

In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

| Applicable standard |                             |                          |                           |
|---------------------|-----------------------------|--------------------------|---------------------------|
| Rating              | Operating Temperature range | -40 °C to +105°C (Note1) | Storage Temperature range |
|                     | Operating Humidity range    | 20% to 80% (Note2)       | Storage Humidity range    |
|                     |                             | -                        | -                         |
|                     |                             | -                        | -                         |

### Specifications

| Item | Test method | Requirements | QT | AT |
|------|-------------|--------------|----|----|
|------|-------------|--------------|----|----|

|                     |  |                                       |                       |   |   |
|---------------------|--|---------------------------------------|-----------------------|---|---|
| <b>Construction</b> |  | Visually and by measuring instrument. | According to drawing. | X | X |
| General examination |  | Confirmed visually.                   |                       | X | X |
| Marking             |  |                                       |                       |   |   |

|                                   |  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|
| <b>Mechanical characteristics</b> |  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|

|           |  |   |   |   |
|-----------|--|---|---|---|
| Vibration | Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction. | No damage, crack or looseness of parts. | X | - |
|-----------|--|---|---|---|

|       |   |   |   |   |
|-------|---|---|---|---|
| Shock | 490 m/s <sup>2</sup> duration of pulse 11 ms at 3 times each for 3 both axial directions. | No damage, crack or looseness of parts. | X | - |
|-------|---|---|---|---|

|                                      |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|
| <b>Environmental characteristics</b> |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|

|                          |  |   |   |   |
|--------------------------|--|---|---|---|
| Damp heat (Steady state) | Exposed at 40 ± 2°C , 90 to 95 %, 96 h. (After leaving the room temperature for 1~2h.) | No damage, crack or looseness of parts. | X | - |
|--------------------------|--|---|---|---|

|                             |  |   |   |   |
|-----------------------------|--|---|---|---|
| Rapid change of temperature | Temperature -55°C→ +85°C<br>Time 30min→ 30min<br>Under 5 cycles.<br>(The transferring time of the tank is 2~3 min)<br>(After leaving the room temperature for 1~2h.) | No damage, crack or looseness of parts. | X | - |
|-----------------------------|--|---|---|---|

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

Note 1: Include the temperature rising by current.  
 Note 2: No condensing  
 Note 3: Apply to the condition of long term storage for unused products before PCB on board. After PCB on board, operating temperature and humidity range is applied for interim strage during transportation.

| Count   | Description of revisions | Designed  | Checked                  | Date     |
|---------|--------------------------|-----------|--------------------------|----------|
| 2       | DI-S-H-008782            | KT. ISHII | HK. UMEHARA              | 14.05.23 |
| Remarks |                          |           |                          |          |
|         |                          |           | Approved<br>K.I. AKIYAMA | 14.01.15 |
|         |                          |           | Checked<br>MN. KENJO     | 14.01.15 |
|         |                          |           | Designed<br>TO. HORII    | 14.01.15 |
|         |                          |           | Drawn<br>TO. HORII       | 14.01.15 |

Unless otherwise specified, refer to IEC 60512.

|      |                       |                   |                   |             |                |
|------|-----------------------|-------------------|-------------------|-------------|----------------|
| Note | QT:Qualification Test | AT:Assurance Test | X:Applicable Test | Drawing No. | ELC4-354088-00 |
|------|-----------------------|-------------------|-------------------|-------------|----------------|

|            |                           |          |                 |       |
|------------|---------------------------|----------|-----------------|-------|
| <b>HRS</b> | Specification sheet       | Part No. | DF62W-WP        |       |
|            | HIROSE ELECTRIC CO., LTD. | Code No. | CL544-1014-6-00 | A 1/1 |