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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 30 V , DC 42 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		15 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 : 50 N MAX.	X	-
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.		CONTACT RESISTANCE: 30 mΩ MAX.	X	-
VIBRATION	FREQUENCY: 10 → 55 → 10 (Hz) (1CYC,5min), SINGLE AMPLITUDE 0.75 mm, AT 10 CYC, FOR 3 DIRECTIONS.		①NO ELECTRICAL DISCONTINUITY OF 10 μs. ②NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	-
SHOCK	490 m/s ² DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR 6 DIRECTIONS.		① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	-
BREAKING STRENGTH ⁽³⁾	MAX 30N SHALL BE APPLIED TO CABLE IN UP AND DOWN, LEFT AND RIGHT DIRECTIONS WHEN MATED.		NO BREAKAGE MAX 30N.	X	-
ENVIRONMENTAL CHARACTERISTICS					
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, 90 TO 95 %, 96 h.		① INSULATION RESISTANCE: 10 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 100 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: 100 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 RUINS 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, + 350±10°C, FOR SOLDERING DURATION, 3 TO 4 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	-
SEALING	EXPOSED AT A DEPTH OF 1 m FOR 0.5 h.		NO WATER PENETRATION INSIDE CONNECTOR.	X	-
AIRTIGHTNESS	APPLY AIR PRESSURE 17.6kPa FOR 0.5min TO INSIDE CONNECTOR.		NO AIR BUBBLES INSIDE CONNECTOR.	X	-
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
Q					
REMARK NOTE (1) R/T : ROOM TEMPERATURE			APPROVED	HY. KOBAYASHI	18.02.26
			CHECKED	HY. KOBAYASHI	18.02.26
			DESIGNED	DS. MATSUNE	18.02.24
Unless otherwise specified, refer to IEC 60512(JIS C5402).			DRAWN	AI. NISHIYAMA	18.02.22
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-113453-31-00
HRS	SPECIFICATION SHEET		PART NO.	HR30-7R-12P (31)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL130-1016-6-31	 1/1