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 In case that the application demands a high level of reliability, such as automotive,  
 please contact a company representative for further information.


APPLICABLE STANDARD		VDE 0627, 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			
	CURRENT	46 A <sup>(1)</sup>	APPLICABLE CABLE		
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)		1 mΩ MAX.	X	X
	BETWEEN D-CONTACT TO SHELL SHALL BE MEASURED AT DC 1A.		100 mΩ MAX.	X	X
INSULATION RESISTANCE	500 V DC. (MIL-STD-1344 3003)		5000 MΩ MIN.	X	X
TEMPERATURE RISE	TEMPERATURE CONSTANCY SHALL BE WITHIN 8 HOURS WHEN APPLYING CURRENT OF 46 A. (DIN VDE 0627 6.27)		TEMPERATURE 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					
CONTACT INSERTION AND WITHDRAWAL FORCES	BY STEEL GAUGE.		INSERTION AND WITHDRAWAL FORCES : — N MIN.	-	-
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.		INSERTION AND WITHDRAWAL FORCES LOCKING DEVICE WITH UNLOCK : 88 N MAX. LOCKING DEVICE WITH LOOK : — N MAX.	X	-
CONTACT RETENTION FORCE	APPLY 20 N PULL FORCE FROM TERMINATION SIDE. (DIN41640)		NO CONTACT DISPLACEMENT.	X	-
MECHANICAL OPERATION	500 TIMES INSERTIONS AND EXTRACTIONS. (MIL-C-5015 4, 6, 12, 2)		CONTACT RESISTANCE: 1.5 mΩ MAX.	X	-
			D-CONTACT-SHELL RESISTANCE: 100 mΩ MAX.	X	-
VIBRATION	FREQUENCY: 10 TO 500 Hz, SINGLE AMPLITUDE 0.75 mm, 98 m/s <sup>2</sup> AT 3 h, FOR 3 DIRECTIONS. (MIL-STD-1344 2005, CONDITION II)		① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-
SHOCK	490 m/s <sup>2</sup> DURATIONS 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°C, 95%, 336h. (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. ④ NO HEAVY CORROSION.	X	-
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → R/T <sup>(2)</sup> → +125 → R/T °C 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 SO <sub>2</sub> : 670 ppm 40°C FOR 8h. EXPOSED IN SO <sub>2</sub> : 670 ppm 18 TO 28°C FOR 16h. (DIN 50018)		NO HEAVY CORROSION.	X	-
SEALING	EXPOSED AT A DEPTH OF 1 m FOR 0.5 h.		NO WATER PENETRATION INSIDE CONNECTOR.	X	-
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	0				
REMARK			APPROVED	SU. OBARA	10.02.16
NOTE(1)46A RATED CURRENT IS THE MAXIMUM CURRENT PER CONTACT. BUT THE CURRENT CAPACITY OF WHOLE IS CONNECTOR 138 A MAX.			CHECKED	HY. KISHI	10.02.16
NOTE(2) R/T : ROOM TEMPERATURE			DESIGNED	TH. KAMEYA	10.02.16
Unless otherwise specified, refer to JIS C 5402.			DRAWN	YS. SAKODA	10.02.13
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-110225-73
HRS		SPECIFICATION SHEET	PART NO.	H/MS3102A22-22P-D-T (73)	



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## SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
<b>ENVIRONMENTAL CHARACTERISTICS</b>				
AIRTIGHTNESS	APPLY AIR PRESSURE 40 kPa FOR 30 SEC TO INSIDE CONNECTOR.	NO AIR BUBBLES FROM CONNECTOR INTERFACE.	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/EVERY HOUR. (JIS B 6015)	NO OIL SEEPAGE INSIDE CONNECTOR.	X	-
RESISTANCE TO SOLDERING HEAT.	SOLDERED TEMPERATURE, $+380\pm 10^{\circ}\text{C}$ , FOR SOLDERING DURATION, $10\pm 1$ s. (IEC 68-2-20)	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	-
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, $+350^{\circ}\text{C}\pm 10^{\circ}\text{C}$ FOR SOLDERING DURATION, $10\pm 1$ s. (IEC 68-2-20)	WETTING ON SOLDER SURFACE. NO SOLDER CLUSTER.	X	-

COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
0				
REMARK			APPROVED	SU. OBARA
			CHECKED	HY. KISHI
			DESIGNED	TH. KAMEYA
			DRAWN	YS. SAKODA
Unless otherwise specified, refer to JIS C 5402.				
Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC4-110225-73	
<b>HRS</b>	SPECIFICATION SHEET	PART NO.	H/MS3102A22-22P-D-T (73)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL120-0227-9-73	 2/2

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