B-873(8)

INSTRUCTION SHEET
XW1E 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 XW1E 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 XW1E before starting installation, wiring, maintenance and inspection of the XW1E. Failure to turn power off may cause electric shock or fire hazard.
- Use wires of a proper size to meet voltage and current requirements. Tighten the M3 terminal screws to a tightening torque of 0.6 to 1.0 N·m. Improper wires and loose terminals during operation will cause overheating and fire hazard. Provide a proper protection against electrical shocks.

1 Type No. Development

XW1E - T V 4 0 3 Q 4 M R - BC

- **Function**: B :Non-illuminated; L :Illuminated; T :Illuminated (Push ON)
- **Button Shape**: 4 :Mushroom (ϕ40mm); 5 :Mushroom (ϕ60mm); 4T:Mechanical Indicator type mushroom (ø38mm)
- **Operator body color**: Blank :yellow; G : green
- **Button Color**: R :Red; RH :Bright Red; Y :yellow
- **Additional Structure**: Blank :Non-additional Structure; BC :Connector
- **Terminal Configuration**: Blank :Solder Terminal; V :PC Board Terminal; M :Screw Terminal; MF :Screw Terminal (IP20)
- **Lamp Type**: Blank :Without Lamp; 4 :LED 24V
- **Lamp Voltage**: Blank :Nonilluminated; Q :Full Voltage
- **Contact Arrangement**: Monitor Contact 0 :Without, 1 :1NO, 2 :2NO, 4 :4NC; Main Contact 1 :1NC, 2 :2NC, 3 :3NC

Not any combination of the part no. codes are available.
Contact IDEC for availability for part nos. that are no listed in IDEC brochures.

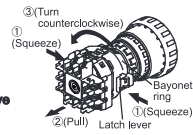
Solder terminal type PC board terminal type	c UL us, 10V, CE, CCC
Screw terminal type	c UL us LISTED, 10V, CE, CCC, UL LISTED EMERGENCY STOP DEVICE *1)
Connector type	UL, 10V, CE, CCC

Note 1: Except for yellow button model.

2 Removing/Installing Contact Block and Panel Mounting

□Removing

First unlock the operator button.Squeeze the latch lever on the yellow bayonet ring ① and pull back the bayonet ring with force until the latch pin clicks ②, then turn the contact block counter-clockwise and pull out ③.



・Notes for removing the contact block

1)**With the button in the locked position, do not remove the contact block, otherwise the switch may be damaged.**
2)When the contact block is removed, the monitor contact (NO contact) is closed.
3)While removing the contact block, do not exert an excessive force, otherwise the switch may be damaged.
4)An LED lamp is built into the contact block for illuminated pushbuttons. When removing the contact block, pull out the contact block straight to prevent damage to the LED lamp. If an excessive force is exerted, the LED lamp may be damaged and fail to light.

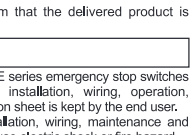
□Panel Mounting

・ø40mm mushroom and ø60mm jumbo mushroom

Remove the locking ring from the operator and check that the rubber gasket is in place. Insert the operator from panel front into the panel hole. Face the side without thread on the operator with TOPmarking upward, and tighten the locking ring using ring wrench MW9Z-T1 to a torque of 2.0 N・m.

・Mechanical Indicator type ø38mm mushroom

Remove the locking ring from the operator and insert the operator into the panel hole. Align the projection on the operator of TOP marking side and the recess in the panel, and tighten the locking ring using a ring wrench MW9Z-T1 to a torque of 2.0 N·m.



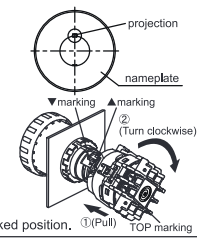
＜About anti-rotation＞

・ø40mm mushroom and ø60mm jumbo mushroom

To prevent the XW emergency stop switch from rotating when resetting from the latched position with excessive force, use of an anti-rotation ring (HW9Z-RL) or a nameplate is recommended. Align the side without thread on the operator with TOP marking, the small ▲marking on the anti-rotation ring or the projection on the nameplate, and the recess on the mounting panel.

・Mechanical Indicator type ø38mm mushroom

Anti-rotation ring HW9Z-RL is not necessary.When using a nameplate (HWAV-*), remove the projection from the nameplate using pliers.



□Installing

First unlock the operator button. Align the small ▼marking on the edge of the operator sleeve with the small ▲marking on the yellow bayonet ring. Hold the contact block, not the bayonet ring. Press the contact block onto the operator and turn the contact block clockwise until the bayonet ring clicks.

・Notes for installing the contact block

Make sure that the bayonet ring is secured in the locked position.

3 Installing and Removing the Terminal Cover

□Terminal Cover XA9Z-VL2

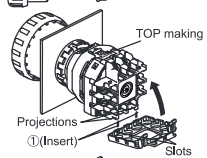
To install the terminal cover, align the TOP marking on the terminal cover with TOP marking on the contact block, and press the terminal cover toward the contact block.

- Notes for installing the XA9Z-VL2

For wiring, insert the wires into the holes in the terminal cover before soldering.

□Terminal Cover XW9Z-VL2M

To install the terminal cover, align the TOP marking on the terminal cover with the TOP marking on the contact block. Place the two projections on the bottom side of the contact block into the slots in the terminal cover.
Press the terminal cover toward the contact block.
To remove the terminal cover, pull out the two latches on the top side of the terminal cover. Do not exert an excessive force to the latches, otherwise the latches may break.

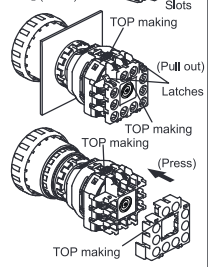


□Finger-safe Terminal Cover XW9Z-VL2MF

To install the terminal cover, align the TOP marking on the terminal cover with the TOP marking on the contact block, and press the terminal cover toward the contact block.

- Notes for using the XW9Z-VL2MF

1)Once installed,the XW9Z-VL2MF cannot be removed.
2)With the XW9Z-VL2MF installed, crimping terminals cannot be used. Use solid wires.
3)Install the XW9Z-VL2MF before wiring.
It cannot be installed after wiring.
4)Make sure that the XW9Z-VL2MF is securely installed.
IP20 cannot be achieved when installed loosely, and electric shocks may occur.



4 Notes for Operation

When using the emergency stop switch for safety-related equipment in a control system, refer to the safety satandards and regulations in each country and region depending on the application purpose of the actual machines and installations to make sure of correct operation. Before using the emergency stop switch, perform risk assessment to make sure of safety.

□Wiring

Tighten the terminal screws to a torque of 0.6 to 1.0 N・m.

□Contact Chatter/Bounce

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 conctrol circuit, take the contact cause bouncing time into consideration (reference value: 20 ms).Do not expose the switch to external shocks, otherwise the contacts will chatter.

□LED Illuminated Switches

The LED lamp is built into the contact block and cannot be replaced.

□Connector Type

- To prepare correct receptacles for the connector type, read the instruction sheet and catalog of Tyco Electronics AMP K.K. and understand the installation and wiring method.
- Fasten the cable so that the connector is not pulled. Otherwise the switch may be deformed and damaged, causing malfunction or operation failure.

□Handling

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

5 Contact Ratings [Main Contact (NC:black) and Monitor Contact (NO:blue)]

Rated Insulation Voltage (Ui)		Solder terminal type	300V		
		PC board terminal type			
		Screw terminal type	250V		
		Connector type	125V		
Conventional Free Air Thermal Current (Ith)		Solder terminal type	5A		
		PC board terminal type			
		Screw terminal type			
		Connector type	2.5A		
Rated Operational Voltage (Ue)			30V	125V	250V*2)
Rated Operational Current	Main Contact AC 50/60Hz	Resistive Load (AC-12)	-	5A*3)	3A
		Inductive Load (AC-15)	-	3A*4)	1.5A
	Main Contact DC	Resistive Load (DC-12)	2A	0.4A	0.2A
		Inductive Load (DC-13)	1A	0.22A	0.1A
	Monitor Contact AC 50/60Hz	Resistive Load (AC-12)	-	1.2A	0.6A
		Inductive Load (AC-14)	-	0.6A	0.3A
	Monitor Contact DC	Resistive Load (DC-12)	2A	0.4A	0.2A
		Inductive Load (DC-13)	1A	0.22A	0.1A

Note 2: Rated operational voltage for connector type : Without 250V
Note 3: Solder Terminal/PC Board Terminal type : 3A
Connector type : 2.5A
Note 4: Solder Terminal/PC Board Terminal/Connector type : 1.5A

6 Built-in LED Ratings

Rated Voltage	Operating Voltage	Operating Current
24V AC/DC	24V AC/DC±10%	5 mA

7 Specifications

Applicable Standard	IEC60947-5-1, EN60947-5-1, JIS C8201-5-1 IEC60947-5-5*5), EN60947-5-5*5), JIS C8201-5-5*5) UL508, UL991*5), NFPA79*5) CSA C22.2 No.14, GB/T14048.5
Standard Operating Conditions	Operating temperature Non illuminated : -25 to +60 ℃ (no freezing) LED illuminated : -25 to +55 ℃ (no freezing) Relative humidity : 45 to 85 % RH (no condensation) Storage temperature : -45 to +80 ℃ (no freezing)
Minimum Direct Opening Force	80 N
Minimum Direct Opening Travel	4.0 mm
Maximum Travel	4.5 mm
Contact Resistance	Solder/PC Board/Screw Terminal type: 50 mΩ maximum (initial value) Connector type : 300 mΩ maximum (initial value after connecting the switch using an applicable connector with 0.3mm² (AWG22) -1m wire)
Insulation Resistance	100 MΩ minimum (500V DC megger)
Over voltage Category	Ⅱ
Impulse Withstand Voltage	Solder/PC Board/Screw Terminal type : 2.5 kV Connector type : 1.5 kV
Pollution Degree	Solder/PC Board/Screw Terminal type : 3 Connector type : 2
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/s² Damage limits : 1,000 m/s²
Vibration Resistance	Operating extremes :10 to 500 Hz, amplitude 0.35 mm, acceleration 50 m/s² Damage limits :10 to 500 Hz, amplitude 0.35 mm, acceleration 50 m/s²
Degree of Protection	IP65 (panel front:IEC 60529) Type1,4X,12,13*6)
Terminal Protection	IP20 (Screw Terminal type when installing XW9Z-VL2MF)
Short-circuit Protective Device	250V/10A fuse (Type aM IEC60269 1/IEC60269 2)
Conditional Short-circuit Current	1,000 A
Recommended Tightening Torque	0.6 to 1.0 N・m (Screw Terminal type)
Recommended Tightening Torque of Locking Ring	2.0 N・m
Applicable Wire	Solder/PC Board Terminal type: 1.25 mm² maximum (AWG16 maximum) Screw Terminal type :0.75 to 1.25 mm² (AWG18 to 16) Connector type :0.3 to 0.85 mm² (AWG22 to 18)
Soldering Condition	310 ~ 350 ℃/3 seconds (Solder/PC board terminal type)
Connector Configuration	D2100D series (made by Tyco Electronics AMP K.K.)(Connector type) 1376009-1(Tab Header of Board-Mounting Horizontal Type)
Applicable Connector	D2100D series (made by Tyco Electronics AMP K.K.)(Connector type) 1-1318119-4 (Receptacle Housing) 1318107-1 (Receptacle Contact)

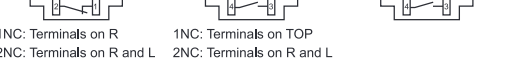
Note 5: Except yellow button switches.
Yellow button switches are stop switch and cannot be used as emergency stop switch.
Note 6: For use on the flat surface of a type1,4X,12and or13 enclosure.

8 Terminal Arrangement (Bottom View)

□Solder Terminal/PC Board Terminal Type

・XW1E-BV (Non-illuminated)

<NC main contacts only> <With 1NO monitor contact> <With 2NO monitor contacts>

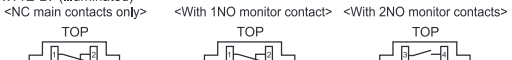


1NC: Terminals on R
2NC: Terminals on R and L
3NC: Terminals on R, L, and TOP

1NC: Terminals on TOP
2NC: Terminals on R and L

・XW1E-LV (Illuminated)

<NC main contacts only> <With 1NO monitor contact> <With 2NO monitor contacts>



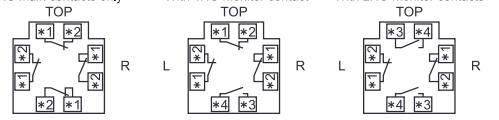
1NC: Terminals on R
2NC: Terminals on R and L
3NC: Terminals on R, L, and TOP

1NC: Terminals on TOP
2NC: Terminals on R and L

□Screw Terminal Type

・XW1E-BV (Non-illuminated)

<NC main contacts only> <With 1NO monitor contact> <With 2NO monitor contacts>

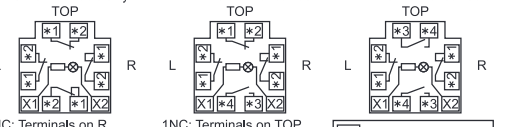


1NC: Terminals on R
2NC: Terminals on R and L
3NC: Terminals on R, L, and TOP

1NC: Terminals on TOP
2NC: Terminals on R and L

・XW1E-LV (Illuminated)

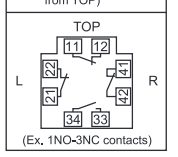
<NC main contacts only> <With 1NO monitor contact> <With 2NO monitor contacts>



1NC: Terminals on R
2NC: Terminals on R and L
3NC: Terminals on R, L, and TOP

1NC: Terminals on TOP
2NC: Terminals on R and L

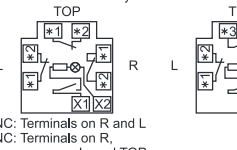
*□: Terminal marking
□: Contact type (1-2: NC contact) (3-4: NO contact)
*: Contact serial number (Starting with 1 counterclockwise from TOP)



(Ex. 1NO-3NC contacts)

・XW1E-TV (Illuminated Push ON)

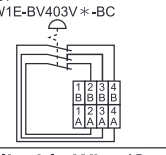
<NC main contacts only> <With 1NO monitor contact>



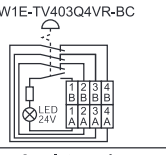
2NC: Terminals on R and L
3NC: Terminals on R, L, and TOP

□Connector Type

XW1E-BV403V*-BC



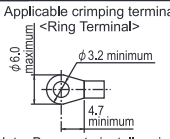
XW1E-TV403Q4VR-BC



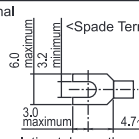
9 Applicable Wire (Screw terminal type)

・Applicable crimping terminal

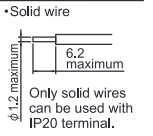
<Ring Terminal>



<Spade Terminal>

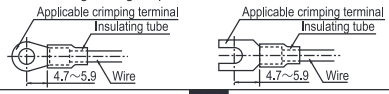


・Solid wire

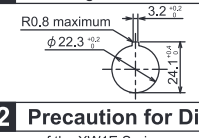


Only solid wires can be used with IP20 terminal.

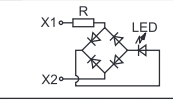
*Note: Be sure to install an insulating tube on the crimping terminal.
Recommended tightening torque: 0.6 to 1.0 N·m



10 Mounting Hole Dimensions



11 LED Unit Internal Circuit



12 Precaution for Disposal

Dispose of the XW1E Series as an industrial waste.

IDEC CORPORATION http://www.idec.com

Manufacturer: IDEC CORP.
2-6-64 Nishimiyahara Yodogawa-ku, Osaka 532-0004, Japan
EU Authorized Representative:APEM SAS
55, Avenue Edouard Herriot BP1, 82303 Caussade Cedex, France

DECLARATION OF CONFORMITY

We, IDEC CORPORATION 2-6-64, Nishimiyahara Yodogawa-ku,Osaka 532-0004, Japan declare under our sole responsibility that the product:

Model No. XW Series

Description: Emergency Stop Switches or Switches
to which this declaration relates is in conformity with the EC Directive on the following standard(s) or other normative document(s). In case of alteration of the product, not agreed upon by us, this declaration will lose its validity.

Applicable EC Directive : Low Voltage Directive (2014/35/EU)
Machinery Directive (2006/42/EC) (applied to Emergency-Stop Switch only)
RoHS Directive (2011/65/EU)
Applicable Standard(s) : EN IEC 63000, EN 60947-5-1
EN 60947-5-5 (applied to Emergency-Stop Switch only)

UK Authorized Representative: APEM COMPONENTS LIMITED
Drakes Drive, Long Crendon, Buckinghamshire, HP18 9BA, UK
Applicable UK Directive :Electrical Equipment (Safety) Regulations 2016,
Supply of Machinery (Safety)Regulations 2008,
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
Applicable Standard(s) : EN 60947-5-1, EN IEC 63000

2023.11

使用说明书 B-873(8)

使用说明书
XW1E系列

承蒙购买 IDEC 产品，谨此衷心致谢！
请确认本产品是否为您所订购的产品后，按照下列项目要求正确使用。

⚠ 安全注意事项

- 在安装、接线施工、运转以及维修保养本产品之前，请仔细阅读本使用说明书以及本公司的产品样本后正确使用。
另外，请提醒最终用户妥善保存本使用说明书。
- 在安装、接线施工、运转以及维修保养本产品之前，请务必先切断电源，以免引起触电或发生火灾的危险。
- 接线时,请使用符合施加电压、通电电流的电线。请按推荐拧紧扭矩(0.6 ～ 1.0N·m)拧紧接线螺丝(M3)。
请切勿使用不符合要求的电线或者在螺丝松动的状态下使用，以免因异常发热而导致火灾发生的危险。
另外，请采取适当的触电预防措施，以免引起触电或发生火灾的危险。

1 型号说明

XW1E-TV4 03Q4MR-BC

- **功能**: B：非照明; L：照明; T：连动照明
- **操作部型状**: 4:ϕ40 大蘑菇头形; 5:ϕ60 特大蘑菇头形; 4T:ϕ38 附指示器大蘑菇头形
- **主体颜色**: 无：黄色; G:绿色
- **触点构成**: 辅助触点 0:无; 1:1NO; 1:2NO / 主触点 1:1NC; 2:2NC; 3:3NC; 4:4NC
- **电压规格**: 无：非照明; Q：全电压
- **照明单元**: 无：无灯泡; 4 :24V LED
- **端子型状**: 无 :焊接端子; V :PCB 端子; M :接线螺丝; MF:接线螺丝（IP20）
- **追加结构**: 无：无追加结构; BC:连接器
- **操作按钮颜色**: R :红色; RH:鲜红色; Y:黄色

※选型样本中没有记载的产品，请事先向 IDEC 确认。

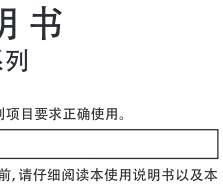
焊接端子/PCB 端子型	c UL us, 10V, CE, CCC
接线螺丝型	c UL us LISTED, 10V, CE, CCC, UL LISTED EMERGENCY STOP DEVICE 注1)
连接器型	UL, 10V, CE, CCC

注1）黄色按钮产品未取得 UI Listed：Emaergancy Stop Device 认证。

2 触点单元的安装及拆卸与面板安装方法

□触点单元的拆卸方法

请确认，在操作部的按钮呈未被按下的情况下，将触点单元的锁扣部件(黄色)的A部，在向箭头方向按压的同时往端子方向拉锁扣部件，逆时针方向转动触点单元45度即可拆卸。

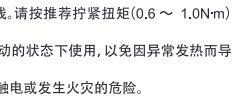


・拆卸触点单元时的注意事项

(1)请注意，在操作部的按钮呈被按下的状态时，请勿强行拆卸触点单元，以免开关损坏。
(2)请注意，从操作部上拆卸触点单元时，辅助触点(NO触点)呈导通状态。
(3)请勿强行拆卸触点单元以免导致开关破损。
(4)请注意，照明型开关的触点单元内置LED。拆卸时，请勿使LED磕碰到操作部或者对其施加过大的外力以免引起点灯不良或破损。

□安装至面板的方法

・φ40大蘑菇头形以及φ60特大蘑菇头形
从操作部上卸下锁紧环后，请确认橡胶垫圈是否安装正确。然后将操作部从面板前面插到面板孔内。使操作部标有TOP标记侧的B部(无螺纹的槽)位于正上方，用专用的锁紧环扳手(型号:MW9Z-T1)，以2.0N·m的推荐拧紧扭矩拧紧锁紧环。

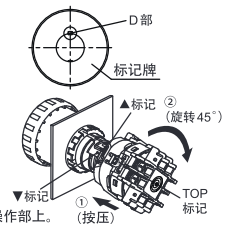


・φ38附指示器大蘑菇头形
从操作部上卸下锁紧环后，将操作部从面板前面插到面板孔内。使操作部标有TOP标记侧的突起C部与面板加工孔的槽对齐，用专用的锁紧环扳手(型号:MW9Z-T1)，以2.0N·m的推荐拧紧扭矩拧紧锁紧环。

＜防转＞

・φ40大蘑菇头形以及φ60特大蘑菇头形
为了防止在转动操作时因过度用力而导致操作部转动，本公司建议使用防转环(另售产品，型号:HW9Z-RL)或紧急停止用文字标记牌(树脂制品)。
安装方法：请将操作部的TOP标记侧的B部(无螺纹的槽)与防转环(HWAV-※)或紧急停止用文字标记牌的突出部位置对齐，使防转环或紧急停止用文字标记牌的突出部与面板缺口部的位置对齐后安装。

・φ38附指示器大蘑菇头形
无需另售品防转环(HW9Z-RL)。但，使用紧急停止用文字标记牌时，请将突起D部用电工钳折断后使用。



□触点单元的安装方法

请确认，在操作部的按钮呈未被按下的状态，握住触点单元的主体(黑色)，将操作部的▼标记与触点单元的锁扣部件的▲标记(TOP侧)对齐，将触点单元在向操作部推压的同时顺时针方向转动触点单元45度后即可。

・触点单元安装时的注意事项

请确认，触点单元的锁扣部件是否确实扣锁在操作部上。

3 端子罩的安装及拆卸

□XA9Z-VL2(焊接端子型用防触电端子罩)
请将另售品绝缘端子罩(型号：XA9Z-VL2)上的TOP标记与触点单元上TOP标记对齐后插入。

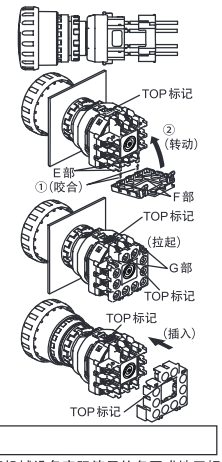
・安装XA9Z-VL2时的注意事项
接线时，请将导线插入绝缘端子罩的孔后焊接。

□XW9Z-VL2M(接线螺丝型用防触电端子罩)
将触点单元的TOP标记和XW9Z-VL2M的TOP标记对齐后，将XW9Z-VL2M咬合部的F(2处)与触点单元的突起部G(2处)在咬合的状态下，旋转XW9Z-VL2M即可，拆卸XW9Z-VL2M时，将W9Z-VL2M的突起部G(2处)拉起即可。
请注意，切勿对突起部E过度用力，以免导致端子罩破损。

□XW9Z-VL2MF(接线螺丝型IP20用保护罩)
将触点单元的TOP标记与XW9Z-VL2MF的TOP标记对齐后压入即可。

・XW9Z-VL2MF使用时的注意事项

(1)XW9Z-VL2M安装后则不能再拆卸。
(2)安装XW9Z-VL2MF时，不能使用压接端子。请使用单线。
(3)XW9Z-VL2MF型端子罩请务必在接线前安装，接线后则不能再安装。
(4)请务必按照操作步骤将咬合安装牢固。若咬合安装不牢固，则不能满足IP20的规格要求，从而引起触电危险。



4 使用注意事项

在将本产品用于控制系统的安全设备部时，请根据机械设备实际使用的各国或地区相对应的安全标准或规定正确使用。且，在使用前请实施危险性评估确认。

□接线注意事项

请使用0.6 ～ 1.0N·m的推荐扭矩拧紧接线螺丝型的接线螺丝(M3)。

□触点反弹

在主触点(NC触点)实施复位(拉出/旋转复位)操作时，辅助触点(NO触点)在操作按压时会发生触点反弹，请考虑防止措施。(参考值：20ms)
另，开关遭受外界冲击时也会发生触点反弹，请注意切勿对其施加外界冲击。

□使用LED照明型时的注意事项

LED与触点单元为一体结构，不能拆卸及更换。

□使用连接器型时的注意事项

・在将电缆端的连接器插入连接器型开关内之前，请务必先充分确认连接器(Tyco Electronics AMP公司生产)的使用说明书或产品样本中记载的插入方法以及接线方法。
・请将电缆固定使用，以免连接器遭受牵拉力。若电缆不固定使用，则可能导致开关变形或破损，从而引发开关动作不良及功能降低。

□使用注意事项

请注意，勿使开关遭受过度的撞击或者振动，以免导致开关变形或破损，从而引发动作不良及功能降低。

5 触点容量 [主触点(NC触点:黑色)／辅助触点(NO触点:蓝色)]

额定绝缘电压(Ui)		焊接端子/PCB端子型	300V		
		接线螺丝型	250V		
		连接器型	125V		
额定通电电流(Ith)		焊接端子/PCB端子型	5A		
		接线螺丝型			
		连接器型	2.5A		
额定使用电压(Ue)			30V	125V	250V注2)
额定使用电流	主触点 AC 50/60Hz	电阻性负载(AC-12)	—	5A注3)	3A
		电感性负载(AC-15)	—	3A注4)	1.5A
	主触点 DC	电阻性负载(DC-12)	2A	0.4A	0.2A
		电感性负载(DC-13)	1A	0.22A	0.1A
	辅助触点 AC 50/60Hz	电阻性负载(AC-12)	—	1.2A	0.6A
		电感性负载(AC-14)	—	0.6A	0.3A
	辅助触点 DC	电阻性负载(DC-12)	2A	0.4A	0.2A
		电感性负载(DC-13)	1A	0.22A	0.1A

注2）连接器型的额定使用电压(Ue) :250V除外
注3）焊接端子/PCB端子型 :3A
连接器型 :2.5A
注4）焊接端子/PCB端子型，连接器型 :1.5A

6 内置LED容量

额定电压	使用电压	额定电流
24V AC/DC	24V AC/DC±10%	5mA

7 性能・规格

对应规格	IEC60947-5-1、EN60947-5-1、JIS C8201-5-1 IEC60947-5-5注5)、EN60947-5-5注5)、JIS C8201-5-5注5) UL508、UL991注5)、NFPA79注5) CSA C22.2 No.14、GB/T14048.5
标准使用状态	环境温度 非照明 : -25 ～ +60℃（无结冰） LED照明 : -25 ～ +55℃（无结冰） 相对湿度 : 45 ～ 85%RH（无结露） 保存环境温度 : -45 ～ +80℃（无结冰）
最小直接开路动作力	80N
至直接开路动作功能的最小动作距离	4.0mm
最大动作距离	4.5mm
接触电阻	焊接端子/PCB端子/接线螺丝型 : 50mΩ以下（初始值） 连接器型 : 300mΩ以下 [初始值：与对应连接器和1米长的0.3mm² (AWG22)的电缆连接时]
绝缘电阻	100MΩ以上（500V DC兆欧表）
过电压类型	Ⅱ
脉冲耐电压	焊接端子/PCB端子/接线螺丝型 : 2.5kV 连接器型 : 1.5kV
污染等级	焊接端子/PCB端子/接线螺丝型 : 3 连接器型 : 2
切换频率	900次／小时
机械性使用寿命	25万次以上
电气性使用寿命	10万次以上 25万次以上（24V AC/DC 100mA）
抗冲击性	误动作：150m/s² 耐久性：1000m/s²
耐振动	误动作：10 ～ 500 Hz、单振幅0.35 mm、加速度50 m/s² 耐久性：10 ～ 500 Hz、单振幅0.35 mm、加速度50 m/s²
操作部保护等级	IP65（面板前面:IEC 60529）Type1,4X,12,13
端子部保护等级	IP20（接线螺丝型：安装XW9Z-VL2MF时）
短路保护装置	250V/10A保险丝（Type aM IEC60269-1 / IEC60269-2）
条件性短路电流	1000A
接线螺丝推荐拧紧扭矩	0.6 ～ 1.0N·m（接线螺丝型）
锁紧环推荐拧紧扭矩	2.0 N·m
可连接的电线	焊接端子型：1.25mm²以下（AWG16以下） 接线螺丝型：0.75 ～ 1.25mm²（AWG18 ～ 16） 连接器型 : 0.3 ～ 0.85mm²（AWG22 ～ 18）
焊接条件	310 ～ 350℃、3秒以内（焊接端子/PCB端子型）
连接器形状	Tyco Electronics AMP公司生产 D2100D系列（连接器型） 1376009-1（PCB安装翼片以及底盘）
对应连接器	Tyco Electronics AMP公司生产 D2100D系列（连接器型） 1-1318119-4（底座） 1318107-1（触点块）

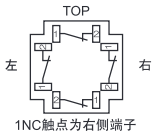
注5）红色按钮以外的产品，不属于该标准对按钮要求的规定之内。
黄色按钮不能作为紧急停止使用。

8 触点排列图(底视图)

□焊接端子/PCB端子型

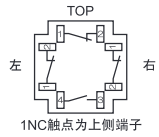
・XW1E-BV（非照明型）

仅限主触点(NC触点)



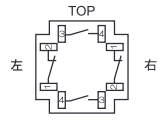
1NC触点为右侧端子
2NC触点为左右端子
3NC触点为上左右端子

含辅助触点(1NO触点)



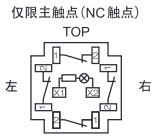
1NC触点为上侧端子
2NC触点为左右端子

含辅助触点(2NO触点)



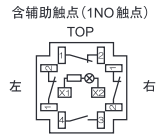
・XW1E-LV（照明型）

仅限主触点(NC触点)



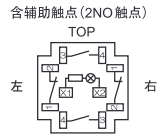
1NC触点为右侧端子
2NC触点为左右端子
3NC触点为上左右端子

含辅助触点(1NO触点)



1NC触点为上侧端子
2NC触点为左右端子

含辅助触点(2NO触点)



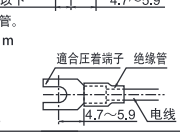
□接线螺丝型

・XW1E-BV（非照明型）

仅限主触点(NC触点)

1NC触点为右侧端子
2NC触点为左右端子
3NC触点为上左右端子

含辅助触点(1NO触点)



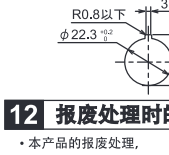
1NC触点为上侧端子
2NC触点为左右端子

含辅助触点(2NO触点)

仅限焊接端子型

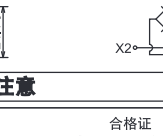
・XW1E-LV（照明型）

仅限主触点(NC触点)



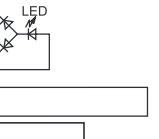
1NC触点为右侧端子
2NC触点为左右端子
3NC触点为上左右端子

含辅助触点(1NO触点)



1NC触点为上侧端子
2NC触点为左右端子

含辅助触点(2NO触点)



※□：端子的表示说明
□：功能编号
(1-2：NC触点、3-4：NO触点)
※：连续编号
(区别触点的编号。
以TOP为基准按逆时针方向，从1开始排列)

・XW1E-TV（遮断照明型）

仅限主触点(NC触点)

2NC触点为左右端子
3NC触点为上左右端子

含辅助触点(1NO触点)

(例：1a3b 接点)

□连接器型

・XW1E-BV403V-BC

・XW1E-TV403Q4VR-BC

9 接线螺丝型对应压接端子

〈圆形压接端子〉

〈叉形压接端子〉

6.0以下
3.2以上
3.0以下
4.