

APPLICABLE STANDARD		TÜV approved(R50204909), UL approved(E52653)			
Rating	Operating Temperature Range	-40°C to +125°C ⁽⁴⁾	Storage Temperature Range	-10°C to +60°C	
	Voltage	AC, DC 500 V(UL,TÜV) AC, DC 1000V	—	—	
	Current	30A(EM-PC-113(**))	Applicable Cable	—	
		50A(EM-PC-133(**)) (EM-PC-143(**) UL,TÜV)			
70A(EM-PC-143(**))					
SPECIFICATIONS					
ITEM		TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION					
General Examination		Examined visually and with a measuring instrument.	According to the drawing.	X	X
Marking		Confirmed visually.		X	X
ELECTRICAL CHARACTERISTICS					
Contact Resistance		Measured at DC 1A.	1 mΩ MAX.	—	—
Insulation Resistance		Measured at 500 V DC.	5000 MΩ MIN.	X	X
Voltage Proof		4260 V AC applied for 1 min.	No flashover or breakdown.	X	X
MECHANICAL CHARACTERISTICS					
Contact Insertion and Extraction Forces		Measured with a φ___ steel gauge.	Insertion and extraction forces: — N MIN.	—	—
Mating and Unmating Forces		Measured with an applicable connector	Mating and unmating forces: 100 N MAX.	X	—
Contact Retention Force		Subjected to a 50N force from the wiring side.	No movement of contact.	X	—
Mechanical Operation		Mated and unmated 100 times.	No damage, cracks or looseness of parts.	X	—
Vibration		Frequency: 10 Hz to 55 to 10 Hz every cycle. Single amplitude: 0.75 mm, Acceleration: 98 m/s ² Performed over 10 cycles in each of three mutually perpendicular directions.	1) No electrical discontinuity of more than 10 μs. 2) No damage, cracks or looseness of parts.	X	—
Shock		Acceleration: 490 m/s ² , Half sine wave pulses of 11 ms. Performed 3 times in each of three mutually perpendicular directions.	1) No electrical discontinuity of more than 10 μs. 2) No damage, cracks or looseness of parts.	X	—
ENVIRONMENTAL CHARACTERISTICS					
Rapid Change of Temperature		Temperature: -55 → R/T ⁽¹⁾ → +125 → R/T °C Time: 30 → 2 to 3 → 30 → 2 to 3 min for 5 cycles.	1) Insulation resistance: 500 MΩ MIN. 2) No damage, cracks or looseness of parts.	X	—
Damp Heat, Steady State		Subjected to a temperature of +40°C, at a humidity of 90 to 95% for 96 hours.	1) Insulation resistance: 50 MΩ MIN. (At high humidity) 2) Insulation resistance: 500 MΩ MIN. (When dry) 3) No damage, cracks or looseness of parts.	X	—
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
△					
NOTES (1) R/T : Room Temperature. (2) The above specifications show the values in assembled condition with applicable crimp contacts.(EM-PC-1*3(**)) (3) RoHS compliant. (4) Including temperature rise due to current carrying.			APPROVED	TP. KOMATSU	20201222
			CHECKED	TP. KOMATSU	20201222
			DESIGNED	TY. SUZUKI	20201222
			DRAWN	TY. SUZUKI	20201222
Unless otherwise specified, refer to IEC 60512(JIS C 5402).					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-117594-81-00
HRS	SPECIFICATION SHEET		PART NO.	EM35MRA-4PC (81)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0138-0028-0-81	△ 1/1