

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-30°C TO +75°C	STORAGE TEMPERATURE RANGE	-40°C TO +85°C	
	VOLTAGE	DC 30V MAX. / AC 40V MAX.	OPERATING HUMIDITY RANGE	- % TO - %	
	CURRENT	3A MAX.	APPLICABLE CABLE	AWG24 TO AWG32	
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
ELECTRICAL CHARACTERISTICS					
CONTACT RESISTANCE		10 mA MAX (DC OR 1000 Hz).	30mΩ MAX.	X	—
INSULATION RESISTANCE		100 V DC.	1000 MΩ MIN.	X	—
VOLTAGE PROOF		250 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	X
MECHANICAL CHARACTERISTICS					
INSERTION AND WITHDRAWAL FORCES		MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE 19.6 N MAX. WITHDRAWAL FORCE 4 TO 19.6 N	X	—
MECHANICAL OPERATION		5000 TIMES INSERTIONS AND EXTRACTIONS.	1) CONTACT RESISTANCE : 50 mΩ MAX. 2) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
VIBRATION		FREQUENCY 10 TO 55 Hz SINGLE AMPLITUDE 0.75 mm, — m/s <sup>2</sup> AT 2 HOURS FOR 3 DIRECTIONS.	1) NO ELECTRICAL DISCONTINUITY OF 1μs. 2) CONTACT RESISTANCE : 50 mΩ MAX. 3) 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.		X	—
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55 → 5TO35 → +85 → 5TO35 °C TIME 30 → 5 → 30 → 5 min. UNDER 5 CYCLES.	1) CONTACT RESISTANCE : 50 mΩ MAX. 2) INSULATION RESISTANCE: 1000 MΩ MIN. 3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 °C, 90 TO 95 %, FOR 96 HOURS .	1) CONTACT RESISTANCE : 50 mΩ MAX. 2) INSULATION RESISTANCE: 10 MΩ MIN. (AFTER DRY.) 3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
CORROSION SALT MIST		EXPOSED IN 5 % SALT WATER FOR 48 HOURS.	1) CONTACT RESISTANCE : 50 mΩ MAX. 2) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
RESISTANCE TO SOLDERING HEAT (SOLDERIRON METHOD)		TEMPERATURE : 380 ± 5 °C TIME : 3 sec.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
Δ					
REMARK			APPROVED	NM. NISHIMATSU	15. 10. 27
			CHECKED	KN. ICHIKAWA	15. 10. 27
			DESIGNED	TS. ITO	15. 10. 27
			DRAWN	AK. AKIYAMA	15. 10. 27
Unless otherwise specified, refer to IEC 60512.					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-120678-30-00
HRS	SPECIFICATION SHEET		PART NO.	MQ172-3SA-CV (30)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL206-0951-7-30	Δ 1/1