

SPECIFICATIONS

No.: ISA4509

Date: August 25.2020

Approved by T.Iwami

Checked by T.Minami

Written by

T.Matsumoto

φ30 TWN SERIES ILLUMINATED SWITCH

TYPE AALFN2 🔷 🔲 DN *
Operation type United Section 1. Contact arrangement

1. Applicable standard ЛS C8201-5-1

EC60947-5-1

EN60947-5-1 (TUV Rheinland Certified)

UL508 (UL Listing)

CSA C22.2 NO.14 (CSA Certified)
GB/T14048.5 (CCC Certified)

2. Operating conditions

(1) Ambient temperature $-25 \text{ to } +50^{\circ}\text{C}$ (no freezing) (2) Relative humidity 45 to 85% (no condensation) (3) Storage temperature $-40 \text{ to } +80^{\circ}\text{C}$ (no freezing)

3. Ratings

Rated insulation voltage
 Thermal current
 Rated operating voltage and rated operating current

Rated operating voltage			24V	48V	50V	110V	220V	440V
Rated	Α	Resistive load (AC12)	10A		10A	10A	6A	2A
opera-	С	Inductive load (AC15)	10A	_	7A	5A	3A	1A
ting	D	Resistive load (DC12)	10A	5A	_	2.2A	1.1A	
current	С	Inductive load (DC13)	5A	2A	_	1.1A	0.6A	_

Note) The operating current is classified according to the $\Pi S C 8201-5-1$ making and breaking current capacities.

(4) Minimum applicable load (reference value) 3V AC/DC, 5mA

(5) Illumination rated operating voltage— (\$\infty\$) 6V AC/DC(66),12V AC/DC(11),24V AC/DC(22)

4. Constructions

(1) Outside view See attached sheet

(2) Operation type – (Δ) Momentary (Blank), Alternate(O)

(3) Degree of protection

(a) Operation units (panel front side) IP65(b) Contact block IP20

(c) Lump terminal Terminal cover integral structure

(4) Contact arrangement - (\square \square) 1a(10),1b(01),1a-1b(11),2a(20),2a-2b(22),3a-1b(31),1a-3b(13),

4a (40), 4b (04)

(5) Operator style Extended with Full Shroud

(6) Lens color—(*) Red(R),Green(G),Amber(A),Yellow(Y),Blue(S)

Pure white (PW)

(7) Built-in LED LSRD (See attached sheet)

(8) Lamp base BA9s/13

(9) Terminal style M3.5 terminal screw +/- screw head

(10) Applicable wire / Recommended tightening 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

(11) Panel thickness 0.8 to 7.5mm (12) Panel cut-out ϕ 30.5 ^{+0.5}mm

5. Characteristics

(1) Contact resistance $50m\Omega$ maximum(initial value)

(2) Insulation resistance $100M\Omega$ minimum (measured with a 500V DC megger)

(3) Dielectric strength 2500V AC, 1 minute

(4) Vibration resistance

(a) Operating extremes
 (b) Damage limits
 Frequency 5 to 55Hz, Amplitude 0.5mm
 Frequency 30Hz, Amplitude 1.5mm

(5) Shock resistance

(a) Operating extremes 100 m/s^2 (b) Damage limits 1000 m/s^2

6. Life

(1) Mechanical life (without load)

(a) Momentary 2,500,000 operation minimum

(b) Alternate 500,000 operation minimum (3,4contacts: 250,000 operation minimum)

(2) Electrical life (220V AC/3A (AC-15))

(a) Momentary 500,000 operation minimum

(Operating frequency: 1800 operations/hour Duty Rate: 40%)

(b) Alternate 500,000 operation minimum (3,4contacts: 250,000 operation minimum)

(Operating frequency: 900 operations/hour Duty Rate: 40%)



SPECIFICATION

No. ISA4590 Date. July -4, 2022

Approved by Y.Onishi

Checked by Tos.Matsumoto

Written by Tom.Matsumoto

MINIATURE LED LAMP

TYPE LSRD- O

Rated voltage

1. Operating conditions

-25 to +55°C (no freezing) (1) Ambient temperature

(Based on applicable IDEC control unit in which this product is mounted)

45 to 85% (no condensation) (2) Relative humidity

(3) Altitude 2000m maximum

2. Ratings

Rated voltage —(O))	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%	
Dated assessment	DC	7mA	7mA	10mA	
Rated current	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)