

Applicable standard										
Rating	Operating temperature range	-55 °C to +105°C (Note1)			Current	Contact	AWG 16	AWG 18	AWG 20	AWG 22
	Operating humidity range	20% to 80% (Note2)				1	15A	13A	11A	9A
	Storage temperature range	-10 °C to +60°C (Note3)				2	14A	12A	10A	8A
	Storage humidity range	40% to 70% (Note3)				3	12A	10A	8A	7A
	Applicable connector	DF63-*S-3.96C				4	10A	8A	7A	6A
	Voltage	AC/DC 630V								
UL,C-UL		Rated Voltage	Rated Current	Overvoltage Category	IP-Degree					
TUV		600V AC/DC	See above	-	-					
		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		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 μ s. 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 μ s. 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 → +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.)			①Contact resistance: 20 mΩ MAX. ②Insulation resistance: 1000 MΩ MIN. ③No damage, crack or looseness of parts.				X	-
Resistance to Soldering heat 		1)Solder bath method Soldered at solder temperature, 260°C for in immersion , duration, 5s. 2)Manual soldering Soldering iron temperature :300°C, Soldering time :3s. No strength on contact.			Such as impaired function ,no deformation of case of excessive looseness of the terminals. 				X	-
Solderability		Soldered at solder temperature, 245°C for in immersion , duration, 5 s.			A new uniform coating of solder shall cover minimum of 95 % of the surface being immersed.				X	-
<p>Note 1: Include the temperature rising by current.</p> <p>Note 2: No condensing.</p> <p>Note 3: Apply to the condition of long term storage for unused products before mounted on PCB. After mounted on PCB, operation temperature and humidity range is applied for interim storage during transportation.</p>										
	Count	Description of revisions			Designed	Checked			Date	
	2	DIS-H-00005518			T.O. KUROMATSU	SZ. ONO			20191202	
Remarks						Approved	HS. OKAWA			20170830
						Checked	TS. FUKUSHIMA			20170830
						Designed	HT. SATO			20170830
						Drawn	MI. SAKIMURA			20170830
Unless otherwise specified, refer to IEC 60512.										
Note QT:Qualification Test AT:Assurance Test X:Applicable Test					Drawing no.		ELC-378620-00-00			
	Specification sheet				Part no.	DF63M-*P-3. 96DSA				
	Hirose electric co., ltd.				Code no.	CL680-				1/1