Applicable standard					
Rating	Operating Temperature Range	-55°C to +85°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	50 V AC/DC		Applicable Connector	DF53-10S-0.6H(##)
	Current	All pin	AWG 32 : 0.7A	Applicable Contact	DF53-32SCF
		Any of 2 pins as a power	AWG 32 : 1.3A(power), 0.5A(signal)		

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				
Insulation Resistance	100 V DC.	100 MΩ MIN.	X	—
Voltage Proof	200 V AC for 1 min.	No flashover or breakdown.	X	—
Mechanical Characteristics				
Mechanical Operation	20 times insertion and extraction.	No damage, crack or looseness of parts.	X	—
Mating and unmating Force	It takes out and inserts with a conformity connector.	1.Insertion Force : 18.2N MAX. 2.Extraction Force : 3.1N MIN.	X	—
Vibration	Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction.	No damage, crack or looseness of parts.	X	—
Shock	Acceleration 500 m/s^2 duration of pulse 11 ms at 3 times for 3 directions.		X	—
Contact extraction force	Pull out the cable after housing fixation.	3N MIN	X	—
Environmental Characteristics				
Damp Heat (Steady State)	Exposed at 40 ± 2°C , humidity 90 to 95 %, 96 h. (After leaving the room temperature for 1 to 2h.)	1.Insulation resistance: 100 MΩ MIN. 2.No damage, crack or looseness of parts.	X	—
Rapid Change Of Temperature	Temperature -55°C→ +85°C Time 30min→ 30min ⚠1 Under 5 Cycles. (The transferring time of the tank is 2 to 3 MIN) (After leaving the room temperature for 1 to 2h.)	1. Insulation resistance: 100 MΩ MIN. 2. No damage, crack or looseness of parts.	X	—
Dry Heat	Exposed at 85±2°C, 96h		X	—
Cold	Exposed at -55±3°C, 96h		X	—

Remarks
Note 1: Include the temperature rising by current.
Note 2: No condensing. Apply to the condition of long term storage for unused products before harness assembly.
Note 3: Applicable to unused product packaging.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠1	1	DIS-H-00019500	JN. TONAI	SZ. ONO	20231120

APPROVED	SJ. OKAMURA	20230728
CHECKED	SZ. ONO	20230728
DESIGNED	JN. TONAI	20230728
DRAWN	JN. TONAI	20230728

Unless otherwise specified, refer to IEC 60512.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-380637-00-00

HRS	SPECIFICATION SHEET	PART NO.	DF53-10P-0.6C
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0668-1019-0-00 ⚠1 1/1

FORM HD0011-2-1