





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)			
	Voltage	630V AC/DC			Applicable connector	a) : DF63(A)-*EP-3.96C(##) b) : DF63WA-*EP-3.96C(##)			
	Current	Applicable connector	a)	b)					
		AWG 20	11A/pin	9A/pin					
	AWG 22	9A/pin	8A/pin	Insulation diameter	φ 1.5 to φ 1.9 mm				
		Rated Voltage		Rated Current		Overvoltage Category		IP-Degree	
UL, C-UL		600V AC/DC		See above		-		-	
TUV		300V AC/DC		See above		II		IP00	
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 Millivolt level method		20mV MAX, 1mA (DC or 1000 Hz).				10 mΩ MAX.		X	—
Mechanical characteristics									
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.				1) No electrical discontinuity of 1μs. 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 to 2 h.)				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 30 min → 30 min  Under 5 cycles. (The transferring time of the tank is 2 to 3 min) (After leaving the room temperature for 1 to 2 h.)				1) Contact resistance: 20 mΩ MAX. 2) No damage, crack or looseness of parts.		X	—
Remarks									
Note 1: Include 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-00010588			TS. KUMAZAWA		SZ. ONO		20210826
Unless otherwise specified, refer to IEC 60512.							Approved	SJ.OKAMURA	20210825
							Checked	SZ.ONO	20210825
							Designed	TS.KUMAZAWA	20210825
							Drawn	TS.HONJO	20210824
Note QT:Qualification test AT:Assurance test X:applicable test					Drawing No.		ELC-382874-00-00		
	Specification sheet				Part No.		DF63-2022PCFA		
	Hirose electric co., Ltd.				Code No.		CL0680-0638-0-00		 1/1