

| APPLICABLE STANDARD | | | | | | | | |
|--|-----------------------------|---|--|--|--|------------------------|------------|-------|
| Rating | Operating Temperature Range | -55 °C to 105 °C ⁽¹⁾ | | Storage Temperature Range | -10 °C to 60 °C ⁽²⁾ | | | |
| | Voltage | Signal Contact : 50 V AC Power Contact : 200 V AC | | Storage Humidity Range | Relative humidity 85% max (Not dewed) | | | |
| | Current | Signal Contact : 0.5 A Power Contact : 3.0A | | Operating Humidity Range | | | | |
| SPECIFICATIONS | | | | | | | | |
| ITEM | | TEST METHOD | | REQUIREMENTS | | QT | AT | |
| CONSTRUCTION | | | | | | | | |
| General Examination | | Visually and by measuring instrument. | | According to drawing. | | x | x | |
| Marking | | Confirmed visually. | | | | x | x | |
| ELECTRIC CHARACTERISTICS | | | | | | | | |
| Contact Resistance | | 100 mA(DC or 1000Hz) | | Signal Contact : 70mΩ MAX. Power Contact : 20mΩ MAX. | | x | — | |
| Insulation Resistance | | Signal Contact : 100 V DC. Power Contact : 250 V DC | | Signal Contact : 100 MΩ MIN. Power Contact : 1000 MΩ MIN. | | x | — | |
| Voltage Proof | | Signal Contact : 150 V AC for 1 min. | | No flashover or breakdown. | | x | x | |
| | | Power Contact : 600 V AC for 1 min. | | | | x | — | |
| MECHANICAL CHARACTERISTICS | | | | | | | | |
| Insertion and Withdrawal Forces | | Measured by applicable connector. | | Insertion Force: 27 N MAX. Withdrawal Force: 3 N MIN. | | x | — | |
| Mechanical Operation | | 100 times insertions and extractions. | | ① Contact Resistance: Signal Contact : 80mΩ MAX. Power Contact : 30mΩ MAX. ② No damage, crack and looseness of parts. | | x | — | |
| Vibration | | Frequency 10 to 55 to 10Hz, approx 5min Single amplitude : 0.75 mm, 10 cycles for 3 axial directions. | | ① No electrical discontinuity of 1 μs. ② No damage, crack and looseness of parts. | | x | — | |
| Shock | | 490 m/s ² , duration of pulse 11 ms at 3 times for 3 both axial directions. | | | | x | — | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | | | |
| Damp Heat (Steady state) | | Exposed at 40±2 °C, 90 ~ 95 %, 96 h. | | ① Contact Resistance: Signal Contact : 80mΩ MAX. Power Contact : 30mΩ MAX. | | x | — | |
| Rapid Change of Temperature | | Temperature -55 → +85 °C Time 30 → 30 min. under 5 cycles. (Relocation time to chamber : within 2~3 MIN) | | ② Insulation Resistance: Signal Contact : 100 MΩ MIN. Power Contact : 1000 MΩ MIN. ③ No damage, crack and looseness of parts. | | x | — | |
| Cold | | Exposed at -55°C, 96 h | | ① Contact Resistance: Signal Contact : 80mΩ MAX. Power Contact : 30mΩ MAX. | | x | — | |
| Dry Heat | | Exposed at 105°C, 96 h | | ② No damage, crack and looseness of parts. | | x | — | |
| Sulfur Dioxide | | Exposed at 25±2°C, 75±5%RH, 25 PPM for 96 h. (Test standard: IEC 68) | | ① No defect such as corrosion which impairs the function of connector. ② Contact Resistance: Signal Contact : 80mΩ MAX. Power Contact : 30mΩ MAX. | | x | — | |
| Resistance to Soldering Heat | | 1)Reflow soldering : Peak TMP : 260°C MAX Reflow TMP: 220°C MIN for 60sec 2) Soldering irons : 360°C MAX. for 5 sec. | | No deformation of case of excessive looseness of the terminal. | | x | — | |
| Solderability | | Soldered at solder temperature 240±3°C for immersion duration, 3 sec. | | A new uniform coating of solder shall cover a minimum of 95 % of the surface being immersed. | | x | — | |
| | COUNT | DESCRIPTION OF REVISIONS | | DESIGNED | | CHECKED | | DATE |
| △ | | | | | | | | |
| REMARKS ⁽¹⁾ Include temperature rise caused by current-carrying. ⁽²⁾ "STORAGE" means a long-term storage state for the unused product before assembly to PCB. | | | | APPROVED | NH. NAKATA | | 18. 05. 28 | |
| | | | | CHECKED | MK. NAGATA | | 18. 05. 28 | |
| | | | | DESIGNED | TS. OONO | | 18. 05. 25 | |
| | | | | DRAWN | TS. OONO | | 18. 05. 25 | |
| Unless otherwise specified, refer to IEC 60512. | | | | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | | DRAWING NO. | | ELC-353539-20-00 | | |
| HRS | SPECIFICATION SHEET | | | PART NO. | | FX23-60P-0. 5SV15 (20) | | |
| | HIROSE ELECTRIC CO., LTD. | | | CODE NO. | | CL573-3003-6-20 | | △ 1/1 |