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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	-55 °C TO 85 °C (1)	STORAGE TEMPERATURE RANGE	-10 °C TO 60 °C (2)
	VOLTAGE	50 V AC	OPERATING HUMIDITY RANGE	RELATIVE HUMIDITY 95 % RH MAX. (3)
	CURRENT	0.3 A	STORAGE HUMIDITY RANGE	40 % TO 70 % (2)

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.		×	×
ELECTRIC CHARACTERISTICS				
CONTACT RESISTANCE	100 mA (DC OR 1000 Hz).	60 mΩ MAX.	×	
INSULATION RESISTANCE	100 V DC	100 MΩ MIN.	×	
VOLTAGE PROOF	150 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	×
MECHANICAL CHARACTERISTICS				
INSERTION AND WITHDRAWAL FORCE	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE: 100.8 N MAX. WITHDRAWAL FORCE: 4.2 N MIN.	×	
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 70 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE : 0.75 mm, AT 10 CYCLES FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
SHOCK	490 m/s^2, DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		×	
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 ～ 95 %, 96 h.	① CONTACT RESISTANCE: 70 mΩ MAX. ② INSULATION RESISTANCE:100 MΩ MIN.	×	
RAPID CHANGE OF TEMPERATURE	TEMPERATURE-55→+15～+35→+85→+15～+35°C TIME 30 → 2 ～ 3 → 30 → 2 ～ 3 min. UNDER 5 CYCLES.	③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
DRY HEAT	EXPOSED AT 85 °C, 96h.	① CONTACT RESISTANCE: 70 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	
COLD	EXPOSED AT - 55 °C, 96h.		×	
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	① CONTACT RESISTANCE: 70 mΩ MAX. ② NO HEAVY CORROSION.	×	
SULPHUR DIOXIDE	EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD: JIS C 0090)		×	
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING : 250 °C MAX, : 220 °C MIN, FOR 60 s	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.	×	
	2) SOLDERING IRONS : 360 °C, FOR 5 s		×	
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 240°C, FOR IMMERSION DURATION, 3 s.	A NEW UNIFORM COATING OF SOLDER SHALL OVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	×	

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⓪					

REMARK (1) TEMPERATURE RISE INCLUDED WHEN ENERGIZED.
(2) THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.
(3) NO DEW CONDENSATION IS PERMITTED.
Unless otherwise specified, refer to JIS C 5402.

APPROVED	HS. OKAWA	10. 08. 16
CHECKED	HT. YAMAGUCHI	10. 08. 16
DESIGNED	SY. KAMIGA	10. 08. 07
DRAWN	HK. SUNADORI	10. 08. 06

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

DRAWING NO. ELC4-151971-21

HRS	SPECIFICATION SHEET	PART NO.	FX10A-168P-SV1(91)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL570-0144-2-91 ⓪	1/1

FORM HD0011-2-1