

|                                                                                                                                  |                             |                                                                                                                        |                                                                                                                     |                                                                                                 |                  |   |   |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------|---|---|
| APPLICABLE STANDARD                                                                                                              |                             |                                                                                                                        |                                                                                                                     |                                                                                                 |                  |   |   |
| RATING                                                                                                                           | OPERATING TEMPERATURE RANGE | -35°C TO +85°C (NOTES 1)                                                                                               | STORAGE TEMPERATURE RANGE                                                                                           | -10°C TO +60°C                                                                                  |                  |   |   |
|                                                                                                                                  | VOLTAGE                     | 30V AC                                                                                                                 | APPLICABLE CONNECTOR                                                                                                | DF37*-*DS-0. 4V (**)                                                                            |                  |   |   |
|                                                                                                                                  | CURRENT                     | 0. 3A                                                                                                                  |                                                                                                                     |                                                                                                 |                  |   |   |
| SPECIFICATIONS                                                                                                                   |                             |                                                                                                                        |                                                                                                                     |                                                                                                 |                  |   |   |
| ITEM                                                                                                                             |                             | TEST METHOD                                                                                                            | REQUIREMENTS                                                                                                        | QT                                                                                              | AT               |   |   |
| CONSTRUCTION                                                                                                                     |                             |                                                                                                                        |                                                                                                                     |                                                                                                 |                  |   |   |
| GENERAL EXAMINATION                                                                                                              |                             | CONFIRMED VISUALLY AND BY MEASURING INSTRUMENT.                                                                        | ACCORDING TO DRAWING.                                                                                               | X                                                                                               | X                |   |   |
| MARKING                                                                                                                          |                             | CONFIRMED VISUALLY.                                                                                                    |                                                                                                                     | X                                                                                               | X                |   |   |
| ELECTRIC CHARACTERISTICS                                                                                                         |                             |                                                                                                                        |                                                                                                                     |                                                                                                 |                  |   |   |
| CONTACT RESISTANCE                                                                                                               |                             | 20mV AC OR LESS 1khz,1m A .                                                                                            | 100mΩ MAX.                                                                                                          | X                                                                                               | —                |   |   |
| INSULATION RESISTANCE                                                                                                            |                             | 100V DC.                                                                                                               | 50MΩ MIN.                                                                                                           | X                                                                                               | —                |   |   |
| VOLTAGE PROOF                                                                                                                    |                             | 100V AC FOR 1 min.                                                                                                     | NO FLASHOVER OR BREAKDOWN.                                                                                          | X                                                                                               | —                |   |   |
| MECHANICAL CHARACTERISTICS                                                                                                       |                             |                                                                                                                        |                                                                                                                     |                                                                                                 |                  |   |   |
| INSERTION AND WITHDRAWAL FORCES                                                                                                  |                             | MEASURED BY APPLICABLE CONNECTOR.<br> |                                                                                                                     | INSERTION FORCE                                                                                 | WITHDRAWAL FORCE | X | — |
|                                                                                                                                  |                             |                                                                                                                        | PIN COUNT                                                                                                           | [N MAX]                                                                                         | [N MIN]          |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 10                                                                                                                  | 15.4                                                                                            | 2.6              |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 16                                                                                                                  | 20.7                                                                                            | 3.6              |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 20                                                                                                                  | 24.3                                                                                            | 4.4              |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 24                                                                                                                  | 27.8                                                                                            | 5.1              |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 30                                                                                                                  | 33.1                                                                                            | 6.2              |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 34                                                                                                                  | 40.8                                                                                            | 6.9              |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 40                                                                                                                  | 41.9                                                                                            | 8                |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 44                                                                                                                  | 45.4                                                                                            | 8.7              |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 50                                                                                                                  | 50.7                                                                                            | 9.8              |   |   |
|                                                                                                                                  |                             |                                                                                                                        | 60                                                                                                                  | 59.5                                                                                            | 11.7             |   |   |
| 70                                                                                                                               | 68.4                        | 13.5                                                                                                                   |                                                                                                                     |                                                                                                 |                  |   |   |
| 74                                                                                                                               | 71.9                        | 14.2                                                                                                                   |                                                                                                                     |                                                                                                 |                  |   |   |
| MECHANICAL OPERATION                                                                                                             |                             | 10TIMES INSERTIONS AND EXTRACTIONS.                                                                                    | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                       |                                                                                                 | X                | — |   |
| VIBRATION                                                                                                                        |                             | FREQUENCY 10 TO 55 TO 10 Hz,APPROX 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.                                 |                                                                                                 | X                | — |   |
| 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.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                 |                                                                                                 | X                | — |   |
| ENVIRONMENTAL CHARACTERISTICS                                                                                                    |                             |                                                                                                                        |                                                                                                                     |                                                                                                 |                  |   |   |
| RAPID CHANGE OF TEMPERATURE                                                                                                      |                             | TEMPERATURE -55 → +85 °C<br>TIME 30 → 30 min<br>UNDER 5 CYCLES.<br>(RELOCATION TIME TO CHAMBER: WITHIN 2 ~3 MIN)       | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② INSULATION RESISTANCE: 50MΩ 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: 100mΩ MAX.<br>② INSULATION RESISTANCE: 25MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. |                                                                                                 | X                | — |   |
| SULPHUR DIOXIDE                                                                                                                  |                             | EXPOSED IN 25 PPM FOR 96h,25°C,75%. (REFER TO JIS C 60068)                                                             | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                       |                                                                                                 | X                | — |   |
| SALT MIST                                                                                                                        |                             | EXPOSED IN 5% SALT MIST FOR 48h.                                                                                       | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                       |                                                                                                 | X                | — |   |
|                                                                                                                                  | COUNT                       | DESCRIPTION OF REVISIONS                                                                                               | DESIGNED                                                                                                            | CHECKED                                                                                         | DATE             |   |   |
|                                               | 1                           | DIS-H-00003087                                                                                                         | YT. TAKAGI                                                                                                          | TS. MIYAZAKI                                                                                    | 17. 09. 28       |   |   |
| REMARKS<br>NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT<br><br>Unless otherwise specified, refer to JIS C 5402 and IEC 60512 |                             |                                                                                                                        | APPROVED                                                                                                            | MO. NAKAMURA                                                                                    | 07. 01. 29       |   |   |
|                                                                                                                                  |                             |                                                                                                                        | CHECKED                                                                                                             | KH. IKEDA                                                                                       | 07. 01. 29       |   |   |
|                                                                                                                                  |                             |                                                                                                                        | DESIGNED                                                                                                            | KY. MIDORIKAWA                                                                                  | 07. 01. 29       |   |   |
|                                                                                                                                  |                             |                                                                                                                        | DRAWN                                                                                                               | KY. MIDORIKAWA                                                                                  | 07. 01. 29       |   |   |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                   |                             |                                                                                                                        | DRAWING NO.                                                                                                         |                                                                                                 | ELC4-314974-01   |   |   |
|                                               | SPECIFICATION SHEET         |                                                                                                                        | PART NO.                                                                                                            | DF37C-*DP-0. 4V (51)                                                                            |                  |   |   |
|                                                                                                                                  | HIROSE ELECTRIC CO., LTD.   |                                                                                                                        | CODE NO.                                                                                                            | CL684  1/1 |                  |   |   |