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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	−35°C TO +85°C (NOTE 1)	STORAGE TEMPERATURE RANGE	−10°C TO +60°C (NOTE 3)
	OPERATING HUMIDITY RANGE	40% TO 80% (NOTE 2)	STORAGE HUMIDITY RANGE	40% TO 70% (NOTE 3)
	VOLTAGE	500V AC/DC	APPLICABLE CABLE	UL1007, AWG20−22
	CURRENT	AWG 20 : 5A AWG 22 : 4A	APPLICABLE CONNECTOR	DF33C-4DS-3.3C

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	1mA (DC OR 1000 Hz). 20mV MAX	10mΩ MAX.	X	—
INSULATION RESISTANCE	500V DC.	1000MΩ MIN.	X	—
VOLTAGE PROOF	1500V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS				
MECHANICAL OPERATION	30 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 20mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 10 CYCLE FOR EACH, FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SHOCK	490 m/s^2 DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		X	—
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.	① CONTACT RESISTANCE: 20mΩ MAX. ② INSULATION RESISTANCE: 500MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55→+85°C TIME 30→ 30min. UNDER 5 CYCLES. THE TRANSFERRING TIME OF THE TANK IS 2～3 min.	① CONTACT RESISTANCE: 20mΩ MAX. ② INSULATION RESISTANCE: 1000MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
RESISTANCE TO SOLDERING HEAT	1) AUTOMATIC SOLDERING (FLOW) SOLDERED AT SOLDER TEMPERATURE, 260°C FOR IN IMMERSION , DURATION, 10 s. 2)MANUAL SOLDERING SOLDERING IRON TEMPERATURE :300°C, SOLDERING TIME :3s. NO STRENGTH ON CONTACT.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 245°C FOR IN IMMERSION , DURATION, 5 s.	A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	X	—

REMARKS
NOTE 1:INCLUDING THE TEMPERATURE RISE BY CURRENT.
NOTE 2:NO CONDENSING
NOTE3:APPLY TO THE CONDITION OF LONGTERM STORAGE FOR UNUSED PRODUCTS BEFORE PCB ON BOARD, AFTER PCB BOARD, OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△0					

APPROVED	HK. UMEHARA	12. 07. 21
CHECKED	HK. UMEHARA	12. 07. 21
DESIGNED	HT. SATO	12. 07. 21
DRAWN	MI. SAKIMURA	12. 07. 21

Unless otherwise specifid , refer to JIS C 5402.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC4-338387-01

HRS	SPECIFICATION SHEET	PART NO.	DF33C-4DP-3.3DSA(24)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL676-1113-0-24 △0	1/1

FORM HD0011-2-1