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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

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	— 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	30 mΩ MAX.	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	φ0.53 ± 0.003 BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES : 0.15 N MIN.	X	—	
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: 40 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	—	
CONTACT RETENTION FORCE	APPLYING A PULL THE WIRE AFTER THE APPLICABLE CRIMPED CONTACT IS ASSEMBLE THE BODY.	20 N MIN.	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 CORROSION 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	—	
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
Q					
REMARK			APPROVED	MO. SATOH	07. 03. 22
(1) ABOVE SPECIFICATIONS SHOWS THE VALUES IN ASSEMBLED CONDITION WITH APPLICABLE CRIMP CONTACTS.			CHECKED	MO. SATOH	07. 03. 22
NOTE(1) R/T : ROOM TEMPERATURE			DESIGNED	TO. HORII	07. 03. 14
Unless otherwise specified, refer to JIS C 5402.			DRAWN	MK. SATO	07. 03. 12
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-027648-73
HRS	SPECIFICATION SHEET		PART NO.	HR10A-13TR-20SC (73)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL110-1002-7-73	1/1