

APPLICABLE STANDARD					
Rating	Operating Temperature Range	−40 °C TO +85 °C (Note 1)	Applicable Cable	φ 6.2±0.3	
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
MECHANICAL CHARACTERISTICS					
Mechanical Operation		Mated and unmated 500 times. (With FI30-20S installed)	No damage, crack and looseness of parts.	X	—
Vibration		Frequency : 10 to 500 Hz, single amplitude 0.75 mm, 98 m/s <sup>2</sup> at 3h for 6 directions.	No damage, crack and looseness of parts.	X	—
Shock		490 m/s <sup>2</sup> duration of pulse 11 ms for 3 times in 3 both axial directions.	No damage, crack and looseness of parts.	X	—
ENVIRONMENTAL CHARACTERISTICS					
Rapid Change of Temperature		Temperature −40 → 5 to 35 → 105 → 5 to 35 °C Time 30 → 5 → 30 → 5 min Under 10 cycles.	No damage, crack and looseness of parts.	X	—
Damp Heat/ Current Carrying		Mated connector with contacts connected in series. Exposed with current carrying at temperature 85°C, humidity 85% for 1000h. DC 0.5A , 30V Leave at room temperature for 2h after testing. (With FI30-20S installed)	No damage, crack and looseness of parts.	X	—
Dry Heat/ Current Carrying		Mated connector with contacts connected in series. Exposed with current carrying at temperature 105°C, for 1000h. DC 0.5A , 30V Leave at room temperature for 2h after testing. (With FI30-20S installed)	No damage, crack and looseness of parts.	X	—
Cold Resistance		Leave at -40 °C, for 500h Leave at 5 to 35°C for 1 to 2h After testing.	No damage, crack and looseness of parts.	X	—
Corrosion Salt Mist		Exposed in 5 % salt water spray for 48 h.	No heavy corrosion.	X	—
Mixed Gas		Sulfur dioxide : 10 ppm Hydrogen sulfide : 3 ppm Temperature : 40 ± 2 °C Humidity : 70 to 80 % Exposed for 96 h	No heavy corrosion.	X	—
Machining Oil		Soak in machining oil at temperature 85 °C,for 100h Tested with 3 different oils separately : UNISOLUBLE HD, UNISOLUBLE CC AND UNICUT TB15.	No damage, crack and looseness of parts.	X	—
(Note 1) The operation temperature includes the temperature rise by current carrying.					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△					
REMARK			APPROVED	RI. TAKAYASU	18. 06. 05
			CHECKED	AH. KODAMA	18. 06. 05
			DESIGNED	MO. SHIMOYAMA	18. 06. 05
			DRAWN	MT. YASUDA	18. 06. 05
Unless otherwise specified, refer to IEC 60512.					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC-122396-50-01	
HRS	SPECIFICATION SHEET		PART NO.	FI-20-CVS2 (50)	
	HIROSE ELECTRIC CO., LTD.		CODE NO	CL230-0531-5-50	△ 1/1