## IDEC

## **SPECIFICATION**

No.: ISA4606 Date: May.-9.2023

Approved by M.Fujimoto
Checked by Y.Hanaoka
Written by T.Matsumoto

FLUSH SILHOUETTE SWITCHES
CW SERIES KEY SELECTOR SWITCHES

1. Applicable standard JIS C8201-5-1

IEC60947-5-1 EN60947-5-1

GB/T14048.5 (CCC Certified)

UL508 (UL Listing)

CSA C22.2 NO.14 (c-UL Listing)

2. Operating conditions

(1) Operating Temperature
(2) Operating Humidity
(3) Storage temperature
(4) Pollution Degree
-25 to +60°C (no freezing)
45 to 85%RH (no condensation)
-40 to +80°C (no freezing)
3 (IEC60947-5-1)

3. Ratings

(1) Rated insulation voltage
(2) Rated thermal current
(3) Rated operating voltage and rated operating current

Rated operating voltage				24V	120V	240V
Rated operating current	Specifications 1	AC 50/60Hz	Resistive load (AC-12)	10A	10A	6A
			Inductive load (AC-15)	10A	6A	3A
		DC	Resistive load (DC-12)	8A	2.2A	1.1A
			Inductive load (DC-15)	4A	1.1A	0.55A
	Specifications 2	AC 50/60Hz	Resistive load (AC-12)	5A	5A	3A
			Inductive load (AC-15)	5A	3A	1.5A
		DC	Resistive load (DC-12)	4A	1.1A	0.55A
			Inductive load (DC-15)	2A	0.55A	0.27A

Note 1) AC inductive load: PF=0.6 to 0.7, DC inductive load: L/R=7msec maximum

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

4. Constructions

(1) Outside view and contact operation

See attached sheet

Round flush

Pleak (1) Metallic

(3) Bezel color— ( $\diamondsuit$ ) Black (1), Metallic (4)

(4) Key removable position— ( $\Delta$ ) Maintained (blank), Spring return from right (1), Spring return from left (2),

Spring return two-way (3)

(5) Operator position 45° 3-position

(6) Degree of protection IP66, UL Type4x (panel front), IP20 (terminal)

(7) Contact material Silve

(8) Contact arrangement— (□□) 1a-1b(11N1),1a-1b(11N2),1a-1b(11N3), 1a-1b(11N4),

2a(20),2a(20N1),2b(02),2b(02N1),2a-1b(21),2a-1b(21N1),

1a-2b(12),1a-2b(12N1),3a(30),3b(03),2a-2b(22),4a(40),2a-2b(22N2)

(9) Operation style Key 0.3 N·m (10) Minimum Operator Torque for Direct Opening Action (1 1) Key removable position code − (◎) Key removable in all positions (A), Key removable at left / center (B) Key removable at center / right (C) Key removable at center (D), Key removable at right / left (E), Key removable at left (G), Key removable at right (H) (12) Key No. - (\*) Standard 0H (blank), Reversible Key (1H to 2H), Non-reversible Key (3H to 6H) (13) Terminal style Screw terminal (M3.5 Slotted -Phillips screw) Note) Ring terminal cannot be used. (14) Applicable wire 2 mm<sup>2</sup> maximum (solid wire  $\phi$  1.6 maximum), up to 2 wires (15) Panel thickness 0.8 to 3.2 mm  $\phi$  22.3 <sup>+0.4</sup>mm (16) Panel cut-out Vertical: 50mm, Horizontal: 30mm (17) Minimum mounting pitch (18) Weight (Approx.) 61g (3 contacts), 68g (4 contacts), 5. Characteristics (1) Contact resistance  $50m\Omega$  maximum (initial value) (2) Insulation resistance 100MΩminimum (500V DC megger) (3) Overvoltage category П (4) Impulse withstand voltage 2.5kV (5) Dielectric strength (a) Between live part and ground 2000V AC, 1minute 2000V AC, 1minute (b) Between terminals of different poles 2000V AC, 1minute (c) Between terminals of the same poles 2000V AC, 1minute (d) Between live part and metal ground (6) Vibration resistance Frequency 5 to 55Hz, Amplitude 0.5mm (a) Operating extremes Frequency 30Hz, Amplitude 1.5mm (b) Damage limits (7) Shock resistance  $100 \text{ m/s}^2$ (a) Operating extremes  $1000 \text{ m/s}^2$ (b) Damage limits 1.2 N·m (8) Mounting nut torque tightening (9) Terminal recommended tightening torque 1.0 to 1.3 N·m (10) Electrical Shock Protection Class II (IEC 61140) 250V/10A fuse (Type aM IEC 60269-1, IEC 602069-2) (11) Short-circuit Protection 6. Life (1) Mechanical life 250,000 operations minimum (single contact block) 100,000 operations minimum (double contact block) (2) Electrical life (rated load) <Specifications 1>

## <Specifications 2>

50,000 operations minimum (single contact block) Switching frequency: 1,800 operations/ hour 25,000 operations minimum (double contact block) Switching frequency: 1,800 operations/ hour 100,000 operations minimum (single contact block) Switching frequency: 1,800 operations/hour 50,000 operations minimum (double contact block)

Switching frequency: 1,800 operations/ hour

## **IDEC CORPORATION**