

| APPLICABLE STANDARD | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------|
| Rating | Operating Temperature range | -55 °C to 85 °C ⁽¹⁾ | Operating Humidity range | Relative humidity 95 % MAX ⁽³⁾ | |
| | Voltage | 50 V AC | Storage Temperature range | -10 °C to 60 °C ⁽²⁾ | |
| | Current | 0.3 A | Storage Humidity range | 40 % to 70 % ⁽²⁾ | |
| SPECIFICATIONS | | | | | |
| ITEM | | TEST METHOD | REQUIREMENTS | QT | AT |
| CONSTRUCTION | | | | | |
| General examination | | Visually and by measuring instrument. | According to drawing. | × | × |
| Marking | | Confirmed visually. | | × | × |
| ELECTRIC CHARACTERISTICS | | | | | |
| Contact resistance | | 100 mA (DC OR 1000 Hz) | 60 mΩ MAX . | × | — |
| Insulation resistance | | 100 V DC. | 100 MΩ MIN. | × | — |
| Voltage proof | | 150 V AC for 1 min. | No flashover or breakdown. | × | × |
| MECHANICAL CHARACTERISTICS | | | | | |
| Insertion and withdrawal forces | | Measured by applicable connector. | Insertion force : 72.0 N MAX. Withdrawal force: 3.0 N MIN. | × | — |
| Mechanical operation | | 50 Times insertions and extractions. | 1)Contact resistance: 70 mΩ MAX. 2)No damage, crack and looseness of parts. | × | — |
| Vibration | | Frequency 10 to 55 to 10 Hz, 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. | × | — |
| Shock | | 490 m/s ² , Duration of pulse 11 ms at 3 times for 3 both axial directions. | | × | — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| Damp heat (Steady state) | | Exposed at 40 ± 2 °C, 90 to 95 %, 96 h. | 1)Contact resistance : 70 mΩ MAX. 2)Insulation resistance: 100 MΩ MIN. 3)No damage, crack and looseness of parts. | × | — |
| Rapid change of temperature | | Temperature: -55 → +85 °C Time : 30 → 30 min. Under 5 cycles. (Relocation time to chamber:Within 2 to 3 min) | | × | — |
| Cold | | Exposed at -55 °C, 96 h | 1)Contact resistance : 70 mΩ MAX. 2)No damage, crack and looseness of parts. | × | — |
| Dry heat | | Exposed at +85 °C, 96 h | | × | — |
| Corrosion salt mist | | Exposed in 5 % salt water spray for 48 h. | 1)Contact resistance : 70 mΩ MAX. 2)No heavy corrosion. | × | — |
| Sulfur dioxide | | Exposed 10 ppm, 40 °C, 75 ± 5 % for 96 h. (Test standard:JIS C 60068) | | × | — |
| Resistance to soldering heat | | 1)Reflow soldering: Peak TMP : 250 °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. | × | — |
| 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. | × | — |
| | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| △ | | | | | |
| REMARKS (1)Temperature rise included when energized. (2)This storage indicates a long-term storage state for the unused product before the board mounted. (3)NON-Condensing. Unless otherwise specified, refer to IEC-60512. | | | APPROVED | NH. NAKATA | 17.11.22 |
| | | | CHECKED | HT. YAMAGUCHI | 17.11.22 |
| | | | DESIGNED | MT. ITANO | 17.11.21 |
| | | | DRAWN | MT. ITANO | 17.11.21 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC-362078-83-00 |
| HRS | SPECIFICATION SHEET | | PART NO. | FX10A-120P-SV4 (83) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL570-0061-7-83 | △ 1/1 |