



SPECIFICATION

φ22 XW SERIES EMERGENCY STOP
 PUSHBUTTON SWITCH
 TYPE XW1E-LV4□■Q4△ R
 Contact arrangement  Terminal style 

No. ISA3369C
 Date. January 25, 2023
 Approved by M.Fujimoto
 Checked by Y.Hanaoka
 Written by F.Takai

1. Applicable standard
 - JIS C 8201-5-1
 - IEC60947-5-1, EN60947-5-1 (TUV Approval)
 - IEC60947-5-5, EN60947-5-5 (TUV Approval)
 - UL508 (UL Recognition) } Solder terminal
 - CSA C22.2 No.14 (c-UL Recognition) } PC board terminal types
 - UL508 (UL Listing) } Screw terminal type only
 - CSA C22.2 No.14 (c-UL Listing)
 - UL991
 - NFPA79
 - GB/T14048.5 (CCC Certified)
2. Operating conditions
 - (1) Ambient temperature -25 to +55°C (no freezing)
 - (2) Relative humidity 45 to 85% (no condensation)
 - (3) Storage temperature -45 to +80°C (no freezing)
 - (4) Pollution degree 3
3. Contact ratings
 - (1) Rated insulation voltage 250V (Screw terminal), 300V (Solder terminal, PC board terminal types)
 - (2) Thermal current 5A
 - (3) Rated operating voltage and rated operating current

Main contact (NC contact), Monitor contact (NO contact)

Rated operating voltage (Ue)				30V	125V	250V
Rated operating current (Ie)	Main contact	A C	Resistive load (AC12)	-	5A (Note 1)	3A
			Inductive load (AC15)	-	3A (Note 2)	1.5A
		D C	Resistive load (DC12)	2A	0.4A	0.2A
			Inductive load (DC13)	1A	0.22A	0.1A
	Monitor contact	A C	Resistive load (AC12)	-	1.2A	0.6A
			Inductive load (AC14)	-	0.6A	0.3A
		D C	Resistive load (DC12)	2A	0.4A	0.2A
			Inductive load (DC13)	1A	0.22A	0.1A

- The operating current is classified according to the JIS C 8201-5-1-1999 making and breaking current capacities

Note 1) Solder terminal/PC board terminal types: 3A

Note 2) Solder terminal/PC board terminal types: 1.5A

- (4) Minimum applicable load (reference value) 5V AC/DC, 1mA
(Operating area may vary according to the operating conditions and load types.)
4. LED illuminated unit ratings
 - (1) Rated insulation voltage 60V
 - (2) Rated voltage 24V AC/DC
 - (3) Operating voltage 24V ±10% AC/DC
 - (4) Thermal current 5mA

5. Constructions

- | | |
|---|---|
| (1) Outside view | See attached sheet |
| (2) Latching | Push lock (Safety-lock mechanism) |
| (3) Resetting | Pull reset or Turn reset. It is possible either way |
| (4) Degree of protection | IP65/IP67 (IEC60529) |
| (5) Contact arrangement — (□■) | Terminal Protection: IP20 (Screw terminal, when using XW9Z-VL2MF) |
| (□: monitor contact ■: main contact) | 1b(01), 2b(02), 3b(03), 4b(04) |
| (6) Button style and color | 1a-1b(11), 1a-2b(12), 1a-3b(13), 2a-2b(22): Solder terminal only |
| (7) Terminal style — (△) | Mushroom (φ 40 button), Red |
| | Solder terminal (blank), PC board terminal (V) |
| | M3 screw terminal/IP20 type (MF), |
| | M3 screw terminal/with terminal cover type (M) |
| (8) Connectable cable | |
| (a) Screw terminal type | 0.75 to 1.25mm ² maximum (AWG 18 to 16) |
| (b) Solder terminal/PC board terminal types | 1.25mm ² maximum (16 AWG maximum) |
| (9) Panel thickness | 0.8 to 6mm |
| (10) Panel cut-out | φ 22.3 ^{+0.4} mm |
| (11) Mounting nut torque tightening | 2.0 N·m |

6. Characteristics

- | | |
|--|---|
| (1) Contact resistance | 50mΩ minimum (initial value) |
| (2) Operation force | Push lock: 32N |
| | Pull reset: 21N |
| | Turn reset: 0.27N·m |
| (3) Minimum force required for direct opening action | 80N |
| (4) Minimum operator stroke required for direct opening action | 4.0mm |
| (5) Maximum operator stroke | 4.5mm |
| (6) Insulation resistance | 100MΩ maximum (measured with a 500V DC megger) |
| (7) Impulse withstand voltage | 2.5kV |
| (8) Over voltage category | II |
| (9) Vibration resistance | |
| (a) Operating extremes | Frequency 10 to 500Hz, Amplitude 0.35mm Acceleration 50m/s ² |
| (b) Damage limits | Frequency 10 to 500Hz, Amplitude 0.35mm Acceleration 50m/s ² |
| (10) Shock resistance | |
| (a) Operating extremes | 150 m/s ² |
| (b) Damage limits | 1000 m/s ² |
| (11) Short-circuit protective device | 10A, 250V fuse (Type aM IEC60269-1/IEC60269-2) |
| (12) Conditional short-circuit current | 1000A |
| (13) Solder heat resistance | 310 to 350°C, 3seconds maximum |
| (14) Weight | Approx. 48g |

7. Life

- | | |
|--------------------------------------|---|
| (1) Mechanical life (without load) | 250000 operation minimum |
| | (Operating frequency: 900 operations/hour maximum) |
| (2) Electrical life (rated load) | |
| (a) Rated load | 100000 operation minimum |
| | (Operating frequency: 900 operations/hour maximum) |
| (b) When the load is 24V·100mA AC/DC | 250000 operation minimum |
| | (Operating frequency: 900 operations/hour maximum) |