

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 ⁽⁴⁾	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
	CONTACT SHALL BE MEASURED AT DC — A		— mΩ MAX.	—	—
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 LOCKING DEVICE WITH LOCK.		INSERTION AND WITHDRAWAL FORCES : 50 N MAX.	X	—
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.		CONTACT RESISTANCE: 30 mΩ MAX.	X	—
			_____ RESISTANCE: — mΩ MAX.	—	—
VIBRATION	FREQUENCY 10 TO 55 Hz (10CYC, 5min), SINGLE AMPLITUDE 0.75 mm, AT 10CYC, FOR 3 DIRECTIONS		① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
SHOCK	IN OPPOSITE DIRECTIONS OF EACH 3 DEMENSION ALAXIS FOR 3 TIMES AT 490 m/s ² DURATIONS OF PULSE 11 ms.		① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
CONTACT RETENTION FORCE	APPLYING A PULL FORCE THE WIRE AFTER THE APPLICABLE CRIMPED CONTACT IS ASSEMBLED THE BODY		20 N MIN	X	—
BREAKING STRENGTH	MAX 30N SHALL BE APPLIED TO CABLE IN UP AND DOWN, LEFT AND RIGHT DIRECTIONS WHEN MATED		NO BREAKAGE OF CONNECTOR.	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.	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	—
SEALING ⁽³⁾	EXPOSED AT A DEPTH OF 1m FOR 0.5 h.		NO WATER PENETRATION INSIDE CONNECTOR.	X	—
AIRTIGHTNESS ⁽³⁾	APPLY AIR PRESSURE 17.6 kPa FOR 0.5min TO INSIDE CONNECTOR		NO AIR BUBBLES INSIDE CONNECTOR	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
①					
REMARK NOTES(1) R/T : ROOM TEMPERATURE (2) ABOVE SPECIFICATIONS SHOWS THE VELVE IN ASSEMBLED CONDITION WITH APPLICABLE CRIMP CONTACT. (3) SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLCIABLE CONNECTOR. (4) 2 A RATE CURRENT IS THE MAXIMUM CURRENT FLOW PER CONTACT. THE CURRENT CAPACITY OF WHOLE CONNECTOR IS 20.4 A MAX.			APPROVED	HY. KOBAYASHI	18.03.16
			CHECKED	HY. KOBAYASHI	18.03.16
			DESIGNED	DS. MATSUNE	18.03.16
			DRAWN	DS. MATSUNE	18.03.16
Unless otherwise specified, refer to IEC 60512.(JIS C 5402)					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-112155-31-00
HRS	SPECIFICATION SHEET		PART NO.	HR30-7R-12PC (31)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL130-1013-8-31	 1/1