





Applicable standard					
Rating	Operating temperature range 	-55 °C to +105°C (Note1)	Storage temperature range	-10 °C to +60°C (Note3)	
	Operating humidity range	20% to 80% (Note2)	Storage humidity range	40% to 70% (Note3)	
	Applicable connector	DF63-*S-3.96C	Voltage	AC/DC 630V	
	Applicable cable	AWG #16 to 18	Current	AWG #16 : 15A/pin	
	Insulation diameter	φ 2.1 to φ 3.2 mm		AWG #18 : 13A/pin	
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	-	
Mechanical characteristics					
Contact insertion and extraction forces	<input type="checkbox"/> 1.14±0.002 mm by steel gauge.	Insertion force 10 N MAX. Extraction force 0.3 N MIN.	X	-	
Mechanical operation	50 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 1μs. 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.		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) No damage, crack or looseness of parts.	X	-	
Rapid change of temperature	Temperature -55°C→ +85°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.)		X	-	
Remarks Note 1:Including the temperature rising by current. Note 2:No condensing Note 3: Apply to unused product on packaged condition.					
	Count	Description of revisions	Designed	Checked	Date
	1	DIS-H-00009798	TS. KUMAZAWA	SZ. ONO	20210616
Unless otherwise specified, refer to IEC 60512.			Approved	SJ. OKAMURA	20210513
			Checked	SZ. ONO	20210513
			Designed	TS. KUMAZAWA	20210513
			Drawn	TS. KUMAZAWA	20210513
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.		ELC-393063-00-00
	Specification sheet		Part no.	DF63A-1618SCFA	
	Hirose electric co., ltd.		Code no.	CL0680-0646-0-00	 1/1