
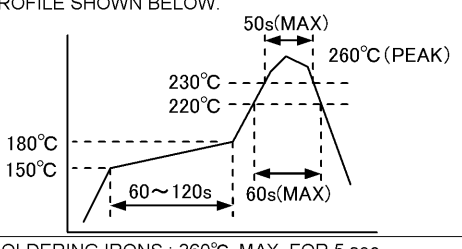






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| APPLICABLE STANDARD  |  |   |                           |                                |   |          |
|--|--|---|---------------------------|--------------------------------|---|----------|
| <br><b>RATING</b> | OPERATING TEMPERATURE RANGE  | -55 °C TO 85 °C <sup>(1) (2)</sup>  | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C <sup>(3)</sup> |   |          |
|  | OPERATING HUMIDITY RANGE   | RH 85 % MAX <sup>(2) (4)</sup>  | STORAGE HUMIDITY RANGE    | RH 70 % MAX <sup>(3) (4)</sup> |   |          |
|  | VOLTAGE  | 60 V AC   | CURRENT                   | 0.5 A                          |   |          |
|  | <b>SPECIFICATIONS</b>  |   |                           |                                |   |          |
| ITEM   | TEST METHOD  | REQUIREMENTS  | QT                        | AT                             |   |          |
| <b>CONSTRUCTION</b>  |  |   |                           |                                |   |          |
| GENERAL EXAMINATION  | VISUALLY AND BY MEASURING INSTRUMENT.  | ACCORDING TO DRAWING.   | x                         | x                              |   |          |
| MARKING  | CONFIRMED VISUALLY.  |   | x                         | x                              |   |          |
| <b>ELECTRIC CHARACTERISTICS</b>  |  |   |                           |                                |   |          |
| CONTACT RESISTANCE   | 20 mV MAX, 1 mA(DC OR 1000Hz)  | 80 mΩ MAX. <sup>(5)</sup>   | x                         |                                |   |          |
| INSULATION RESISTANCE  | 100 V DC.  | 500 MΩ MIN.   | x                         |                                |   |          |
| VOLTAGE PROOF  | 200 V AC FOR 1 min.  | NO FLASHOVER OR BREAKDOWN.  | x                         |                                |   |          |
| <b>MECHANICAL CHARACTERISTICS</b>  |  |   |                           |                                |   |          |
| INSERTION AND WITHDRAWAL FORCES  | MEASURED BY APPLICABLE CONNECTOR.  | INSERTION FORCE: 15.5 N MAX.<br>WITHDRAWAL FORCE: 1.55 N MIN.   | x                         |                                |   |          |
| MECHANICAL OPERATION   | 50 TIMES INSERTIONS AND EXTRACTIONS.   | ① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | x                         |                                |   |          |
| VIBRATION  | FREQUENCY 10 TO 55 Hz,<br>SINGL AMPLITUDE : 0.75 mm,<br>FOR 2 h IN 3 DIRECTIONS.   | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | x                         |                                |   |          |
| SHOCK  | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>FOR 3 TIMES IN 3 DIRECTIONS.   |   | x                         |                                |   |          |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>   |  |   |                           |                                |   |          |
| DAMP HEAT (STEADY STATE)   | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.   | ① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE.<br>② INSULATION RESISTANCE: 500 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x                         |                                |   |          |
| DRY HEAT   | EXPOSED AT 85±2 °C, 96 h   |   | x                         |                                |   |          |
| RAPID CHANGE OF TEMPERATURE  | TEMPERATURE -55 → +5~+35 → +85 → +5~+35 °C<br>TIME 30 → 5 MAX → 30 → 5 MAX min.<br>UNDER 5 CYCLES.   | ① CONTACT RESISTANCE: NO VARIATION OF 20 mΩ OR MORE FROM INITIAL VALUE.<br>② NO DERECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR.             | x                         |                                |   |          |
| CORROSION SALT MIST  | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.  |   | x                         |                                |   |          |
| SULFUR DIOXIDE   | EXPOSED IN 25 PPM FOR 96 h.<br>(TEST STANDARD: JIS C 60068)  | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.  | x                         |                                |   |          |
| RESISTANCE TO SOLDERING HEAT   | 1)REFLOW SOLDERING :<br>REFLOW 2 TIMES UNDER THE TEMPERATURE PROFILE SHOWN BELOW.<br><br>2) SOLDERING IRONS : 360°C MAX. FOR 5 sec.   |   | 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  |          |
|  | 2  | DIS-F-004353  | KN. SHIBUYA               | HT. YAMAGUCHI                  | 09.12.15  |          |
|                 | REMARKS  |   |                           | APPROVED                       | HS. OKAWA   | 08.06.05 |
|  | (1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.<br>(2) OPERATING TEMPERATURE SHOULD BE -55 TO 40°C WHEN HUMIDITY EXCEEDS 80% RH.<br>(3) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.<br>(4) THERE MUST NOT BE DEWFALL.<br>(5) DON'T INCLUDE CONDUCTOR RESISTANCE OF THE CABLE OF THE COMBINATION CONNECTOR. |   |                           | CHECKED                        | HT. YAMAGUCHI   | 08.06.05 |
|  | Unless otherwise specified, refer to JIS-C-5402.   |   |                           | DESIGNED                       | SS. YOSHIDA   | 08.06.04 |
|  | Note QT:Qualification Test AT:Assurance Test X:Applicable Test   |   |                           | DRAWN                          | SS. YOSHIDA   | 08.06.04 |
|  | DRAWING NO.  |   | ELC4-157330-00            |                                |   |          |
|                 | SPECIFICATION SHEET  |   | PART NO.                  | FX16-31S-0.5SV                 |   |          |
|  | HIROSE ELECTRIC CO., LTD.  |   | CODE NO.                  | CL575-3402-4-00                |  1/1 |          |