LCD
Counters / Timers

CX Series



Features

- LCD display with easy-to-read white PV characters
- Input type: voltage input (PNP) / no-voltage input (NPN) selectable (through parameter setting), universal voltage input type available
- One-shot output time: 0.01 to 99.99 seconds (in 0.01 second increments)
- Compact rear-length size (64.5 mm)

[Counter]

- Prescale value setting range: 0.00001 to 99999.9
- Various input / output modes (11 input modes, 11 output modes)
- Set start point function
- Total count display mode: displays current count and aggregate count simultaneously

[Timer]

- Various output modes (15 output modes)
- Time setting range: 0.001 second to 99999.9 hours
- Set output time to 0 feature

Specifications

Model	CX6S-1P□□	CX6S-2P□□	CX6M-1P□□	CX6M-2P□□
Display digits	6-digit			
Display method	7-segment (1st, 2nd digits of counting value display: white, setting value display: green), 11-segment (the other digits of counting value display: white) LCD			
Character size	W × H (unit: mm)			
Counting value	4.1 × 10.1		6.2 × 15.2	
Setting value	3.3 × 8.1		5 × 12.3	
Counter	Count up, count down, count up / down			
Counting range [01]	-99999 to 999999			
Timer	Count up, count down			
Repeat / SET / voltage / Temp. Error	CX6 - P : Power ON Start: ≤ ± 0.01 % ± 0.05 sec Signal ON Start: ≤ ± 0.01 % ± 0.03 sec CX6 - P F: Power ON Start: ≤ ± 0.01 % ± 0.08 sec Signal ON Start: ≤ ± 0.01 % ± 0.06 sec			
Input logic (CX6□-□P□)	Voltage input (PNP) - input impedance: 10.8 kΩ, [H]: 5 - 30 VDC⎓, [L]: 0 - 2 VDC⎓ No-voltage input (NPN) - short-circuit impedance: ≤ 1 kΩ, short-circuit residual voltage: ≤ 2 VDC⎓			
Input logic (CX6□-□P□F)	Free voltage input - INA (START), INB (INHIBIT) input, [H]: 24 - 240 VAC~ 50 / 60 Hz / 24 - 240 VDC⎓ [L]: 0 - 10 VAC~ / VDC⎓ No-voltage input - RESET input, short-circuit impedance: ≤ 1 kΩ, short-circuit residual voltage: ≤ 2 VDC⎓			
One-shot output time	0.01 to 99.99 s			
Unit weight (packaged)	Dependent on the model			
CX6□-□P4	≈ 112 g (≈ 157 g)	≈ 117 g (≈ 162 g)	≈ 170 g (≈ 235 g)	≈ 175 g (≈ 240 g)
CX6□-□P4F	≈ 110 g (≈ 155 g)	≈ 115 g (≈ 160 g)	≈ 168 g (≈ 233 g)	≈ 173 g (≈ 238 g)
CX6□-□P2	≈ 111 g (≈ 156 g)	≈ 116 g (≈ 161 g)	≈ 169 g (≈ 234 g)	≈ 174 g (≈ 239 g)
CX6□-□P2F	≈ 109 g (≈ 154 g)	≈ 114 g (≈ 159 g)	≈ 167 g (≈ 232 g)	≈ 172 g (≈ 237 g)
Approval	CE EAC			

01) It varies depending on the setting of decimal points.

Model	CX6S-□P□□	CX6M-□P□□
Contact control output	Relay	
Type (1-stage)	SPDT (1c) × 1	SPDT (1c) × 1
Type (2-stage)	SPST (1a) × 2	SPDT (1c) × 2
Capacity	≤ 250 VAC~ 3 A, ≤ 30 VDC⎓ 3 A resistive load	≤ 250 VAC~ 3 A, ≤ 30 VDC⎓ 3 A resistive load
Solid-state control output	-	NPN open collector
Type (1-stage)	-	× 1
Type (2-stage)	-	× 2
Capacity	-	≤ 30 VDC⎓, 100 mA

View product detail

Voltage	AC voltage type	AC / DC voltage type
Power supply	100 - 240 VAC⁓ ± 10 % 50 / 60 Hz	24 VAC⁓ ± 10 % 50 / 60 Hz, 24 - 48 VDC⎓ ± 10 %
Power consumption	Dependent on the model	
CX6S-1P□	≤ 6.4 VA	AC: ≤ 5.5 VA, DC: ≤ 3.5 W
CX6S-1P□F	≤ 4.2 VA	AC: ≤ 3.6 VA, DC: ≤ 2.5 W
CX6S-2P□	≤ 6.7 VA	AC: ≤ 5.6 VA, DC: ≤ 3.6 W
CX6S-2P□F	≤ 4.9 VA	AC: ≤ 4.0 VA, DC: ≤ 2.8 W
CX6M-1P□	≤ 7.1 VA	AC: ≤ 6.2 VA, DC: ≤ 4 W
CX6M-1P□F	≤ 4.7 VA	AC: ≤ 3.9 VA, DC: ≤ 2.9 W
CX6M-2P□	≤ 7.5 VA	AC: ≤ 6.3 VA, DC: ≤ 4.1 W
CX6M-2P□F	≤ 5.4 VA	AC: ≤ 4.5 VA, DC: ≤ 3.3 W
External power supply [01)]	≤ 12 VDC⎓ ± 10 % 100 mA	
Memory retention	≈ 10 years (non-volatile semiconductor memory type)	
Insulation resistance	≥ 100 MΩ (500 VDC⎓ megger)	
Dielectric strength	3,000 VAC⁓ 50 / 60 Hz for 1 minute	
Noise immunity	± 2 kV square wave noise (pulse width: 1 μs) by the noise simulator	± 500 V square wave noise (pulse width: 1 μs) by the noise simulator
Vibration	0.75 mm double amplitude at frequency of 10 to 55Hz (for 1 minute) in each X, Y, Z direction for 1 hour	
Vibration (malfunction)	0.5 mm double amplitude at frequency of 10 to 55Hz (for 1 minute) in each X, Y, Z direction for 10 minute	
Shock	300 m/s^2 (≈ 30 G) in each X, Y, Z direction for 3 times	
Shock (malfunction)	100 m/s^2 (≈ 10 G) in each X, Y, Z direction for 3 times	
Relay life cycle	Mechanical: ≥ 5,000,000 operations Electrical: ≥ 100,000 operations	
Ambient temp.	-10 to 55 °C, storage: -25 to 65 °C (no freezing or condensation)	
Ambient humi.	35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)	
Protection rating	IP65 (front part, IEC standard)	

01) This is for the CX6□-□P□ model.