ACCESSORIES

SCOKET socket outline drawing, dimensions, wiring, Mounting

Type	Socket	Dimension	Wiring	Mounting
DPDT	<p>BTA3-11AN</p>		<p>Refer to Wire diagrams</p>	<p>1. track mounting 2. screw mounting</p>
3PDT	<p>BTA3-11A</p>		<p>Refer to Wire diagram</p>	<p>1. track mounting 2. screw mounting</p>



## BETA ELECTRIC INDUSTRY CO., LTD. RELAYS & COMPONENTS

### HOW TO ORDER

BTA7- 3C    S- C M4L- 12VAC

