

## XA Series Emergency Stop Switches

- Features**
- Lead-free, RoHS compliant, EU directive 2002/95/EC
  - Panel depth is only 27.9 mm for 1 to 4 contacts, both on illuminated and non-illuminated types
  - IDEC's original "Safe break action" ensures that the contacts stay open when the contact block is detached from the operator
  - 2 in 1: Pushlock Turn Reset and Push-Pull function built-in
  - Direct-opening action mechanism (IEC60947-5-5, 5.2, IEC60947-5-1, Annex K)
  - Safety-lock mechanism (IEC60947-5-5, 6.2)
  - Degree of protection IP65 (IEC60529)
  - 16mm Operator with  $\phi 29$  or  $\phi 40$  mm mushroom head



### Specifications

Applicable Standards	IEC60947-5-1, EN60947-5-1, IEC60947-5-5, EN60947-5-5, JIS C8201-5-1, UL508, CSA C22.2 No. 14
Operating Temperature	Non-illuminated: -25 to +60°C (no freezing) Illuminated: -25 to +55°C (no freezing)
Operating Humidity	45 to 85% RH (no condensation)
Storage Temperature	-45 to +80°C
Operating Force	Push to lock: 10.5N Pull to reset: 10N Turn to reset: 0.16 N-m
Minimum Force Required for Direct Opening Action	60N
Minimum Operator Stroke Required for Direct Opening Action	4.0 mm
Maximum Operator Stroke	4.5 mm
Contact Resistance	50 mΩ maximum (initial value)
Contact Material	Gold plated Silver
Insulation Resistance	100 MΩ minimum (500V DC megger)
Overvoltage Category	II
Impulse Withstand Voltage	2.5 kV
Pollution Degree	3 (inside LED unit: 2)
Operation Frequency	900 operations/hour
Shock Resistance	Operating extremes: 150 m/s <sup>2</sup> (15G) Damage limits: 1000 m/s <sup>2</sup> (100G)
Vibration Resistance	Operating extremes: 10 to 500 Hz, amplitude 0.35 mm acceleration 50 m/s <sup>2</sup> Damage limits: 10 to 500 Hz, amplitude 0.35 mm acceleration 50 m/s <sup>2</sup>
Mechanical Life	250,000 operations minimum
Electrical Life	100,000 operations minimum 250,000 operations minimum (24V AC/DC, 100 mA)
Degree of Protection	IP65 (IEC60529)
Short-circuit Protection	250V/10A fuse (Type aM, IEC60269-1/IEC60269-2)
Conditional Short-circuit Current	1000A
Terminal Style	Solder terminal, PC board terminal
Recommended Tightening Torque for Locking Ring	0.88 N-m
Connectable Wire	1.25 mm <sup>2</sup> maximum (AWG16 maximum)
Soldering Conditions	310 to 350°C, 3 seconds maximum
Weight	$\phi 29$ mm type: 23g, $\phi 40$ mm type: 28g

### Contact Ratings

Rated Insulation Voltage (Ui)				300V (illuminated part: 60V)		
Rated Current (Ith)				5A		
Rated Operating Voltage (Ue)				30V	125V	250V
Rated Operating Current	Main Contacts (NC)	AC 50/60 Hz	Resistive Load (AC-12)	—	3A	3A
			Inductive Load (AC-15)	—	1.5A	1.5A
		DC	Resistive Load (DC-12)	2A	0.4A	0.2A
			Inductive Load (DC-13)	1A	0.22A	0.1A
	Monitor Contacts (NO)	AC 50/60 Hz	Resistive Load (AC-12)	—	1.2A	0.6A
			Inductive Load (AC-14)	—	0.6A	0.3A
		DC	Resistive Load (DC-12)	2A	0.4A	0.2A
			Inductive Load (DC-13)	1A	0.22A	0.1A

- Minimum applicable load: 5V AC/DC, 1 mA (reference value)  
(Operating area may vary according to the operating conditions and load types)
- The rated operating currents are measured at resistive/inductive load types specified in IEC 60947-5-1.

### Illuminated Unit LED Ratings

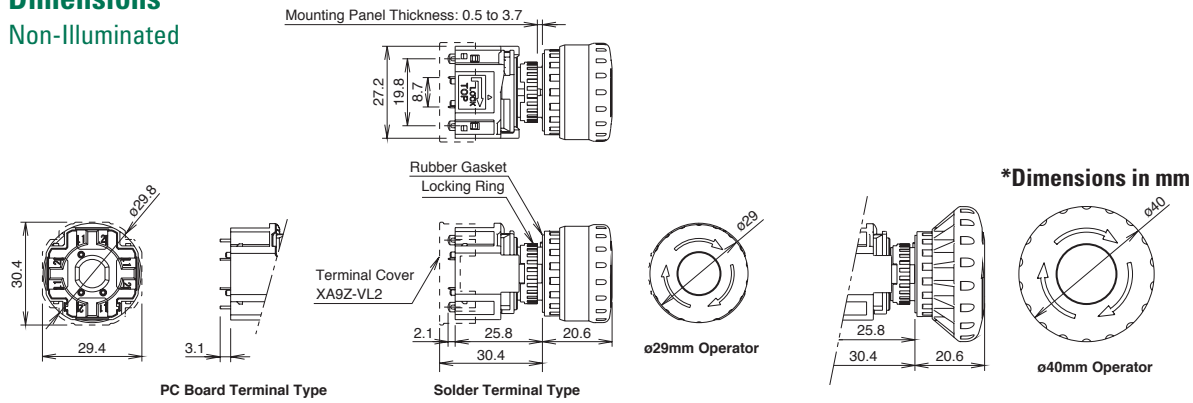
Rated Voltage	Operating Voltage	Rated Current
24V AC/DC	24V AC/DC $\pm 10\%$	11 mA



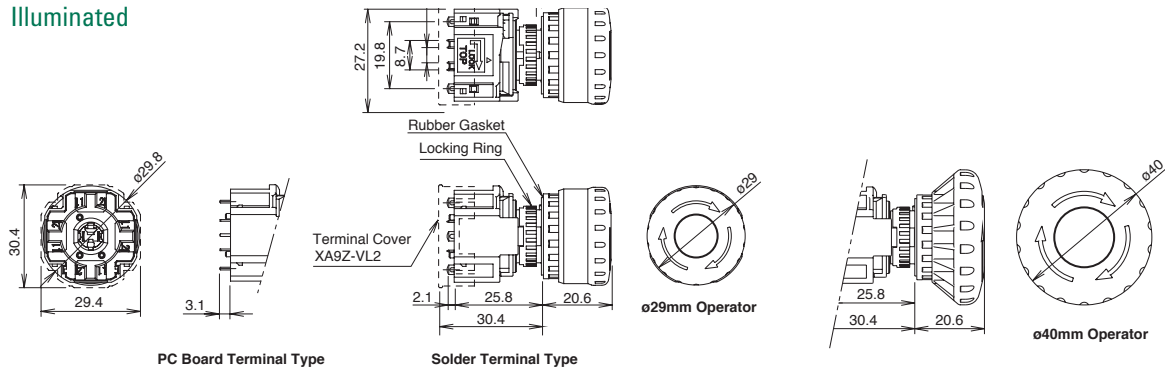
For more information on the XA and other IDEC Emergency Stop Switches, visit:  
[www.idec.com/usa/estop](http://www.idec.com/usa/estop)

## Dimensions

### Non-Illuminated

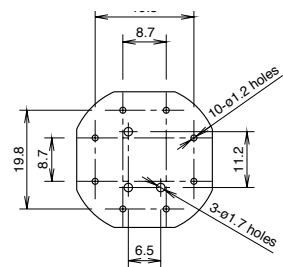


### Illuminated

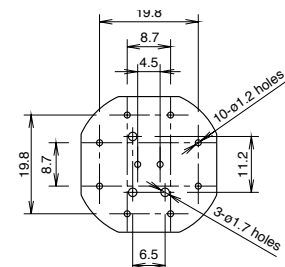


## PC Board Layout (Bottom View)

### Non-Illuminated



### Illuminated



## Part Numbers

**XA1E - L V 3 11 Q4 - R**

### E-Stop Type

B: Non-Illuminated  
L: Illuminated 24V DC

### Mushroom Type

3: ø29mm  
4: ø40mm

### Contact Configuration

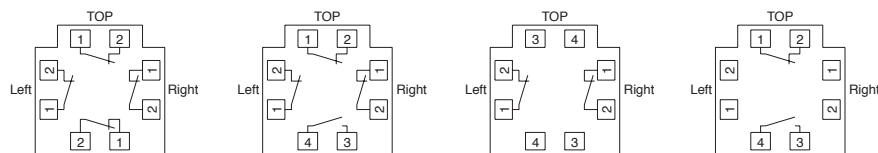
11: 1NO - 1NC  
02: 2NC  
13: 1NO - 3NC  
04: 4NC

### Terminal Type

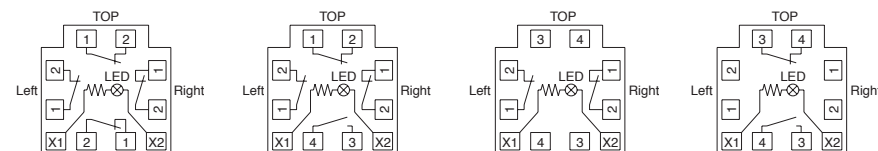
Non-Illuminated Units  
blank: solder tab  
V: PCB  
Illuminated Units  
Q4: solder tab  
Q4V: PCB

## Connection Diagrams

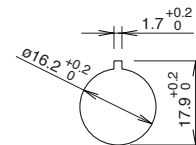
### Non-Illuminated



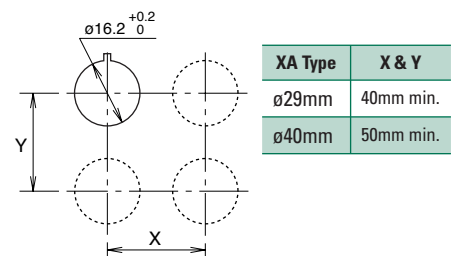
### Illuminated



## Panel Cut-out



## Mounting Hole Layout



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XA9Y-DS100-0 7.5K