

| APPLICABLE STANDARD   |   |  |                           |                                |              |
|---|---|--|---------------------------|--------------------------------|--------------|
| RATING  | OPERATING TEMPERATURE RANGE   | -55 °C TO 85 °C <sup>(1)</sup>   | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C <sup>(2)</sup> |              |
|   | VOLTAGE   | 100 V AC   | OPERATING HUMIDITY RANGE  | 40 % TO 80 %                   |              |
|   | CURRENT   | 0.5 A  | STORAGE HUMIDITY RANGE    | 60 % RH MAX <sup>(2)</sup>     |              |
| 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).   | 50 mΩ MAX.   | ×                         | -                              |              |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD   | 20 mV MAX, 1 mA(DC OR 1000Hz)   | 60 mΩ MAX.   | ×                         | -                              |              |
| INSULATION RESISTANCE   | 250 V DC  | 100 MΩ MIN.  | ×                         | -                              |              |
| VOLTAGE PROOF   | 300 V AC FOR 1 min.   | NO FLASHOVER OR BREAKDOWN.   | ×                         | -                              |              |
| MECHANICAL CHARACTERISTICS  |   |  |                           |                                |              |
| MECHANICAL OPERATION  | 500 TIMES INSERTIONS AND EXTRACTIONS.   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.               | ×                         | -                              |              |
| VIBRATION   | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.52mm,<br>10 CYCLES IN 3 DIRECTIONS. $\Delta$                      | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.         | ×                         | -                              |              |
| SHOCK   | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms FOR 3 TIMES IN 3 DIRECTIONS.                               |  | ×                         | -                              |              |
| ENVIRONMENTAL CHARACTERISTICS   |   |  |                           |                                |              |
| DAMP HEAT (STEADY STATE)  | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 hrs.  | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② INSULATION RESISTANCE: 100 MΩ MIN.                     | ×                         | -                              |              |
| RAPID CHANGE OF TEMPERATURE   | TEMPERATURE-55→+15~+35→+85→+15~+35°C<br>TIME 30 → 2~3 → 30 → 2~3 min<br>5 CYCLES.                         | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | ×                         | -                              |              |
| DRY HEAT $\Delta$   | EXPOSED AT 85 °C, 96 h.   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PART                 | ×                         | -                              |              |
| CORROSION SALT MIST   | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 hrs.   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.                                    | ×                         | -                              |              |
| SULPHUR DIOXIDE   | EXPOSED IN 10 PPM FOR 96 hrs.<br>(TEST STANDARD: JEIDA 39)  |  | ×                         | -                              |              |
| RESISTANCE TO SOLDERING HEAT  | 1) REFLOW SOLDERING : 240 °C MAX,<br>: 200 °C MIN,<br>FOR 60 s<br>2) SOLDERING IRONS : 360 °C,<br>FOR 5 s | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                              | ×                         | -                              |              |
| SOLDERABILITY   | SOLDERED AT SOLDER TEMPERATURE, 240°C,<br>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         |
| $\Delta$  | 2   | DIS-F-000943   | SY.KAMIGA                 | HS.OZAWA                       | 06.06.20     |
| REMARK <sup>(1)</sup> TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br><sup>(2)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. |   |  | APPROVED                  | HS.OKAWA                       | 05.10.11     |
|   |   |  | CHECKED                   | HS.OZAWA                       | 05.10.07     |
|   |   |  | DESIGNED                  | TK.YANAGISAWA                  | 05.10.07     |
| Unless otherwise specified, refer to JIS C 5402   |   |  | DRAWN                     | TK.YANAGISAWA                  | 05.10.07     |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |   |  | DRAWING NO.               | ELC4-151381-21                 |              |
| <b>HRS</b>  | SPECIFICATION SHEET   |  | PART NO.                  | FX5-52P-SH(71)                 |              |
|   | HIROSE ELECTRIC CO., LTD.   |  | CODE NO.                  | CL575-0006-0-71                | $\Delta$ 1/1 |