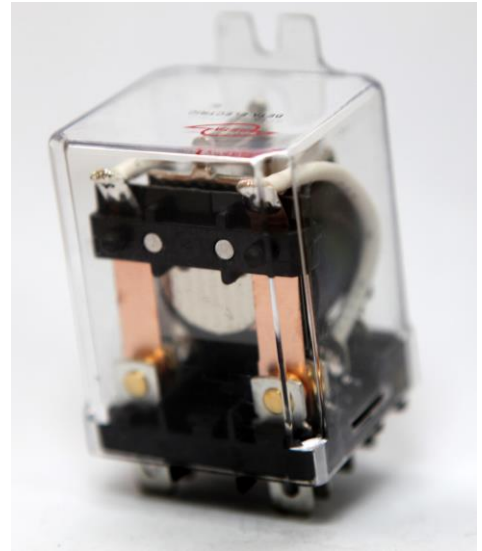


## FEATURES

- Plug-in style relay.
- Quick connect receptacles or direct soldering. P.C.B. terminals are also acceptable.
- Large capacity of 25A contact rating.
- SPDT, DPDT, 3PDT contact arrangement.
- BTA3 general purpose relays are available in a wide choice of AC or DC voltage with indicator lamp and/or manual push button.
- E115915



## LINEUP

### ■ STANDARD COIL POLARITY

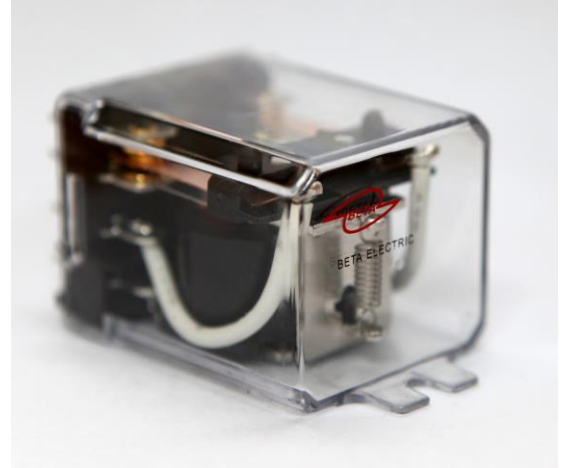
Type	Contact form	Solder terminals/ P.C.B terminals		
		Standard	With LED	With LED and Manual button
Coil insulation Class B	SPDT	BTA3-1C-B-S-C	BTA3-1C-B-S-C-L	BTA3-1C-B-S-C-LM
	DPDT	BTA3-2C-B-S-C	BTA3-2C-B-S-C-L	BTA3-2C-B-S-C-LM
	3PDT	BTA3-3C-B-S-C	BTA3-3C-B-S-C-L	BTA3-3C-B-S-C-LM
	SPNC	BTA3-1B-B-S-C	BTA3-1B-B-S-C-L	BTA3-1B-B-S-C-LM
	DPNC	BTA3-2B-B-S-C	BTA3-2B-B-S-C-L	BTA3-2B-B-S-C-LM
	3PNC	BTA3-3B-B-S-C	BTA3-3B-B-S-C-L	BTA3-3B-B-S-C-LM
	SPNO	BTA3-1A-B-S-C	BTA3-1A-B-S-C-L	BTA3-1A-B-S-C-LM
	DPNO	BTA3-2A-B-S-C	BTA3-2A-B-S-C-L	BTA3-1A-B-S-C-LM
	3PNO	BTA3-3A-B-S-C	BTA3-3A-B-S-C-L	BTA3-1A-B-S-C-LM
Coil insulation Class F	SPDT	BTA3-1C-B-S-C-F	BTA3-1C-B-S-C-L-F	BTA3-1C-B-S-C-LM-F
	DPDT	BTA3-2C-B-S-C-F	BTA3-2C-B-S-C-L-F	BTA3-2C-B-S-C-LM-F
	3PDT	BTA3-3C-B-S-C-F	BTA3-3C-B-S-C-L-F	BTA3-3C-B-S-C-LM-F
	SPNC	BTA3-1B-B-S-C-F	BTA3-1B-B-S-C-L-F	BTA3-1B-B-S-C-LM-F
	DPNC	BTA3-2B-B-S-C-F	BTA3-2B-B-S-C-L-F	BTA3-2B-B-S-C-LM-F
	3PNC	BTA3-3B-B-S-C-F	BTA3-3B-B-S-C-L-F	BTA3-3B-B-S-C-LM-F
	SPNO	BTA3-1A-B-S-C-F	BTA3-1A-B-S-C-L-F	BTA3-1A-B-S-C-LM-F
	DPNO	BTA3-2A-B-S-C-F	BTA3-2A-B-S-C-L-F	BTA3-1A-B-S-C-LM-F
	3PNO	BTA3-3A-B-S-C-F	BTA3-3A-B-S-C-L-F	BTA3-1A-B-S-C-LM-F

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

- Notes:
- The standard contact material AgCdO can be replaced by AGSNO2 gold flashed by adding a letter B in its product name, ex. BTA2-1C-B-S2-C  
Blank: AGCDO      B: AGSNO2 gold flashed
  - You can choose terminal style by switching the codes. For instance : BTA2-1C-B-S-C(6.35X0.8) can be changed to BTA2-1C-B-S1-C(4.8X0.8)  
S: 6.35X0.8    S1: 4.8X0.8    S2: 4.8X0.5    P1: 2.3X0.8    P2: 1.2X0.8 (See Terminal Style figure below)
  - You can choose cover style by switching the codes. For instance : BTA2-1C-B-S2-C( plain cove) can be changed to BTA2-1C-F-S2-C1(side flange cover)  
C: plain cover    C1: side flange cover    C3: top flange cover    C4: din rail cover
  - Description of coil insulation Class: B: insulation temperature 130°C (leave blank behind voltage),    F: insulation temperature 155°C (add "F" behind voltage, refer to above chart)

### SOCKETS & ACCESSORIES

Poles	Front-mounting Socket
1C/2C/3C	BTA3-11A
	BTA3-11AN



## SPECIFICATIONS

### COIL RATINGS

Rated voltage(V)	Rated current (mA)		Coil resistance (Ω)	Must operate voltage	Must release voltage	Max. voltage	Power consumption (approx.)
	50 Hz	60 Hz					
AC (1C,2C)	6	595	550	85	30	110	3.0VA
	12	272	241				
	24	146.8	127.2				
	110	31.2	27.5				
	120	37.7	31				
	220	23.5	19.7				
AC (3C)	6	734	616	85	30	110	3.4VA
	12	454	365				
	24	142	124				
	48	77.9	64.9				
	120	37.4	31.2				
	240	18.7	14.8				

Rated voltage(V)		Rated current (mA)		Coil resistance ( $\Omega$ )	Must operate voltage	Must release voltage	Max. voltage	Power consumption (approx.)			
		50 Hz	60 Hz						% of rated voltage		
DC (1C,2C)	6	180.5		29.5	75	10		1.2W			
	12	96.5		120							
	24	50		472							
	48	26.7		1800							
	110	13.2		10000							
	120	13.2		10000							
DC (3C)	6	278		21.3				75	10		1.5W
	12	147		85							
	24	70.8		340							
	48	33.6		1360							
	110	12.9		8500							
	120	12.9		8500							

**Note:**

1. The test value of coil resistance was at a temperature of 25 ° C, humidity 35% to 70%.
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.

**■ CONTACT RATINGS**

Item	1C/2C	3C
Resistive load (cos $\Phi$ = 1)	25A,300VAC 13A,28VDC	20A,277VAC 13A,28VDC
Motor	1HP,120VAC 1-1/2HP,240VAC	3/4HP,120VAC 1HP,240VAC
Max. switching voltage	250VAC 125VDC	
Max. switching current	25A	
Max. switching power	7500VA 364W	5540VA 364W

■ CHARACTERISTICS

Item	All Relays
Contact resistance	50mΩ Maximum.
Operate time	AC: 30mS Maximum, DC: 20mS Maximum
Release time	AC: 25mS Maximum, DC: 15mS Maximum
Max. operating frequency	Mechanical: 18,000 operations/h Electrical: 1,800 operations/h (under rated load)
Insulation resistance	1000MΩ Minimum. At 500VDC.
Dielectric strength	Between open contact: 1000 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 Hz, 0.75-mm single amplitude (1.5-mm double amplitude) Malfunction: 10 to 55 Hz, 0.5-mm single amplitude (1.0-mm double amplitude)
Shock resistance	Destruction: 1,000 m/s <sup>2</sup> (approx. 100G) Malfunction: 1,00 m/s <sup>2</sup> (approx. 10G)
Endurance	Mechanical: 10,000,000 operations min (at 18,000 operations/h) Electrical: 100,000 operations min (at 1,800 operations/h under rated load)
Ambient temperature	Operating: -30°C to +50°C (AC); -30°C to +65°C (DC)
Ambient humidity	Operating: 5% to 85%
Weight	88g

■ SOCKETS Dielectric withstand voltage 、 Insulation resistance

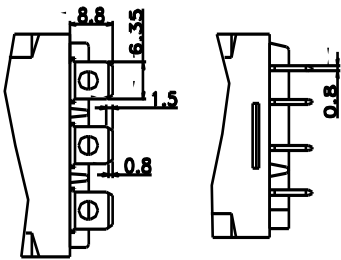
Pole	Model	Carry current	Dielectric withstand voltage	Insulation resistance
1C/2C/3C	BTA3-11A	25A	1800VAC 1min	1000M Ω Minimum. At 500VDC.
	BTA3-11AN	25A	1800VAC 1min	1000M Ω Minimum. At 500VDC.

## DIMENSION

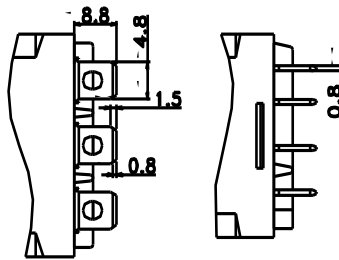
■ Relays with Solder/Plug-in Terminals

### Terminal style

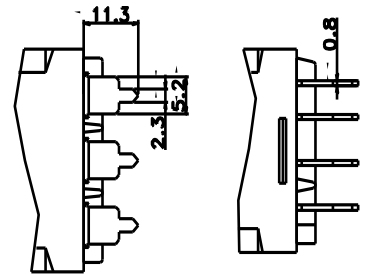
Standard terminal:  
code:S



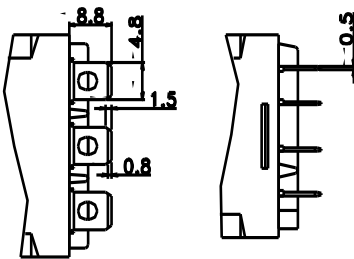
Standard terminal:  
code:S1



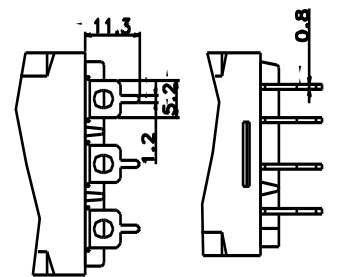
P.C.B terminal:  
code P1



Standard terminal:  
code S2

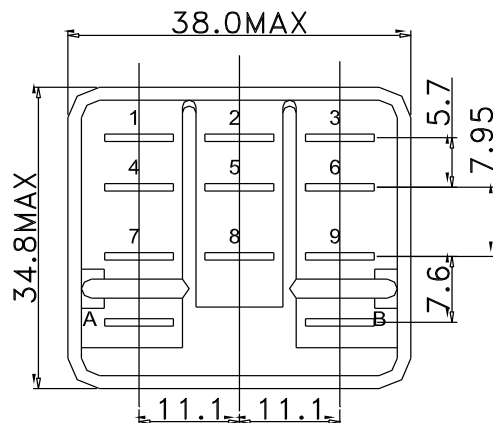
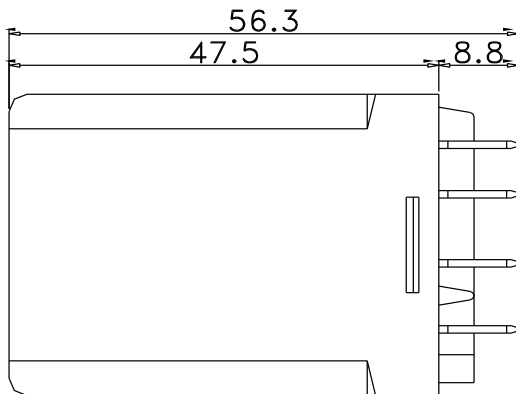


P.C.B terminal:  
code P2

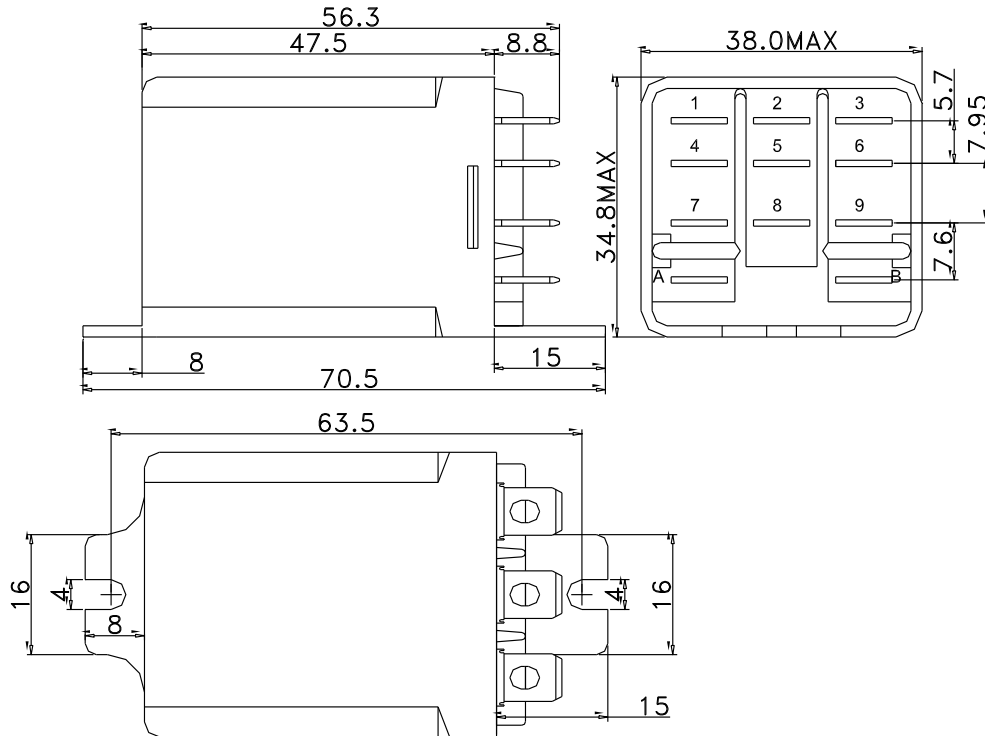


### Cover style

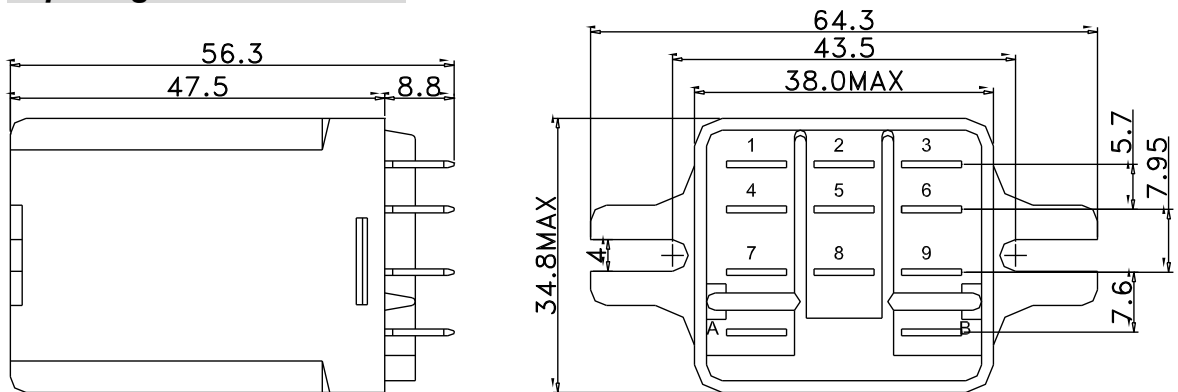
Plain cover: code C



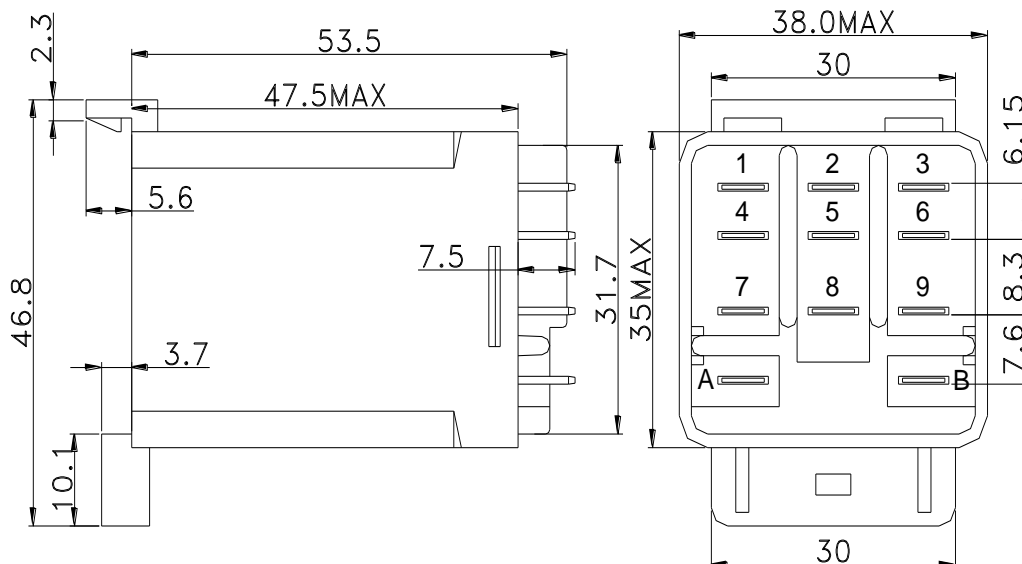
**Side flange cover: code C1**



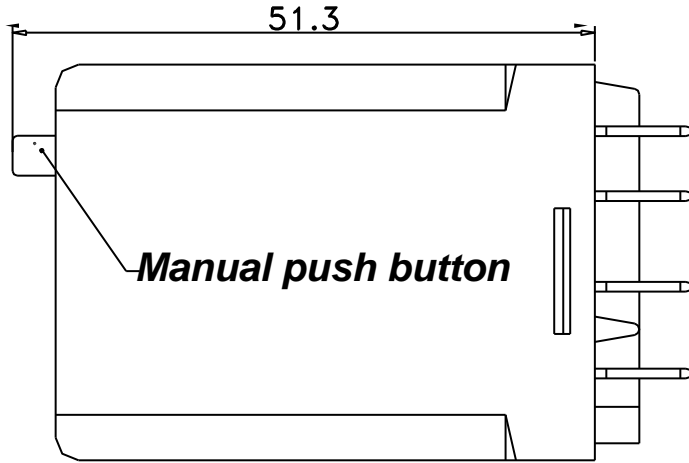
**Top flange cover: code C3**



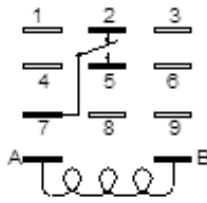
**Din rail cover: code C4**



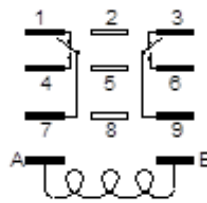
## Outline drawing with manual push button: code M



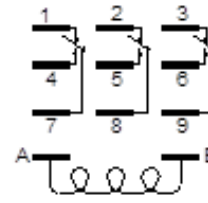
## Wiring diagram



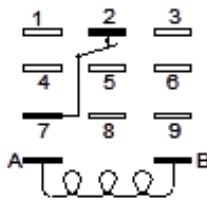
**SPDT**



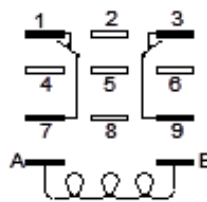
**DPDT**



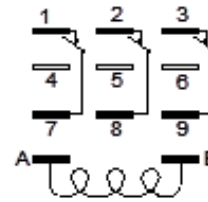
**3PDT**



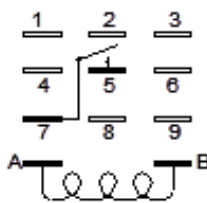
**SPNC**



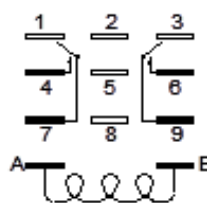
**DPNC**



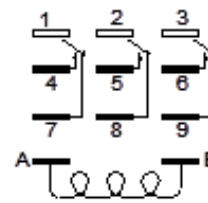
**3PNC**



**SPNO**



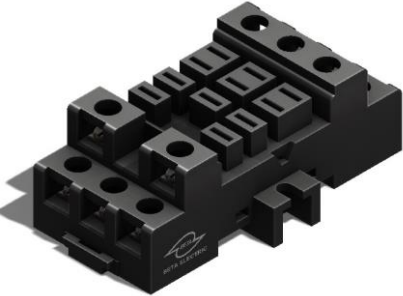
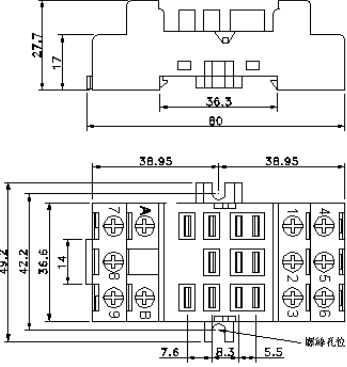
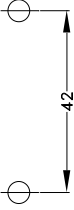

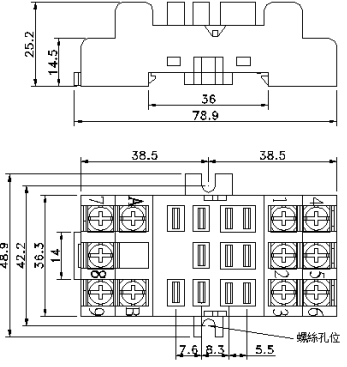
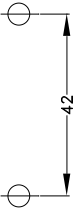
**DPNO**



**3PNO**

### ACCESSORIES

#### SOCKET outline drawing, dimensions , wiring , Mounting

Model	Dimension	Wiring	Mounting
<p data-bbox="229 622 354 651">BTA3-11AN</p> 		<p data-bbox="1161 741 1262 864">Refer to Wire diagrams</p>	<p data-bbox="1310 600 1517 674">1. track mounting 2. screw mounting</p> 
<p data-bbox="236 1099 347 1128">BTA3-11A</p> 		<p data-bbox="1155 1240 1267 1319">參照 Wire diagrams</p>	<p data-bbox="1310 1077 1517 1151">1. track mounting 2. screw mounting</p> 

Note: BTA3-11AN & BTA3-11A are used in 0.5MM thickness terminal only



## HOW TO ORDER

