

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-30°C TO + 85°C(NOTES 1)	STORAGE TEMPERATURE RANGE	-10°C TO +60°C	
	VOLTAGE	150V AC	APPLICABLE CONNECTOR	DF9#-31P-1V(22) DF9#-31P-1V(32)	
	CURRENT	0.5A	APPLICABLE CABLE	UL1571,28 AWG, OUTER DIAMETER: φ0.58	
SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
<b>CONSTRUCTION</b>					
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X	
MARKING	CONFIRMED VISUALLY.		X	X	
<b>ELECTRIC CHARACTERISTICS</b>					
CONTACT RESISTANCE MILLIVOLT LEVEL METHOD	20 mV MAX, 1 mA(DC OR 1000 Hz).	60 mΩ MAX. CONTACT RESISTANCE OF GROUND FITTING: 100 mΩ MAX.	X	—	
INSULATION RESISTANCE	100 V DC.	500 MΩ MIN.	X	—	
VOLTAGE PROOF	250 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	—	
<b>MECHANICAL CHARACTERISTICS</b>					
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE: 100 N MAX. EXTRACTION FORCE: 15 N MIN.	X	—	
MECHANICAL OPERATION	30 TIMES INSERTIONS AND EXTRACTIONS.	①CONTACT RESISTANCE: 60mΩ MAX. CONTACT RESISTANCE OF GROUND FITTING: 100 mΩ MAX. ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—	
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE0.75 mm, 10 CYCLES OF EACH 3 AXIAL DIRECTION FOR 5 min.	①NO ELECTRICAL DISCONTINUITY OF 1 μs. ②CONTACT RESISTANCE: 60 mΩ MAX. CONTACT RESISTANCE OF GROUND FITTING: 100 mΩ MAX. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—	
SHOCK	490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.	①NO ELECTRICAL DISCONTINUITY OF 1 μs. ②CONTACT RESISTANCE: 60 mΩ MAX. CONTACT RESISTANCE OF GROUND FITTING: 100 mΩ MAX. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—	
<b>ENVIRONMENTAL CHARACTERISTICS</b>					
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → 15T035 → 85→ 15T035 °C TIME 30 → 5 MAX → 30→ 5 MAX min UNDER 5 CYCLES.	①CONTACT RESISTANCE: 60 mΩ MAX. CONTACT RESISTANCE OF GROUND FITTING: 100 mΩ MAX. ②INSULATION RESISTANCE: 500 MΩ MIN ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—	
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, 90 TO 95 %, 96 h.	①CONTACT RESISTANCE: 60 mΩ MAX. CONTACT RESISTANCE OF GROUND FITTING: 100 mΩ MAX. ②INSULATION RESISTANCE: 500 MΩ MIN ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—	
REMARKS					
NOTES 1:INCLUDING THE TEMPERATURE RISE BY CURRENT. 2:EXPECT CONSTRUCTION,APPLY THESE SPECIFICATION TO PAIR DF9M-31S-1R-PA WITH DF9M-31S-1R-PB. 3:ONLY APPLY SPECIFIED CONTACT RESISTANCE OF GROUND FITTING TO MATING DF9M*-31P-1V(22) OR DF9M*-31P-1V (32).					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△					
Unless otherwise specified , refer to MIL-STD-1344.			APPROVED	MO.NAKAMURA	06.01.24
			CHECKED	TS.MIYAZAKI	06.01.24
			DESIGNED	TY.001	06.01.24
			DRAWN	HK.MURAKAMI	06.01.23
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-160590-05	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	DF9M-31S-1R (05)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL540-0231-3-05	△ 1/1