

| APPLICABLE STANDARD |                             |                          |                           |                          |
|---------------------|-----------------------------|--------------------------|---------------------------|--------------------------|
| RATING              | OPERATING TEMPERATURE RANGE | -35°C TO +85°C (NOTES 1) | STORAGE TEMPERATURE RANGE | -10°C TO + 60°C          |
|                     | VOLTAGE                     | 50V AC                   | APPLICABLE CONNECTOR      | DF17# (**)-*DS-0.5V (57) |
|                     | CURRENT                     | 0.3A                     |                           |                          |

### 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    | 100m A (DC OR 1000 Hz). | 60mΩ MAX.                  | X | - |
| INSULATION RESISTANCE | 100V DC.                | 500MΩ MIN.                 | X | - |
| VOLTAGE PROOF         | 150V AC FOR 1 min.      | NO FLASHOVER OR BREAKDOWN. | X | - |

#### MECHANICAL CHARACTERISTICS

| INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTOR.  | <table border="1"> <thead> <tr> <th rowspan="2">SIGNAL</th> <th>INSERTION FORCE (N)MAX</th> <th>WITHDRAWAL FORCE (N)MIN</th> </tr> </thead> <tbody> <tr><td>20</td><td>20.0</td><td>2.0</td></tr> <tr><td>30</td><td>30.0</td><td>3.0</td></tr> <tr><td>40</td><td>40.0</td><td>4.0</td></tr> <tr><td>50</td><td>50.0</td><td>5.0</td></tr> <tr><td>60</td><td>60.0</td><td>6.0</td></tr> <tr><td>70</td><td>70.0</td><td>7.0</td></tr> <tr><td>80</td><td>80.0</td><td>8.0</td></tr> <tr><td>100</td><td>100.0</td><td>10.0</td></tr> <tr><td>120</td><td>120.0</td><td>12.0</td></tr> </tbody> </table> | SIGNAL | INSERTION FORCE (N)MAX | WITHDRAWAL FORCE (N)MIN | 20                      | 20.0 | 2.0 | 30 | 30.0 | 3.0 | 40 | 40.0 | 4.0 | 50 | 50.0 | 5.0 | 60 | 60.0 | 6.0 | 70 | 70.0 | 7.0 | 80 | 80.0 | 8.0 | 100 | 100.0 | 10.0 | 120 | 120.0 | 12.0 | X | - |
|---------------------------------|--|---|--------|------------------------|-------------------------|-------------------------|------|-----|----|------|-----|----|------|-----|----|------|-----|----|------|-----|----|------|-----|----|------|-----|-----|-------|------|-----|-------|------|---|---|
|                                 |  |   |        | SIGNAL                 | INSERTION FORCE (N)MAX  | WITHDRAWAL FORCE (N)MIN |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
|                                 |  |   | 20     |                        | 20.0                    | 2.0                     |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
|                                 |  |   | 30     | 30.0                   | 3.0                     |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
|                                 |  |   | 40     | 40.0                   | 4.0                     |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
|                                 |  |   | 50     | 50.0                   | 5.0                     |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
|                                 |  |   | 60     | 60.0                   | 6.0                     |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
|                                 |  |   | 70     | 70.0                   | 7.0                     |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
|                                 |  |   | 80     | 80.0                   | 8.0                     |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
|                                 |  |   | 100    | 100.0                  | 10.0                    |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
| 120                             | 120.0  | 12.0  |        |                        |                         |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
| MECHANICAL OPERATION            | 50TIMES INSERTIONS AND EXTRACTIONS.  | ① CONTACT RESISTANCE: 60mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | X      | -                      |                         |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
| VIBRATION                       | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | X      | -                      |                         |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |
| SHOCK                           | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.  | ① NO ELECTRICAL DISCONTINUITY OF 1μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | X      | -                      |                         |                         |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |    |      |     |     |       |      |     |       |      |   |   |

#### ENVIRONMENTAL CHARACTERISTICS

|                              |   |  |   |   |
|------------------------------|---|--|---|---|
| RAPID CHANGE OF TEMPERATURE  | TEMPERATURE -55→ 5 TO 35→ 85→ 5 TO 35°C<br>TIME 30→10 TO 15→ 30→10TO15min<br>UNDER 5 CYCLES.  | ① CONTACT RESISTANCE: 60mΩ MAX.<br>② INSULATION RESISTANCE: 500 MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| DAMP HEAT (STEADY STATE)     | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.   | ① CONTACT RESISTANCE: 60mΩ MAX.<br>② INSULATION RESISTANCE: 250 MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| CORROSION SALT MIST          | EXPOSED IN 5% SALT WATER SPRAY FOR 48 h.  | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.  | X | - |
| SULPHUR DIOXIDE              | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD:JEIDA-39)   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.  | X | - |
| HEAT RESISTANCE OF SOLDERING | [RECOMMENDED TEMPERATURE PROFILE]<br>《SOLDERING AREA》<br>MAX250°C, 220°C FOR 60 SECONDS MAX.<br>《PREHEATING AREA》<br>150 TO 180°C 90~120 SECONDS.<br>MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION.<br>[RECOMMENDED MANUAL SOLDELING CONDITION ]<br>SOLDERING IRON TEMPERATURE 350°C<br>SOLDERING TIME : WITHIN 3 SECONDS. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.  | X | - |

| COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|-------|--------------------------|----------|---------|------|
|-------|--------------------------|----------|---------|------|

|  |          |               |          |
|--|----------|---------------|----------|
| REMARKS<br>NOTE1:INCLUDING THE TEMPERATURE RISE BY CURRENT.<br><br>UNLESS OTHERWISE SPECIFIED,REFER TO JIS C 0806. | APPROVED | KH. IKEDA     | 05.08.26 |
|  | CHECKED  | AR. TAKAHASHI | 05.08.26 |
|  | DESIGNED | YH. MICHIDA   | 05.08.24 |
|  | DRAWN    | YH. MICHIDA   | 05.08.24 |

|  |             |                |
|--|-------------|----------------|
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | DRAWING NO. | ELC4-162137-07 |
|--|-------------|----------------|

|                           |          |                             |
|---------------------------|----------|-----------------------------|
| SPECIFICATION SHEET       | PART NO. | DF17B (2. 0) -*DP-0.5V (57) |
| HIROSE ELECTRIC CO., LTD. | CODE NO. | CL683                       |