Sep.1.2022 Copyright 2022 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
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	−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^2 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^2, 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 ℃ TIME : 3 sec.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠					

REMARK

Unless otherwise specified, refer to IEC 60512.

APPROVED	NM. NISHIMATSU	15. 10. 27
CHECKED	KN. ICHIKAWA	15. 10. 27
DESIGNED	TS. ITO	15. 10. 27
DRAWN	AK. AKIYAMA	15. 10. 27

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	⚠ 1/1

FORM HD0011-2-1