APPLICABLE STANDARD		DIN VDE 0627, MIL-C-5015, TUV approved(R9351324) , UL approved(E52653)		
RATING	OPERATING TEMPERATURE RANGE	-40 °C TO +125 °C	STORAGE TEMPERATURE RANGE	-10 °C TO +60 °C
	VOLTAGE	AC 500 V , DC 500 V(POLLUTION DEGREE 2, OVER VOLTAGE CATEGORY 2 IS APPLIED.)		
		AC 250 V , DC 250 V(POLLUTION DEGREE 3, OVER VOLTAGE CATEGORY 3 IS APPLIED.)		
	CURRENT	23 A (69A) (1)	APPLICABLE CABLE	3.5mm²

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	CONTACT SHALL BE MEASURED AT DC 1 A (MIL-C-2316)	3 mΩ MAX.	X	X
	BETWEEN D-CONTACT TO SHELL BE MEASURED AT DC 1 A.	100 mΩ MAX.	X	X
INSULATION RESISTANCE	500 V DC. (MIL-STD-1344 3003)	5000 MΩ MIN.	X	X
TEMPERATURE RISE	TEMPERATURE CONSTANCY SHAL BE WITHIN 8 HOURS WHEN APPLYING CURRENT OF 23 A. (DIN VDE 0627 6.27)	TEMPERTURE RISE SHALL BE 1 K/h MAX.	X	–
VOLTAGE PROOF	2250 V AC. FOR 1 min. (MIL-STD-1344 3001)	NO FLASHOVER OR BREAKDOWN.	X	X
MECHANICAL CHARACTERISTICS				
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION AND WITHDRAWAL FORCES. LOCKING DEVICE WITH UNLOCK : 50 N MAX.	X	–
CONTACT RETENTION FORCE	APPLYING A PULL FORCE THE WIRE AFTER THE APPLICABLE CRIMPED CONTACT IS ASSEMBLED WITH THE BODY. (DIN41640)	20 N MIN.	X	–
MECHANICAL OPERATION	500 TIMES INSERTIONS AND EXTRACTIONS. (MIL-C-5015 4.6.12.2)	CONTACT RESISTANCE: 4.5 mΩ MAX.	X	–
		CONTACT NO.D - SHELL RESISTANCE: 100 mΩ MAX.	X	–
VIBRATION	FREQUENCY: 10 TO 500 Hz, SINGLE AMPLITUDE 0.75 mm, 98 m/s2 AT 3h, FOR 3 DIRECTIONS. (MIL-STD-1344 2005, CONDITION Ⅱ)	①NO ELECTRICAL DISCONTINUITY OF 10 μs. ②NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	–
SHOCK	490 m/s² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. (MIL-STD 1344 2004, CONDITION E)	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	–
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 71 ℃, 95 %, 336 h. (MIL-C-5015 4.6.10)	① INSULATION RESISTANCE: 50 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 500 MΩ MIN (AT DRY). ③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS.	X	–
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → R/T(2) → +125 → R/T ℃ TIME 30 → 10 TO 15 → 30 → 10 TO 15 min UNDER 5 CYCLES. (MIL-C-5015 4.6.4)	① INSULATION RESISTANCE: 5000 MΩ MIN. ② NO DAMAGE. CRACK AND LOOSENESS OF PARTS.	X	–
CORROSION SULPHUR DIOXIDE	EXPOSED IN SO2 : 670ppm 40 ℃ FOR 8h. EXPOSED IN SO2 : 670ppm 18 TO 28 ℃ FOR 16h. (DIN 50018)	NO HEAVY CORROSION.	X	–
SEALING	EXPOSED AT A DEPTH OF 1 m FOR 0.5 h. (JIS B 6015)	NO WATER PENETRATION INSIDE CONNECTOR.	X	–

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
A					

REMARK

NOTE(1) 23A(69A) : RATED CURRENT "23A" SHOWS MAXIMUM CURRENT PER CONTACT TOTAL CURRENT. FIGURE IN () SHOWS THE TOTAL CURRENT CAPACITY OF A CONNECTOR.

(2) R/T : ROOM TEMPERATURE

Unless otherwise specified, refer to JIS C 5402.

APPROVED	EJ.KUNII	13.01.21
CHECKED	EJ.KUNII	13.01.21
DESIGNED	HY.KISHI	13.01.21
DRAWN	HY.KISHI	13.01.21

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

DRAWING NO. ELC4-113100-73

HRS

SPECIFICATION SHEET — PART NO. H/MS3102A18-10P-D-T1(73)

HIROSE ELECTRIC CO., LTD. — CODE NO. CL120-0259-5-73 A 1/2

FORM HD0011-2-1

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
ENVIRONMENTAL CHARACTERISTICS				
AIRTIGHTNESS	APPLY AIR PRESSURE 40 kPa FOR 30 sec TO INSIDE CONNECTOR.	NO AIR BUBBLES FROM CONNECTOR INTERFACE.	X	X
RESISTANCE TO DUST	REFER TO IEC 529.7.6	NO DUST SEEPAGE INSIDE CONNECTOR.	X	–
OIL RESISTING	DROP CUTTING OIL FOR 48 HOURS AT THE RATE OF 0.5 LITER EVERY HOUR. (JIS B 6015)	NO OIL SEEPAGE INSIDE CONNECTOR.	X	–
RESISTANCE TO SOLDERING HEAT	PLACE SOLDERING IRON (IRON TIP TEMPERATURE +380± 10 ℃) AND SOLDER TO SOLDERING POT AREA FOR 10± 1 s.(IEC 68-2-20)	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	–
SOLDERABILTY	PLACE SOLDER IRON (IRON TIP TEMPERATURE +350± 10 ℃) AND SOLDER TO SOLDERING POT AREA FOR 10 ± 1 s. (IEC 68-2-20)	A SOLDERING SIDE IS TO BE WET WITH SOLDER. AND NO SMALL LUMP OF THE SLDER.	X	–