

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 	DF63WA-4EP-3.96C	Voltage	630V AC/DC	
	Applicable contact	DF63W-1618SC* DF63W-2022SC*	Current 	AWG 16 : 12 A/pin AWG 18 : 9 A/pin AWG 20 : 7 A/pin AWG 22 : 6 A/pin	
	Insulation diameter	$\phi 1.7 \sim \phi 2.4 \text{ mm}$			
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.	1)Contact resistance: 20 mΩ MAX. 2)No damage, crack or looseness of parts.	X	—
Vibration		Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction.	1)No electrical discontinuity of 1 μs. 2)No 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.	1)No electrical discontinuity of 1 μs. 2)No 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.)	1)Contact resistance: 20 mΩ MAX. 2)Insulation resistance: 500 MΩ Min. 3)No 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.)	1)Contact resistance: 20 mΩ MAX. 2)Insulation resistance: 1000 MΩ Min. 3)No damage, crack or looseness of parts.	X	—
Sealing		Exposed at a depth of 1m for 0.5h.	No water penetration inside connector.	X	—
Remarks					
Note 1: Include the temperature rising by current. Note 2: Apply to the packaged and unused product. 					
	Count	Description of revisions	Designed	Checked	Date
	3	DIS-H-00018486	HT. SATO	SZ. ONO	20230613
Unless otherwise specified, refer to IEC 60512.			Approved	HK. UMEHARA	20150310
			Checked	HK. UMEHARA	20150310
			Designed	TO. HORII	20150310
			Drawn	TO. HORII	20150310
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing No.	ELC-359261-00-00	
	Specification sheet		Part No.	DF63WA-4S-3.96C	
	HIROSE ELECTRIC CO., LTD.		Code No.	CL0680-0619-3-00	 1/1