IDEC

# SPECIFICATIONS

No. ISA3074C
Date. Oct.25, 2023

Approved by M.Fujimoto
Checked by Y.Hanaoka
Written by R.Guo

## TWS(φ25)SERIES ILLUMINATED SELECTOR SWITCH

TYPE ASLS2◇ ○6 □□ DN ※

- ◇ : Operation type
- ○ : Rated voltage
- □□ : Contact arrangement
- ※ : Illuminated color

1. Applicable standard

JIS C 8201-5-1
IEC60947-5-1
EN 60947-5-1 (TUV Approval)
UL508 (UL Listing)
CSA C22.2 No.14 (CSA Certified)
GB/T14048.5(CCC Certification )

2. Operating conditions

(1) Ambient temperature: -25 to +50°C (no freezing)
(2) Relative humidity: 45 to 85% (no condensation)
(3) Storage temperature: -40 to +80°C(no freezing)

3. Ratings

(1) Rated insulation voltage: 600V
(2) Thermal current: 10A
(3) Rated operating voltage and rated operating current

| Rated operating voltage | | | 24V | 48V | 50V | 110V | 220V | 440V |
|---|---|---|---|---|---|---|---|---|
| Rated operating current | AC | Resistive load (AC12) | 10A | — | 10A | 10A | 6A | 2A |
| | | Inductive load (AC15) | 10A | — | 7A | 5A | 3A | 1A |
| | DC | Resistive load (DC12) | 10A | 5A | — | 2.2A | 1.1A | — |
| | | Inductive load (DC13) | 5A | 2A | — | 1.1A | 0.6A | — |

Note) The operating current is classified according to the JIS C 8201-5-1 closed-circuit and breaking current capacities.

(4) Minimum applicable load (reference value): 3V AC/DC, 5mA
(5) Rated voltage— (○): 100/110V AC (1), 115/120V AC (12), 200/220V AC (2), 230/240V AC (24), 380V AC (38), 400/440V AC (4), 480V AC (48),

4. Constructions

(1) Outside view: See attached sheet
(2) Degree of protection
  (a) Operation units (panel front side): IP54
  (b) Contact block: IP20
  (c) Lump terminal: Terminal cover integral structure
(3) Operation type— (◇): Maintained(Blank),Spring return from right(1), Spring return from left(2)
(4) No. of position: 2
(5) Angle: 90°
(6) Operator style: Knob(Black)

(7) Contact arrangement － (□□) 1a-1b(11), 2a(20), 2b(02), 2a-2b(22), 4a(40)
(8) Illuminated color－(※) Red(R), Amber(A), Green(G), Yellow(Y), Blue(S),Pure white(PW)
(9) Included LED lamp LSRD-6 (See attached sheet)
(10) Lamp base BA9S
(11) Terminal style M3.5 terminal screw +/- screw head
(12) Applicable wire / Recommended tig htening torque

| Applicable wire | | Maximum number of installed | Recommended tightening torque(N･m) | Remarks |
|---|---|---|---|---|
| Solid wire | φ0.5～1.6mm(AWG14～22) | 2 | 1.0～1.3 | |
| | φ1.7～2.0mm(AWG12) | 1 | 1.2～1.3 | It's possible to connect to only contact terminals |
| Strand wire | 0.3～2.0mm$^2$(AWG14～22) | 2 | 1.0～1.3 | |
| | 2.1～3.5 mm$^2$(AWG12) | 1 | 1.2～1.3 | It's possible to connect to only contact terminals |

(13) Panel thickness 0.8～6mm
(14) Panel cut-out $\phi 25.5^{+0.5}$ mm

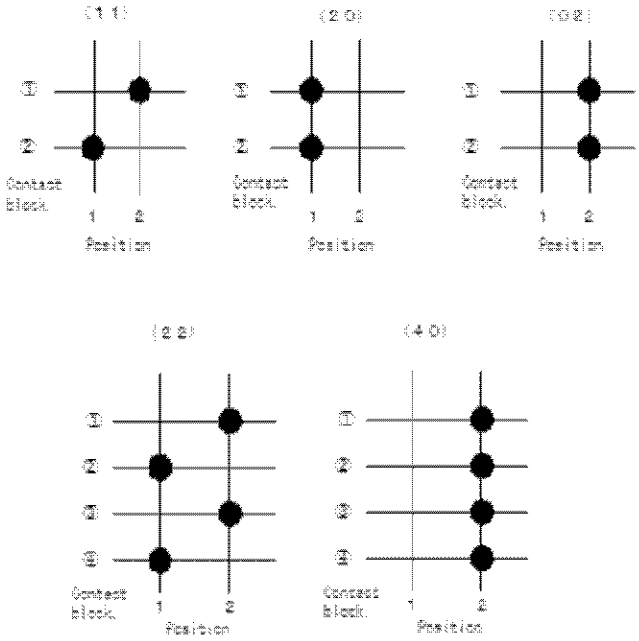
## 5. Characteristics

(1) Contact resistance 50mΩmaximum (initial value)
(2) Insulation resistance 100MΩminimum (measured with a 500V DC megger)
(3) Dielectric strength 2,500V AC, 1minute
(4) Vibration resistance
(a) Operating extremes Frequency 5 to 55Hz,Amplitude 0.5mm
(b) Damage limits Frequency 30Hz,Amplitude 1.5mm
(5) Shock resistance
(a) Operating extremes 100m/s$^2$
(b) Damage limits 1,000m/s$^2$

## 6. Life

(1) Mechanical life(without load) 500,000 operation minimum
(2) Electrical life (rated load) 250,000 operation minimum
(Operating frequency: 1,200 operations/hour maximum Duty Rate:40%)

## □ CONTACT ARRANGEMENT



# SPECIFICATION

No. ISA4590
Date. July -4, 2022
Approved by Y.Onishi
Checked by Tos.Matsumoto
Written by Tom.Matsumoto

MINIATURE LED LAMP

TYPE LSRD- ○

└ Rated voltage

1. Operating conditions

| | | |
|---|---|---|
| (1) | Ambient temperature | -25 to +55℃ (no freezing)<br>(Based on applicable IDEC control unit in which this product is mounted) |
| (2) | Relative humidity | 45 to 85% (no condensation) |
| (3) | Altitude | 2000m maximum |

2. Ratings

| Rated voltage－(○) | | 24V AC/DC (2) | 12V AC/DC (1) | 6V AC/DC (6) |
|---|---|---|---|---|
| Operating voltage | | 24V AC/DC±10% | 12V AC/DC±10% | 6V AC/DC±10% |
| Rated current | DC | 7mA | 7mA | 10mA |
| | AC | 8mA | 8mA | 14mA |

3. Constructions

| | | |
|---|---|---|
| (1) | Outside view, equivalent circuit | See attached sheet |
| (2) | Base | Based on JIS C7709 BA9S/13 |
| (3) | Lamp base surface preparation | SuCu plating |
| (4) | Weight | Approx.2g |

4. Characteristics

| | | |
|---|---|---|
| (1) | Vibration Resistance, Shock Resistance | Based on applicable IDEC control unit in which this product is mounted |
| (2) | Chromaticity range (X, Y) | (0.302, 0.331)-(0.306, 0.310)-(0.323, 0.326)-(0.320, 0.350) |