| APPLICA                         | BLE STAN                       | IDARD  |   |                      |                       |  |                  |            |          |
|---------------------------------|--------------------------------|--|---|----------------------|-----------------------|--|------------------|------------|----------|
|                                 | OPERATING<br>TEMPERATURE RANGE |  | -55°C TO 85°C(NO  | STORAGE<br>TEMPERATU |                       |  |                  |            |          |
| RATING                          | VOLTAGE                        |  | 30V AC/DC   |                      | _                     | APPLICABLE CONNECTOR DF40GL-44DP-0. 4  |                  | V (**)     |          |
|                                 | CURRENT                        |  | 0. 35A  |                      |                       |  |                  |            |          |
|                                 |                                |  |   | IFICA                | ATIONS                |  |                  |            |          |
| 17                              | EM                             |  | TEST METHOD   |                      |                       | PEOLIII  | REMENTS          | QT         | AT       |
|                                 | RUCTION                        | TEST METHOD  |   |                      |                       | REQUIREMENTS   |                  |            | 1 71     |
| GENERAL EX                      |                                | VISUALLY AND BY MEASURING INSTRUMENT.  |   |                      | ACCORDIN              | IG TO DRAV   | VING.            | X          | Х        |
| MARKING                         |                                | CONFIRMED VISUALLY.  |   |                      |                       | 1  |                  |            | X        |
| ELECTR                          | IC CHARA                       | CTERI  | STICS   |                      |                       |  |                  |            | -L       |
| CONTACT RESISTANCE              |                                | 20mV AC OR LESS 1kHz,1m A .  |   |                      | 90mΩ MAX              | 90mΩ MAX.  |                  |            |          |
| INSULATION RESISTANCE           |                                | 100V DC.   |   |                      | 50MΩ MIN.             | 50MΩ MIN.  |                  |            | _        |
| VOLTAGE PROOF                   |                                | 100V AC FOR 1 min.   |   |                      | NO FLASH              | NO FLASHOVER OR BREAKDOWN.   |                  |            | <u> </u> |
| MECHAN                          | NICAL CH                       | ARACTI   | ERISTICS  |                      |                       |  |                  | X          | 1        |
| INSERTION A                     |                                | MEASURED BY APPLICABLE CONNECTOR.  |   |                      | INSERTION             | INSERTION FORCE 42.0 N MAX   |                  |            |          |
| WITHDRAWAL FORCES               |                                |  |   |                      |                       | WITHDRAWAL FORCE 6.0N MIN  |                  |            | _        |
| LOCK STRENGTH                   |                                | MATE TO APPLICABLE CONNECTOR AND APPLY PULL FORCE HORIZONTALLY.  |   |                      | 7 30N MIN             |  |                  |            | _        |
| MECHANICAL OPERATION            |                                | 30TIMES INSERTIONS AND EXTRACTIONS.  |   |                      |                       | <ol> <li>CONTACT RESISTANCE: 90mΩ MAX.</li> <li>NO DAMAGE, CRACK OR LOOSENESS OF PARTS.</li> </ol>             |                  |            | _        |
| VIBRATION                       |                                | FREQUENCY 10 TO 55 TO 10 Hz, 5min, SINGLE AMPLITUDE 0.75 mm,10CYCLES, FOR 3 DIRECTIONS.  |   |                      | -                     | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                            |                  |            | -        |
| SHOCK                           |                                | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.  |   |                      | -                     | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                               |                  |            |          |
| <b>ENVIRO</b>                   | NMENTAL                        | CHAR   | ACTERISTICS   |                      |                       |  |                  | 1          | -1       |
| RAPID CHANGE OF<br>TEMPERATURE  |                                | TEMPERATURE -55 $\rightarrow$ 5 TO 35 $\rightarrow$ 85 $\rightarrow$ 5 TO 35 °C TIME 30 $\rightarrow$ 5 MAX $\rightarrow$ 30 $\rightarrow$ 5 MAX min UNDER 5 CYCLES. |   |                      | n ② INSULAT           | CONTACT RESISTANCE: 90mΩ MAX.     INSULATION RESISTANCE: 50MΩ MIN.     NO DAMAGE, CRACK OR LOOSENESS OF PARTS. |                  |            | _        |
| DAMP HEAT<br>(STEADY STATE)     |                                | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.  |   |                      | ① CONTAC<br>② INSULAT | CONTACT RESISTANCE: 90mΩ MAX.     INSULATION RESISTANCE: 25MΩ MIN.     NO DAMAGE, CRACK OR LOOSENESS OF PARTS. |                  |            | -        |
| SULPHUR DI                      | OXIDE                          | EXPOSED IN 25 PPM FOR 96h,25°C,75%.  |   |                      | ① CONTAC              | ① CONTACT RESISTANCE: 180mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                     |                  |            | <u> </u> |
| HEAT RESISTANCE OF<br>SOLDERING |                                | RECOMMENDED TEMPERATURE PROFILE<br>SOLDERING AREA<br>MAX 250°C, 220°C FOR 60 SECONDS MAX.  |   |                      | -                     | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.  |                  |            | -        |
|                                 |                                | PREHEAT<br>150 TO 18<br>MAXIMUM<br>SAME CO<br>RECOMM<br>SOLDERII<br>SOLDERII   | TING AREA 10°C 90 TO 120SECONDS. 1 TWICE ACTION IS ALLOWED NDITION. ENDED MANUAL SOLDERING NG IRON TEMPERATURE 350° NG TIME: WIHTIN 3 SECONDS | UNDER T              | ON                    |  |                  |            |          |
| SOLDERABIL                      | ITY                            | SOLDERING TEMPERATURE: 245±5°C DURATION OF IMMERSION: SOLDERING FOR 3 ±0.5 SECONDS.  |   |                      |                       | A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95% OF THE SURFACE BEING IMMERSED.                      |                  |            | _        |
| COUN                            | T D                            | ESCRIPTION   | ON OF REVISIONS   |                      | DESIGNED              |  | CHECKED          | DA         | ΛTE      |
|                                 |                                |  |   |                      |                       |  | T                |            |          |
| REMARKS<br>NOTE1: INCL          | UDE THE TEMP                   | refer to JIS C 5402, IEC 60512.  |   |                      |                       | APPROVED   | MO. ISHIDA       | 15. 07. 28 |          |
|                                 |                                |  |   |                      |                       | CHECKED  | WR. FUKUCHI      | 15. 07. 28 |          |
| Unless othe                     | wise specified                 |  |   |                      |                       | DESIGNED   | 00.1             | 15. 07. 27 |          |
|                                 |                                |  |   |                      |                       | DRAWN  | KR. AJITO        | 15. 07. 27 |          |
| Note QT:Q                       | ualification Te                | st AT:As   | surance Test X:Applicable Test  |                      | DRAWIN                |  | ELC-355293-58-01 |            |          |
| HS.                             |                                | SPECIFICATION SHEET  |   |                      | PART NO.              |  |                  |            |          |
|                                 | HIR                            | HIROSE ELECTRIC CO., LTD.  |   |                      | CODE NO.              | ODE NO.   CL684-4411-0-58   4  |                  |            | 1/1      |