

INSTRUCTION SHEET

XA1E Series

Thank you for selecting IDEC product. Please confirm that the delivered product is what you have ordered.

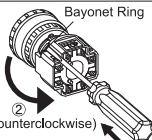
SAFETY NOTE

- Read this instruction sheet and the catalog for the XA1E series emergency stop switches to make sure of correct operation before starting installation, wiring, operation, maintenance, and inspection. Make sure that the instruction sheet is kept by the end user.
- Turn off the power to the XA1E before starting installation, wiring, maintenance and inspection of the XA1E. Failure to turn power off may cause electric shock or fire hazard.
- Use wires of an appropriate size to meet the voltage and current requirement. Using inappropriate wires may cause overheating, resulting in possible fire hazard. Also provide necessary protection against electric shock, otherwise electric shock or fire hazard may be caused.

1 Removing and Installing the Contact Block

Removing

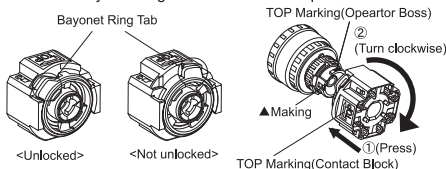
First unlock the operator button. While pushing up the white bayonet ring with force, using a small screwdriver (width: 3 mm maximum) if necessary, turn the contact block counterclockwise and pull out.



- Notes for removing the contact block (Turn counterclockwise)
 - When the contact block is removed, the monitor contact (NO contact) is closed.
 - While removing the contact block, do not exert an excessive force, otherwise the switch may be damaged.

Installing

First turn the bayonet ring tab to the unlocked position.



Align the small ▲ marking on the edge of the operator boss with the TOP marking on the contact block. Press the contact block onto the operator and turn the contact block clockwise until the bayonet ring clicks. Make sure that the contact block is securely installed by confirming that the contact does not turn counterclockwise.

2 Notes for Operation

Contact Bouncing

When the button is reset by pulling or turning, the NC main contacts cause bouncing. When pressing the button, the NO monitor contacts cause bouncing. When designing a control circuit, take the bouncing into consideration (reference value: 20 ms).

Handling

Do not expose the switch to excessive shocks and vibrations, otherwise the switch may be deformed or damaged, causing malfunction or operation failure.

3 Contact Ratings [Main Contact (NC) and Monitor Contact (NO)]

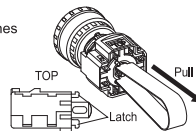
Rated Insulation Voltage (Ui)		300V				
Rated Current (Ith)		5A				
Rated Operating Voltage (Ue)		30V	125V	250V		
Rated Operating Current	Main Contact	AC	Resistive Load (AC-12)	-	3A	3A
		50/60Hz	Inductive Load (AC-15)	-	1.5A	1.5A
	DC	AC	Resistive Load (DC-12)	2A	0.4A	0.2A
		50/60Hz	Inductive Load (DC-13)	1A	0.22A	0.1A
	AC	AC	Resistive Load (AC-12)	-	1.2A	0.6A
		50/60Hz	Inductive Load (AC-14)	-	0.6A	0.3A
	DC	AC	Resistive Load (DC-12)	2A	0.4A	0.2A
		50/60Hz	Inductive Load (DC-13)	1A	0.22A	0.1A

4 Built-in LED Ratings

Rated Voltage	Operating Voltage	Operating Current
24V AC/DC	24V AC/DC ± 10%	11 mA

5 Removing/Installing LED unit

- Removing
 - Pull out the LED unit while pinching the latches on the LED unit using special tool MT-101.
- Installing
 - Align the top of the LED unit with the TOP marking on the contact block.
 - Push the LED unit into the contact block.



6 Specifications

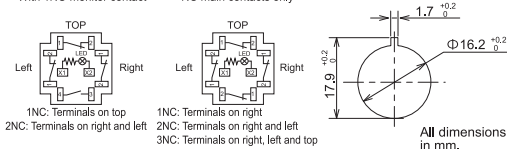
Applicable Standard	IEC60947-5-1, EN60947-5-1 IEC60947-5-5*, EN60947-5-5* JIS C8201-5-1, UL508, CSA C22.2 No.14 CCC GB14048.5
Standard Operating Conditions	Operating temperature Non illuminated: 25 to 60 °C (no freezing) LED illuminated: 25 to 55 °C (no freezing) Relative humidity: 45 to 85 % RH (no condensation) Storage temperature: 45 to 80 °C (no freezing)
Minimum Direct Opening Force	60 N
Minimum Direct Opening Travel	4.0 mm
Maximum Travel	4.5 mm
Contact Resistance	50 mΩ maximum (initial value)
Insulation Resistance	100 MΩ minimum (500V DC megger)
Overvoltage Category	II
Impulse Withstand Voltage	2.5 kV
Pollution Degree	3
Operating Frequency	900 operations/hour
Mechanical Life	250,000 operations minimum
Electrical Life	100,000 operations minimum 250,000 operations minimum (24V AC/DC, 100mA)
Shock Resistance	Operating extremes: 150 m/s ² Damage limits: 1,000 m/s ²
Vibration Resistance	Operating extremes: 10 to 500 Hz, amplitude 0.35 mm, acceleration 50 m/s ² Damage limits: 10 to 500 Hz, amplitude 0.35 mm, acceleration 50 m/s ²
Degree of Protection	IP65 (panel front)
Short-circuit Protective Device	250V/10A fuse (Type aM IEC60269-1/IEC60269-2)
Conditional Short-circuit Current	1,000 A
Terminal Style	Solder terminal, PC board terminal
Recommended Tightening Torque of Locking Ring	0.88 N·m
Applicable Wire	1.25 mm ² maximum (AWG16 maximum)
Soldering Condition	310~350°C/3 seconds

*: These standards require red-colored operator buttons.

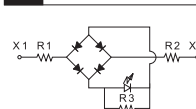
Emergency stop switches with other-colored operator buttons conform to all other requirements except for the color requirement.

7 Contact Arrangements (Bottom View) 8 Mounting Hole Dimensions

< With 1NO monitor contact > < NC main contacts only >



9 LED unit internal circuit 10 Notes for Using Nameplate



Remove the projection from the nameplate using pliers.

