


APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-35 °C TO +85°C (NOTE1)	STORAGE TEMPERATURE RANGE	-10 °C TO +60°C (NOTE3)	
	OPERATING HUMIDITY RANGE	20% TO 80% (NOTE2)	STORAGE HUMIDITY RANGE	40% TO 70% (NOTE3)	
	VOLTAGE	50 V AC/DC	UL-C-UL RATING	VOLTAGE	29 V AC/DC
	CURRENT	AWG 28 : 2.0A AWG 30 : 1.5A AWG 32 : 1.0A AWG 34 : 0.8A		CURRENT	2.5A
	APPLICABLE CONNECTOR	DF57H-3S-1.2C(##)		OPERATING TEMPERATURE RANGE	-35 °C TO +75°C (NOTE1)

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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CONSTRUCTION

GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.		X	X

ELECTRIC CHARACTERISTICS

CONTACT RESISTANCE MILLIVOLT LEVEL METHOD	20mV MAX, 1mA (DC or 1000Hz).	10 mΩ MAX.	X	-
INSULATION RESISTANCE	100 V DC.	100 MΩ MIN.	X	-
VOLTAGE PROOF	500 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	-

MECHANICAL CHARACTERISTICS

MECHANICAL OPERATION	30 TIMES INSERTION AND EXTRACTION.	①CONTACT RESISTANCE: 20 mΩ MAX. ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
CONTACT INSERTION AND EXTRACTION FORCES	IT TAKES OUT AND INSERTS WITH A CONFORMITY CONNECTOR.	①INSERTION FORCE : 20.0N MAX. ②EXTRACTION FORCE: 0.9N MIN.	X	-
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 10 CYCLES FOR 3 DIRECTION.	①NO ELECTRICAL DISCONTINUITY OF 1 μs. ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
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 TO 95 % , 96 h. (AFTER LEAVING THE ROOM TEMPERATURE FOR 1-2h.)	①CONTACT RESISTANCE: 20 mΩ MAX. ②INSULATION RESISTANCE: 100 MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55°C→ +85°C TIME 30min→ 30min UNDER 5 CYCLES. (THE TRANSFERRING TIME OF THE TANK IS 2-3 min) (AFTER LEAVING THE ROOM TEMPERATURE FOR 1-2h.)	①CONTACT RESISTANCE: 20 mΩ MAX. ②INSULATION RESISTANCE: 100 MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	-
RESISTANCE TO SOLDERING HEAT	1) REFLOW SOLDERING «REFLOW TIME» NUMBER OF REFLOW CYCLES : 2 CYCLES MAX. DURATION ABOVE 220 °C, 60 sec. MAX. PEAK TEMPERATURE: 250°C 10 sec. MAX. «PRE-HEAT TIME» PRE-HEAT TEMPERATURE(MIN) :150 °C PRE-HEAT TEMPERATURE(MAX) :180 °C PRE-HEAT TIME(MIN) : 90 sec. PRE-HEAT TIME(MAX) : 120 sec. 2) MANUAL SOLDERING SOLDERING IRON TEMPERATURE :350±10°C, SOLDERING TIME : 3sec. NO STRENGTH ON CONTACT.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	-
SOLDERABILITY	SOLDERING TEMPERATURE : 245°C DURATION OF IMMERSION :SOLDERING, FOR 5 sec.	NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	X	-

NOTE 1: INCLUDE THE TEMPERATURE RISING BY CURRENT.
NOTE2:NO CONDENSING
NOTE3:APPLY TO THE CONDITION OF LONG TERM 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
1	DIS-H-008827	MI. SAKIMURA	TS. FUKUSHIMA	14. 07. 07

Unless otherwise specified, refer to IEC 60512.	APPROVED	KI. AKIYAMA	12. 02. 21
	CHECKED	HK. UMEHARA	12. 02. 21
	DESIGNED	TS. KUMAZAWA	12. 02. 20
	DRAWN	TS. KUMAZAWA	12. 02. 20

Note QT:Qualification Test AT:Assurance Test X:Applicable Test DRAWING NO. ELC4-343905-01

HRS	SPECIFICATION SHEET	PART NO.	DF57H-3P-1. 2V (21)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL666-0105-0-21	 1/1