

Applicable standard					
Rating	Operating Temperature range	-40 °C to +105°C (Note1)	Storage Temperature range	-10 °C to +60°C (Note2)	
	Operating Humidity range	20% to 80%	Storage Humidity range	40% to 70% (Note2)	
	Applicable Connector	DF63W-4S-3.96C DF63WA-4S-3.96C	Voltage	AC/DC 630V	
	Applicable contact	DF63-1618PC*	Current	AWG#16 : 12 A	
	Insulation diameter	φ 2. 8 ~ φ 3. 2mm		AWG#18 : 9 A	
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		20mV MAX, 1mA (DC or 1000Hz).	10 mΩ MAX.	X	—
Insulation resistance		500 V DC.	1000 MΩ MIN.	X	—
Voltage proof		1500 V AC for 1 min.	No flashover or breakdown.	X	—
Mechanical characteristics					
Mechanical operation		30 times insertion and extraction.	①Contact resistance: 20 mΩ MAX. ②No damage, crack or looseness of parts.	X	—
Vibration		Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction.	①No electrical discontinuity of 1 μs. ②No damage, crack or looseness of parts.	X	—
Shock		490 m/s ² duration of pulse 11 ms at 3 times each for 3 both axial directions.	①No electrical discontinuity of 1 μs. ②No damage, crack or looseness of parts.	X	—
Environmental characteristics					
Damp heat (Steady state)		Exposed at 40 ± 2°C , 90 to 95 %, 96 h. (After leaving the room temperature for 1~2h.)	①Contact resistance: 20 mΩ MAX. ②Insulation resistance: 500 MΩ Min. ③No damage, crack or looseness of parts.	X	—
Rapid change of temperature		Temperature -55°C→ +105°C Time 30min→ 30min Under 5 cycles. (The transferring time of the tank is 2~3 min) (After leaving the room temperature for 1~2h.)	①Contact resistance: 20 mΩ MAX. ②Insulation resistance: 1000 MΩ Min. ③No damage, crack or looseness of parts.	X	—
Sealing		Exposed at a depth of 1m for 0.5h.	No water penetration inside connector.	X	—
Note 1: Include the temperature rising by current. Note2: Apply to the condition of long term storage for unused products before being processed or mounted on products. After before being processed or mounted on products, operating temperature and humidity range is applied for interim strage during transportation.					
	Count	Description of revisions	Designed	Checked	Date
△					
Remarks Unless otherwise specified, refer to IEC 60512.			Approved	HK. UMEHARA	15. 03. 10
			Checked	HK. UMEHARA	15. 03. 10
			Designed	TO. HORII	15. 03. 10
			Drawn	TO. HORII	15. 03. 10
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing No.		ELC-359249-00-00
HRS	Specification sheet		Part No.	DF63W-4EP-3. 96C	
	HIROSE ELECTRIC CO., LTD.		Code No.	CL680-0607-4-00	△ 1/1