

| APPLICABLE STANDARD   |   |                          |  |                 |          |
|---|---|--------------------------|--|-----------------|----------|
| RATING  | OPERATING TEMPERATURE RANGE   | ① -55 °C TO 85 °C        | STORAGE TEMPERATURE RANGE  | - °C TO - °C    |          |
|   | VOLTAGE   | 250 V AC                 | OPERATING HUMIDITY RANGE   | - % TO - %      |          |
|   | CURRENT   | 1 A                      | APPLICABLE CABLE   | -               |          |
| 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  | 10 mA (DC OR 1000 Hz).  |                          | 70 mΩ MAX.   | X               | X        |
| INSULATION RESISTANCE   | 250 V DC.   |                          | 1000 MΩ MIN.   | X               | X        |
| VOLTAGE PROOF   | 500 V AC FOR 1 min.   |                          | NO FLASHOVER OR BREAKDOWN.   | X               | X        |
| MECHANICAL CHARACTERISTICS  |   |                          |  |                 |          |
| INSERTION AND WITHDRAWAL FORCES   | MEASURED BY APPLICABLE CONNECTOR.   |                          | INSERTION FORCE: 78.4 N MAX.<br>EXTRACTION FORCE: 19.6 N MIN.                  | X               | -        |
| MECHANICAL OPERATION  | 500 TIMES INSERTIONS AND EXTRACTIONS.   |                          | 1)CONTACT RESISTANCE: 70 mΩ MAX.<br>2)NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X               | -        |
| VIBRATION   | FREQUENCY 10 TO 500 Hz<br>SINGLE AMPLITUDE 0.75 mm,<br>AT 3h FOR 3 DIRECTIONS.              |                          | 1)NO ELECTRICAL DISCONTINUITY OF<br>1μs.<br>2)CONTACT RESISTANCE: 70 mΩ MAX.   | X               | -        |
| SHOCK   | 490 m/s <sup>2</sup> DIRECTIONS OF PULSE 11 ms<br>AT 3 TIMES FOR 6 DIRECTIONS.              |                          | 3)NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                     | X               | -        |
| ENVIRONMENTAL CHARACTERISTICS   |   |                          |  |                 |          |
| RAPID CHANGE OF TEMPERATURE   | TEMPERATURE -40 → 5~35 → 105 → 5~35 °C<br>TIME 30 → 2~3 → 30 → 2~3 min.<br>UNDER 10 CYCLES. |                          | 1)CONTACT RESISTANCE: 70 mΩ MAX.<br>2)NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X               | -        |
| CORROSION SALT MIST   | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   |                          | 1)CONTACT RESISTANCE: 70 mΩ MAX.<br>2)NO HEAVY CORROSION.                      | X               | -        |
| <p>① THE PRODUCT PERFORMANCE IS GUARANTEED ONLY IN THE TEMPERATURE ADEQUATE TO PEOPLE'S ACTIVITIES.</p> <p>② THE OPERATION TEMPERATURE INCLUDES THE RISE BY CURRENT CARRYING.</p> |   |                          |  |                 |          |
|   | COUNT   | DESCRIPTION OF REVISIONS | DESIGNED   | CHECKED         | DATE     |
| Q   |   |                          |  |                 |          |
| REMARK  |   |                          | APPROVED   | HO.MIWA         | 06.09.08 |
|   |   |                          | CHECKED  | YH.ENAMI        | 06.09.07 |
|   |   |                          | DESIGNED   | MT.ITANO        | 06.09.07 |
| Unless otherwise specified, refer to JIS C 5402.  |   |                          | DRAWN  | MT.ITANO        | 06.09.07 |
| Note  | QT:Qualification Test AT:Assurance Test X:Applicable Test                                   |                          | DRAWING NO.  | ELC4-045019-01  |          |
| <b>HRS</b>  | SPECIFICATION SHEET   |                          | PART NO.   | F140-20S (50)   |          |
|   | HIROSE ELECTRIC CO., LTD.   |                          | CODE NO.   | CL230-0507-0-50 | △ 1/1    |