

| APPLICABLE STANDARD | | | | | |
|--|-----------------------------|--|-------------|---|--|
| RATING | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C ⁽¹⁾ | | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C ⁽²⁾ |
| | VOLTAGE | 50 V AC | | STORAGE HUMIDITY RANGE | RELATIVE HUMIDITY 85% max (NOT DEWED) |
| | CURRENT | 0.5 A | | 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) | | 70 mΩ MAX. | x — |
| INSULATION RESISTANCE | | 100 V DC. | | 100 MΩ MIN. | x — |
| VOLTAGE PROOF | | 150 V AC FOR 1 min. | | NO FLASHOVER OR BREAKDOWN. | x x |
| MECHANICAL CHARACTERISTICS | | | | | |
| INSERTION AND WITHDRAWAL FORCES | | MEASURED BY APPLICABLE CONNECTOR. | | INSERTION FORCE: 84 N MAX. WITHDRAWAL FORCE: 10.3 N MIN. | x — |
| MECHANICAL OPERATION | | 50 TIMES INSERTIONS AND EXTRACTIONS. | | ① CONTACT RESISTANCE: Δ VARIATION FROM INITIAL VALUE 20 mΩ OR LESS. 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 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 DIRECTIONS. | | | x — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| DAMP HEAT (STEADY STATE) | | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h. | | ① CONTACT RESISTANCE: Δ VARIATION FROM INITIAL VALUE 20 mΩ OR LESS. | 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 : 100 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x — |
| COLD | | EXPOSED AT -55°C, 96 h | | ① CONTACT RESISTANCE: Δ VARIATION FROM INITIAL VALUE 20 mΩ OR LESS. | x — |
| DRY HEAT | | EXPOSED AT 85°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: JIS C 60068) | | ① NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR. ② CONTACT RESISTANCE: Δ VARIATION FROM INITIAL VALUE 20 mΩ OR LESS. | 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 |
| Δ | 4 | DIS-F-005857 | KT. D01 | KI. HIROKAWA | 11. 11. 24 |
| 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. Unless otherwise specified, refer to JIS-C-5402. | | | APPROVED | HS. OKAWA | 11. 08. 22 |
| | | | CHECKED | KI. HIROKAWA | 11. 08. 12 |
| | | | DESIGNED | KT. D01 | 11. 08. 12 |
| | | | DRAWN | KT. D01 | 11. 08. 12 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC4-336329-00 |
| HRS | SPECIFICATION SHEET | | PART NO. | FX20-120P-0. 5SV20 | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL570-1011-4-00 | Δ 1/1 |