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

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COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△					△				
△					△				

<b>APPLICABLE STANDARD</b>				
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	φ 7 ± 0.2

**SPECIFICATIONS**

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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<b>CONSTRUCTION</b>				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.		×	×

<b>ELECTRIC CHARACTERISTICS</b>				
CONTACT RESISTANCE	CONTACT SHALL BE MEASURED AT DC 1 A	10 mΩ MAX.	×	×
INSULATION RESISTANCE	100 V DC.	1000 MΩ MIN.	×	×
VOLTAGE PROOF	300 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	×

<b>MECHANICAL CHARACTERISTICS</b>				
CONTACT INSERTION AND WITHDRAWAL FORCES	φ 0.53 ± 0.003 BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES : 0.15 N MIN.	×	—
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION AND WITHDRAWAL FORCES LOCKING DEVICE WITH LOCK : 70 N MAX.	×	—
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 15 mΩ MAX.	×	—
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, — m/s <sup>2</sup> AT 2 h, FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	×	—
SHOCK	490 m/s <sup>2</sup> 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.	×	—

<b>ENVIRONMENTAL CHARACTERISTICS</b>				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, 90 TO 95 %, 96 h.	① INSULATION RESISTANCE: 5 MΩMIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 50 MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → R/T <sup>(1)</sup> → +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.	×	—
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	NO HEAVY CORROSION.	×	—
DRY HEAT	EXPOSED AT + 85 °C , 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
COLD	EXPOSED AT - 55 °C , 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
RESISTANCE TO SOLDERING HEAT	SOLDER TEMPERATURE, + 380 ± 10 °C ,FOR SOLDERING DURATION, 3 ~ 4 s.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	×	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, + 350 ± 10 °C FOR SOLDERING DURATION, 2 ~ 3 s.	WETTING ON SOLDER SURFACE. NO SOLDER CLUSTER.	×	—

<b>REMARKS</b> NOTE (1) R/T : ROOM TEMPERATURE	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
		<i>D. Matsume</i>	<i>D. Matsume</i>	<i>E. Kunita</i>	<i>M. Sato</i>
Unless otherwise specified, refer to JIS C 5402.	'05.10.01	'05.10.01	'05.10.03	05.10.14	

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

<b>HS</b> HIROSE ELECTRIC CO., LTD.	SPECIFICATION SHEET	PART NO. HR10A-13P-20S(73)
CODE NO. (OLD) CL	DRAWING NO. ELC4-046520-73	CODE NO. CL110-0716-8-73

