ELC-EX08NNSN

Instruction Sheet

Switch-Type Digital Extension Module

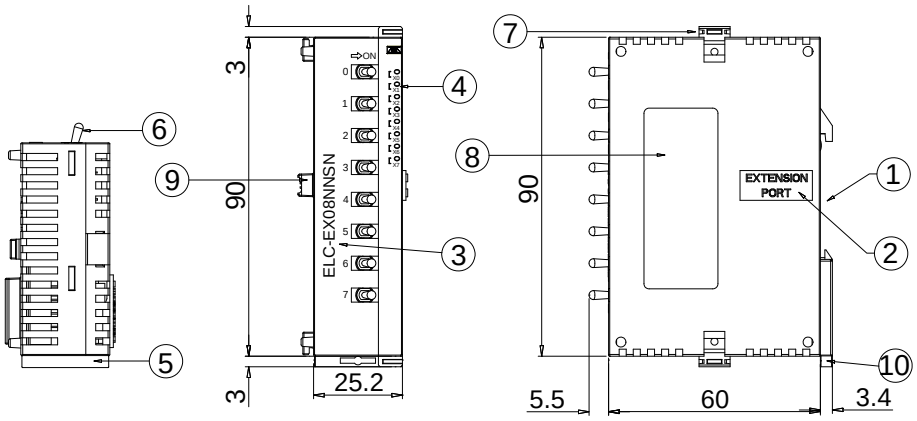
1 ⚠ WARNING

- Please read this instruction carefully before use.
- ELC-EX08NNSN is an OPEN-TYPE device and therefore should be installed in an enclosure free of airborne dust, humidity, electric shock and vibration. The enclosure should prevent non-maintenance staff from operating the device (e.g. key or specific tools are required to open the enclosure) in case danger and damage on the device may occur.
- DO NOT tough any terminal when the power is switched on
- Warning – Do not disconnect while circuit is live unless area is known to be non-hazardous.
- Power, input and output (I/O) wiring must be in accordance with Class 1, Div. 2 wiring methods - Article 501-10(B)(1) of the National Electrical Code.
- Suitable for use in Class 1, Division 2, Groups A, B, C, D or Non-Hazardous locations only.
- Warning – Explosion hazard - Substitution of components may impair suitability for Class 1, Division 2.
- Warning – Explosion hazard - Do not disconnect equipment unless power has been switched off or the area is known to be Non-Hazardous.

2 INTRODUCTION

1. Thank you for choosing ELC series programmable logic controller. ELC-EX08NNSN shall be used together with ELC SLIM TYPE occupying 8 input points. Including MPU, the digital I/O can be extended to maximum 256 points. Besides, maximum 8 special extension modules (AN02NANN/AN04ANNN/AN04NANN/AN06AANN/PT04ANNN/TC04ANNN/MC01) are extendable from MPU.
2. No external power supply and signals are required, ELC-EX08NNSN allows you to directly control its input points by its switches.
3. As digital switches, ELC-EX08NNSN is able to input instructions without required external wiring for receiving signals. Besides, ELC-EX08NNSN is handy and safe for using in teachings.

■ **Product Profile**



Unit: mm

1.	DIN rail (35mm)	2.	Extension unit/module connection port	3.	Model name
4.	Input indicators	5.	DIN rail clip	6.	Input switch
7.	Fixing clip for extension unit	8.	Nameplate	9.	Extension unit/module connection port
10.	Aiming pinhole for connection to MPU				

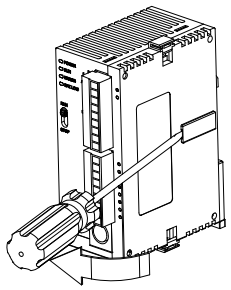
3 SPECIFICATION

3.1. Electrical Specification

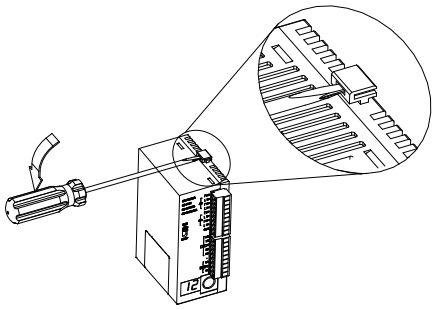
Model / Items	ELC-EX08NNSN
Power voltage	24VDC (-15%~20%) (Power is supplied by the internal bus of MPU)
Power consumption	0.5W
Anti-interference ability	ESD(IEC 61131-2, IEC 61000-4-2): 8KV Air Discharge EFT(IEC 61131-2, IEC 61000-4-4): Power Line: 2KV, Digital I/O: 1KV, Analog & Communication I/O: 1KV RS(IEC 61131-2, IEC 61000-4-3): 26MHz~1GHz, 10V/m
Operation/Storage	Operation : 0°C ~ 55°C (Temperature), 50 ~ 95% (Humidity), Pollution degree 2 Storage: -25°C ~ 70°C (Temperature), 5 ~ 95% (Humidity)
Agency Approvals	UL508 UL1604, Class1,Div2 Operating temperature code: T5 European community EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC
Vibration/ Shock immunity	International standard: IEC61131-2, IEC 68-2-6（TEST Fc/IEC61131-2 & IEC 68-2-27 (TEST Ea)
Weight (g)	60g

4 INSTALLATION

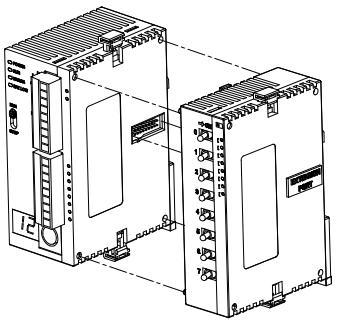
1. Use a screwdriver to open the side cover and reveal the connecting port.



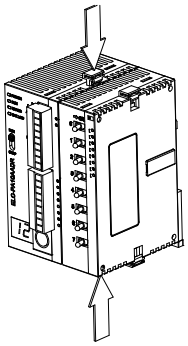
2. Use the screwdriver to lift and unfasten the fixing clip.



3. Accurately connect the extension module to the MPU by using the pinholes at each corner.



4. Secure the extension module to the MPU by pushing down the fixing clips.



5. **Order of the I/O point No.:** The input points of the first extension module are lined up from X20 and output points are lined up from Y20. The rule applies to all MPU connections with extension modules of any number of points.

Model	Input points	Output points	No. of input points	No. of output points
ELC-PC12NNDR	8	4	X0 ~ X7	Y0 ~ Y3
ELC-EX08NNSN	8	0	X20 ~ X27	-
ELC-EX16NNDR	8	8	X30 ~ X37	Y20 ~ Y37

5 TROUBLESHOOTING

■ Input LED Indicator

The On/Off of input signals can be indicated by the input LED indicator. When the input is On, the LED will be on. If error occurs, please check if the loops of the LED and input signal are normal by using HHP/ELCSoft. Please also be aware that:

1. Do NOT place ELC-EX08NNSN under direct sunlight and please avoid placing it next to overheating objects in case the high temperature will affect the functions of ELC-EX08NNSN.
2. Please clean the airborne or conductive dust on the panel on a regular basis.