

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-25 °C TO +85 °C	STORAGE TEMPERATURE RANGE	-10 °C TO +60 °C	
	VOLTAGE	AC 100 V , DC 140 V			
	CURRENT	2 A	APPLICABLE CABLE		
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		CONTACT SHALL BE MEASURED AT DC 1 A	10 mΩ MAX.	X	X
INSULATION RESISTANCE		100 V DC.	1000 MΩ MIN.	X	X
VOLTAGE PROOF		300 V AC. FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	X
MECHANICAL CHARACTERISTICS					
CONTACT INSERTION AND WITHDRAWAL FORCES		BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES : — N MIN.	—	—
CONNECTOR INSERTION AND WITHDRAWAL FORCES		MEASURED BY APPLICABLE CONNECTOR.	INSERTION AND WITHDRAWAL FORCES LOCKING DEVICE WITH UNLOCK : — N MAX. LOCKING DEVICE WITH LOCK : 70 N MAX.	X	—
MECHANICAL OPERATION		1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 20 mΩ MAX.	X	—
VIBRATION		FREQUENCY: 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, — m/s ² AT 2h, FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
SHOCK		490 m/s ² DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
ENVIRONMENTAL CHARACTERISTICS					
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 °C, 90 TO 95 %, 96 h.	① INSULATION RESISTANCE: 5 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 50 MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55 → R/T ⁽¹⁾ → +85 → R/T °C TIME 30 → 10 TO 15 → 30 → 10 TO 15 min UNDER 5 CYCLES.	① INSULATION RESISTANCE: 1000 MΩ MIN.. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
CORROSION SALT MIST		EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	NO HEAVY CORROSIN RUIN THE FUNCTION.	X	—
DRY HEAT		EXPOSED AT + 85 °C, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
COLD		EXPOSED AT - 55 °C, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
RESISTANCE TO SOLDERING HEAT		SOLDER TEMPERATURE, + 380±10°C, FOR SOLDERING DURATION, 3 0 ⁺¹ s.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY		SOLDERED AT SOLDER TEMPERATURE, + 350±10°C FOR SOLDERING DURATION, 2 TO 3 s.	WETTING ON SOLDER SURFACE, NO SOLDER CLUSTER.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
①					
REMARK NOTE (1) R/T : ROOM TEMPERATURE Unless otherwise specified, refer to JIS C 5402.			APPROVED	MO. SATOH	07.03.23
			CHECKED	MO. SATOH	07.03.23
			DESIGNED	TO. HORII	07.03.20
			DRAWN	MK. SATO	07.03.20
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-023956-73
HRS	SPECIFICATION SHEET		PART NO.	HR10A-13R-20PB (73)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL110-0708-0-73	△ 1/1