

Applicable standard						
Rating	Operating temperature range 	-40 °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	DF59-3S-2V(**)	Current		3A	
			Voltage	Specification	AC/DC 230V	
UL/C-UL				AC/DC 29.9V		
			TÜV	TBD		
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 	DC6V MAX, 100mA. (DC or 1000Hz).		50mΩ MAX.		X	-
Insulation resistance	500V DC.		1000MΩ MIN.		X	-
Voltage proof	650V AC FOR 1 min.		No flashover or breakdown.		X	-
Mechanical characteristics						
Mechanical operation	30 times insertion and extraction.		①50mΩ MAX. ②No damage, crack or looseness of parts.		X	-
Vibration	Frequency 10 to 55Hz, single amplitude 0.75mm, at 10cycles for 3direction.		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 for 3 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.)		①50mΩ MAX. ②Insulation resistance: 1000MΩ MIN.		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.)		③No damage, crack or looseness of parts.		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-00002838	TS. KUMAZAWA	TS. FUKUSHIMA	17.05.30	
Remarks				Approved	KI. AKIYAMA	10.09.29
				Checked	OM. MIYAMOTO	10.09.29
				Designed	KT. ISHII	10.09.29
				Drawn	KT. ISHII	10.09.29
Unless otherwise specified, refer to IEC60512.						
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.		ELC-330594-50-01	
	Specification sheet		Part no.	DF59-3P-2FC (50)		
	Hirose electric co., ltd.		Code no.	CL667-0007-7-50		1/1