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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	2 A	APPLICABLE CABLE	φ7

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: 15 mΩ MAX.	X	—
VIBRATION	FREQUENCY: 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, — m/s2 AT 2h, FOR 3 DIRECTIONS.	①NO ELECTRICAL DISCONTINUITY OF 10 μs. ②NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
SHOCK	490 m/s² 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 ℃, 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 ℃ 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 ℃, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
COLD	EXPOSED AT - 55 ℃, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
RESISTANCE TO SOLDERING HEAT	SOLDER TEMPERATURE, + 380±10℃, FOR SOLDERING DURATION, 3^{+1}_{0} s.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, + 350±10℃ FOR SOLDERING DURATION, 2 TO 3 s.	WETTING ON SOLDER SURFACE, NO SOLDER CLUSTER.	X	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
A					

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. ELC4-045382-74

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. HR10A-13P-20P(74)

CODE NO. CL110-0713-0-74 A 1/1

FORM HD0011-2-1