















Product Overview

Series	LA8N Series(LCD type)	
Digit	8 Digits	
Model	LA8N-BN	LA8N-BF
Appearances & Dimensions	 [W48×H24×L54mm]	
Display	LCD Zero Blanking type (Height : 8.7mm)	
Operation method	Count up mode	
Power supply	Internal lithium battery	
Input type	No-voltage input	Free voltage input
Counting speed	Selectable 1cps / 30cps / 1kcps	20cps fixed
Count input	Residual voltage at short-circuit : Max. 0.5V Impedance at short-circuit : Max. 10kΩ (ON) Impedance at open-circuit : Min. 750kΩ (OFF)	"H" level voltage : 24-240VAC / 6-240VDC "L" level voltage : 0-2VAC / 0-2.4VDC
External switch	SW1, SW2	SW1
RESET input	No-voltage input	
Min.signal width of RESET	Min. 20ms	
Battery life cycle	Over 7 years(at 20℃)	
Insulation resistance	Min. 100MΩ (at 500VDC megger)	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 1 hour
	Malfunaction	0.3mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 10 minutes
Shock	Mechanical	300m/s ² (Approx. 30G) in X, Y, Z directions for 3 times
	Malfunaction	100m/s ² (Approx. 10G) in X, Y, Z directions for 3 times
Reference	J-3 to 5	

Series	CTS Series		CTY Series	CTM Series
Digit	4 Digits	6 Digits	6 Digits	6 Digits
Model	Dual Preset	CT4S-2P□□	CT6S-2P□□	CT6M-2P□□
	Single Preset	CT4S-1P□□	CT6S-1P□□	CT6M-1P□□
	Indicator	-	CT6S-I□□	CT6M-I□□
Appearances & Dimensions	 [W48×H48×L90mm]		 [W72×H36×L77mm]	 [W72×H72×L85mm]
Operation type	Count up, Count down, Count Up/Down			
Power Supply	AC Power	100-240VAC 50/60Hz		
	AC/DC Power	24VAC 50/60Hz / 24-48VDC		
Allowable voltage range	90 to 110% of rated voltage(AC Power type)			
Max. counting speed	Selectable 1cps, 30cps, 1kcps, 5kcps, or 10kcps			
Min. input signal width	Counter	Reset input : Selectable 1ms or 20ms		
	Timer	INA, INB, RESET : Selectable 1ms or 20ms		INA, INB, RESET, INHIBIT, BATCH RESET: Selectable 1ms or 20ms
Input	Selectable voltage input or No-voltage input -Voltage input : input impedance is 5.4kΩ, 'H' level : 5-30VDC, 'L' level : 0-2VDC -No-voltage input: short-circuit impedance : Max. 1kΩ, Residual voltage : Max. 2VDC			
One-shot output	Selectable 0.01s to 99.99s			
Control output	Without com.	Contact output	Dual preset : SPST(1a) 2EA Single preset : SPDT(1c) 1EA	Dual preset : SPST(1a) 1EA, SPDT(1c) 1EA Single preset : SPDT(1c) 1EA
		Solid state output	Dual preset : 1NPN open collector Single preset : 1NPN open collector	
	Com.	Contact output	Dual preset : SPST(1a) 2EA Single preset : SPDT(1c) 1EA	
		Solid state output	-	Dual preset: - Single preset: 1NPN open collector
	Capacity	Contact output	250VAC 5A resistive load	250VAC 3A resistive load
Solid state output		30VDC Max. 100mA Max.		
External sensor power	12VDC ±10%, 100mA Max.			
Reference	J-6 to 33			

Product Overview

Series		FX Series		FXS Series		FX Series		FXH Series		FXL Series		
Digit		4 Digits		6 Digits		4 Digits		6 Digits		4 Digits		
Model	Single preset type	—		—		FX4S		—		—		
	Dual preset type	—		—		—		—		—		
	Indicator	FX4Y-I		FX6Y-I		—		FX5S-I		FX4-I		
Appearances & Dimensions		 [W72×H36×L93mm]		 [W48×H48×L91mm]		 [W72×H72×L112mm]		 [W48×H96×L100mm]		 [W144×H72×L112mm]		
Operation type		Count up, Count down, Count Up/Down										
Power supply		100–240VAC 50/60Hz, 12-24VAC/DC (Option)										
Allowable voltage range		90 to 110% of power supply										
Max. counting speed		Selectable 1cps, 30cps, 2kcps, 5kcps by internal DIP switch										
Min. signal range		Min. 20ms (Input INHIBIT, RESET)										
Input type	CP1, CP2 input	[No-voltage input] Impedance at short-circuit : Max. 470Ω, Residual voltage at short-circuit : Max. 1V, Impedance at open-circuit : Min. 100kΩ				[No-voltage input] ⇨ Impedance at short-circuit : Max. 5.4kΩ, Residual voltage at short-circuit : Max. 2V, Impedance at open-circuit : Min. 100kΩ [Voltage input] ⇨ Input impedance : 10kΩ, "H" level voltage : 5–30VDC, "L" level voltage : 0–2VDC						
	RESET input											
Control output	Con-tact	Type	—		SPDT (1c)		—		Single preset type : SPDT (1c), Dual preset type : SPDT (1c) × 2			
		Capacity	—		250VAC 3A resistive load		—		250VAC 3A resistive load			
	Solid-state	Type	—		1 NPN open collector		—		Single preset type : 1 NPN open collector, Dual preset type : 2 NPN open collectors			
		Capacity	—		Max. 30VDC 100mA		—		Max. 30VDC 100mA			
External power		12VDC ±10%, 50mA Max.										
Reference		J-34 to 39		J-40 to 47		J-48 to 56						

Series		FS Series		F Series		L Series		FM Series		LM Series		
Digit		4 Digits		5 Digits		8 Digits		4 Digits		6 Digits		
Model	Single preset type	FS4A		—		F8A		L8A		—		
	Dual preset type	—		—		—		—		—		
	Indicator	—		FS5B		F8B		L8B		F4BM		
Appearances & Dimensions		 [W48×H48×L85mm]		 [W72×H72×L113mm]		 [W144×H72×L112mm]		 [W72×H72×L112mm]		 [W144×H72×L112mm]		
Operation type		Count up, Count down				Count up, Count down, Count Up/Down						
Power supply		100–240VAC 50/60Hz, 12-24VAC/DC (Option)										
Allowable voltage range		90 to 110% of power supply										
Max. counting speed		Selectable 1cps, 30cps, 2kcps, 5kcps by internal DIP switch										
Min. signal range		RESET input : Min. 20ms										
Input type	CP1, CP2 input	[No-voltage input] Impedance at short-circuit : Max. 1kΩ, Residual voltage at short-circuit : Max. 1V, Impedance at open-circuit : Min. 100kΩ				[Voltage input] ⇨ Input impedance : 5.4kΩ, "H" level voltage : 5–30VDC, "L" level voltage : 0–2VDC [No-voltage input] ⇨ Impedance at short-circuit : Max. 1kΩ, Residual voltage at short-circuit : Max. 2VDC, Impedance at open-circuit : Min. 100kΩ						
	RESET input											
Control output	Con-tact	Type	SPST (1a)		—		SPDT (1c)		Single preset type : SPDT (1c) Dual preset type : SPDT (1c) × 2			
		Capacity	250VAC 3A resistive load		—		250VAC 3A resistive load					
	Solid-state	Type	—		1 NPN open collector		Single preset type : 1 NPN open collector Dual preset type : 2 PNP open collectors					
		Capacity	—		Max. 30VDC 100mA							
Reference		J-57 to 61		J-62 to 68		J-69 to 77						

- (A) Photo electric sensor
- (B) Fiber optic sensor
- (C) Door/Area sensor
- (D) Proximity sensor
- (E) Pressure sensor
- (F) Rotary encoder
- (G) Connector/Socket
- (H) Temp. controller
- (I) SSR/Power controller
- (J) Counter
- (K) Timer
- (L) Panel meter
- (M) Tacho/Speed/Pulse meter
- (N) Display unit
- (O) Sensor controller
- (P) Switching power supply
- (Q) Stepping motor & Driver & Controller
- (R) Graphic/Logic panel
- (S) Field network device
- (T) Production stoppage models & replacement