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	DF63SF-*S-3.96C	Voltage	AC/DC 630V	
	Applicable cable	AWG#16 to 18	Current	AWG#16	15A(2PIN,P=7.92mm)
					12A(3PIN,P=3.96mm)
	Insulation Diameter	Φ2.1 to 2.7 mm		AWG#18	13A(2PIN,P=7.92mm)
					10A(3PIN,P=3.96mm)

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	□0.8±0.002 mm by steel gauge.	Insertion force 4.5 N MAX. Extraction force 0.3 N MIN.	X	–
Mechanical operation	50 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.		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℃ , 90 to 95 %, 96 h. (After leaving the room temperature for 1 to 2h.)	①Contact resistance: 20 mΩ MAX. ②No damage, crack or looseness of parts.	X	–
Rapid change of temperature	Temperature -55℃→ +105℃ Time 30min→ 30min Under 5 cycles. (the transferring time of the tank is 2 to 3 min) (after leaving the room temperature for 1 to 2h.)		X	–

Note1: Include the temperature rising by current.
Note2: No condensing.
Note3: Apply to the condition of long term storage for unused products before harness assembly.
After harness assembly, operation temperature and humidity range is applied for interim storage during transportation.

	Count	Description of revisions	Designed	Checked	Date
△0					

Remarks

Unless otherwise specified, refer to IEC 60512.

Approved	HS.OKAWA	20191112
Checked	SZ.ONO	20191112
Designed	TO.KUROMATSU	20191112
Drawn	SK.CHIBA	20191112

Note QT:Qualification test AT:Assurance test X:applicable test

Drawing No. ELC-367036-00-00

HRS	Specification sheet	Part No.	DF63SF-1618SCFA	
	Hirose electric co., Ltd.	Code No.	CL680-0703-0-00	△0 1/1

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