

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	φ 8.5	
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	20 mΩ MAX.	X	—
INSULATION RESISTANCE		100 V DC.	1000 MΩ MIN.	X	—
VOLTAGE PROOF		300 V AC. FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	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 : 70 N MAX. LOCKING DEVICE WITH LOCK : — N MAX.	X	—
MECHANICAL OPERATION		100 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 20 mΩ MAX.	X	—
VIBRATION		FREQUENCY 10 TO 500 Hz, SINGLE AMPLITUDE 0.75 mm, 98 m/s <sup>2</sup> DIRECTIONS AT 2 h, FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
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.	X	—
CONTACT RETENSION FORCE		APPLYING A PULL FORCE THE WIRE AFTER THE APPLICABLE CRIMPED CONTACT IS ASSEMBLED WITH 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 <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.	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 °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
①					
REMARK			APPROVED	SU. OBARA	14.03.06
NOTES R/T:ROOM TEMPERATURE.			CHECKED	HY. KISHI	14.03.06
SEALING AND AIRTIGHTNESS SHALL BE TESTED UNDER MATED CONDITION WITH AN APPLICABLE CONNECTOR.			DESIGNED	MM. ISHII	14.03.06
Unless otherwise specified, refer to JIS C 5402.			DRAWN	MM. ISHII	14.03.06
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-113281-73	
HRS	SPECIFICATION SHEET		PART NO.	HR22-12TPQ-20SC (73)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL122-0053-2-73	△ 1/1