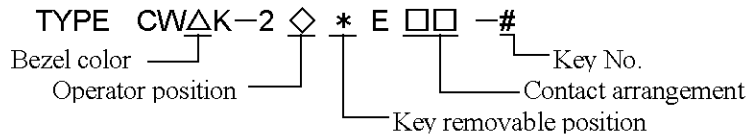


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 Approved by M.Fujimoto
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FLUSH SILHOUETTE SWITCHES CW SERIES KEY SELECTOR SWITCHES



1. Applicable standard

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

2. Operating conditions

- (1) Ambient temperature -25 to +60°C (no freezing)
- (2) Relative humidity 45 to 85% (no condensation)
- (3) Storage temperature -40 to +80°C (no freezing)
- (4) Pollution degree 3

3. Ratings

- (1) Rated insulation voltage 300V
- (2) Rated thermal current 10A
- (3) Minimum applicable load 5V AC/DC · 3mA (reference value)
- (4) Rated operating voltage and rated operating current

<Specifications 1 >

Rated operating voltage		24V	120V	240V	
Rated operating current	AC				
		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 >

Rated operating voltage		24V	120V	240V	
Rated operating current	AC				
		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

Note 2) The electrical life depends on specifications. For details, see page 2.

4. Constructions

- (1) Outside view and contact operation See attached sheet
- (2) Bezel style Round flush
- (3) Operation type— (◇) Maintained (blank), Spring return from right (1)
- (4) Operator position 90° 2-position (2)
- (5) Degree of protection IP66,UL Type4x(panel front), IP20(terminal)
- (6) Contact material Silver
- (7) Contact arrangement— (□□) 1NO(10), 1NC(01), 1NO-1NC(11), 2NO(20), 2NC(02), 3NC(03), 3NO(30), 2NO-1NC(21), 1NO-2NC(12), 2NO-2NC(22), 4NO(40)
- (8) Bezel color— (△) Black (1), Metallic (4)
- (9) Operation style Key
- (10) Key removable position code— (*) Key removable at all positions (A)
 Key removable at left (B)
 Key removable at right (C)

(1 1) Key No. — (#)	Standard (0H) Reversible type (1H, 2H) Non-reversible type (3H, 4H, 5H, 6H)
(1 2) Terminal style	Screw terminal (M3.5 Slotted -Phillips screw) Note) Ring terminal cannot be used.
(1 3) Applicable wire	2 mm ² maximum (solid wire ϕ 1.6 maximum), up to 2 wires
(1 4) Panel thickness	0.8 to 3.2 mm
(1 5) Panel cut-out	ϕ 22.3 ^{+0.4} mm
(1 6) Minimum mounting pitch	Vertical: 50mm, Horizontal: 30mm
(1 7) Weight	61g (3C contact), 68g (4C contact),
5. Characteristics	
(1) Contact resistance	50m Ω maximum (initial value)
(2) Insulation resistance	100M Ω minimum (500V DC megger)
(3) Overvoltage category	II
(4) Impulse withstand voltage	2.5kV
(5) Dielectric strength	
(a) Between live part and ground	2,000V AC, 1minute
(b) Between terminals of different poles	2,000V AC, 1minute
(c) Between terminals of the same poles	2,000V AC, 1minute
(d) Between live part and metal ground	2,000V AC, 1minute
(6) Vibration resistance	
(a) Operating extremes	Frequency 5 to 55Hz, Amplitude 0.5mm
(7) Shock resistance	
(a) Operating extremes	100 m/s ²
(b) Damage limits	1,000 m/s ²
(8) Mounting nut torque tightening	1.2 N·m
(9) Terminal strength	
(a) Recommended tightening torque	1.0 to 1.3 N minimum
(1 0) Electrical shock protection	Class II
(1 1) Short-circuit protection	250V/10A fuse (Type aM IEC60269-1/ IEC60269-2)
(1 2) Rated conditional short-circuit current	1,000A
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>	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
<Specifications 2>	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

□ Contact Arrangement

No. of Positions	Contact Configuration (Code)	Contact Block		Operator Position		
		Mounting Position	Contact	L	R	
90° 2-position	1NO (10)	1	NO		●	
		2	—	Dummy		
		3	—	Dummy		
	1NC (01)	1	—	Dummy		
		2	—	Dummy		
		3	NC	●		
	1NO-1NC (11)	1	NO		●	
		2	—	Dummy		
		3	NC	●		
	2NO (20)	1	NO		●	
		2	—	Dummy		
		3	NO		●	
	2NC (02)	1	NC	●		
		2	—	Dummy		
		3	NC	●		
	2NO-1NC (21)	1	NO		●	
		2	NO		●	
		3	NC	●		
	1NO-2NC (12)	1	NO		●	
		2	NC	●		
		3	NC	●		
	3NO (30)	1	NO		●	
		2	NO		●	
		3	NO		●	
	3NC (03)	1	NC	●		
		2	NC	●		
		3	NC	●		
	2NO-2NC (22)	1	NO: NC	NO NC		●
		2	—	Dummy		
		3	NO: NC	NO NC	●	
4NO (40)	1	2NO	NO		●	
			NO		●	
	2	—	Dummy			
	3	2NO	NO		●	
NO				●		