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1. Applicable standard

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

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 voltage and rated current

Rated operating voltage			24V	48V	50V	110V	220V	440V
Rated operating current	A	Resistive load (AC-12)	10A	—	10A	10A	6A	2A
	C	Inductive load (AC-15)	10A	—	7A	5A	3A	1A
	D	Resistive load (DC-12)	10A	5A	—	2.2A	1.1A	—
	C	Inductive load (DC-13)	5A	2A	—	1.1A	0.6A	—

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

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

4. Constructions

- (1) Outside view See attached sheet
- (2) Operation type — (△) Momentary(B), Alternate(O)
- (3) Degree of protection
 - (a) Operation units (panel front side) IP65
 - (b) Contact block IP20
- (4) Contact arrangement — (□□) 1a(10),1b(01),1a-1b(11),2a(20),2b(02),
 2a-2b(22),4a(40),4b(04),1a-3b(13),3a-1b(31),
 3a(30),3b(03),1a-2b(12),2a-1b(21)
- (5) Button style Extended with full shroud
- (6) Button color — (※) Black(B),Green(G),Red(R),Yellow(Y),Blue(S),White(W)
- (7) Terminal style M3.5 terminal screw +/- screw head

(8) Applicable wire / Recommended tightening torque

Applicable wire		Maximum number of installed	Recommended tightening torque (N·m)
Solid wire	ϕ 0.5~1.6mm(AWG14~22)	2	1.0~1.3
	ϕ 1.7~2.0mm(AWG12)	1	1.2~1.3
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

- (9) Panel thickness 1 to 6mm
 (10) Panel cut-out ϕ 22.3^{+0.4}mm

5. Characteristics

- (1) Contact resistance 50 m Ω maximum (initial value)
 (2) Insulation resistance 100M Ω minimum (measured with a 500V DC megger)
 (3) Dielectric strength 2500V 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 100 m/s²
 (b) Damage limits 1000 m/s²

6. Life

- (1) Mechanical life(without load)
 (a) Momentary 5,000,000 operation minimum
 (b) Alternate 500,000 operation minimum
 (3-4contacts:250,000 operation minimum)
 (2) Electrical life (rated load)
 (a) Momentary 500,000 operation minimum
 (Operating frequency: 1800 operations/hour maximum, Duty Rate: 40%)
 (b) Alternate 500,000 operation minimum (3-4contacts:250,000 operation minimum)
 (Operating frequency: 900 operations/hour maximum, Duty Rate: 40%)