



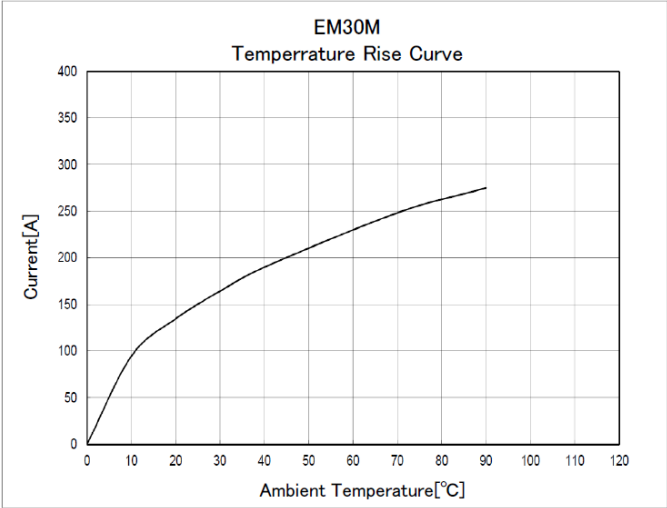
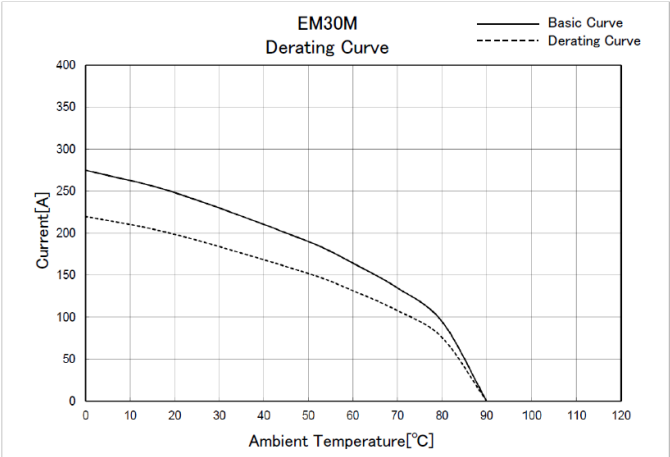


APPLICABLE STANDARD  UL approved (E481344)									
RATING	OPERATING TEMPERATURE RANGE		-20 °C TO +90 °C (Including temperature rise due to conduction)		STORAGE TEMPERATURE RANGE		-10 °C TO +60 °C		
	VOLTAGE		AC, DC 1000V						
	CURRENT		175 A (NOTE5)		APPLICABLE CABLE		42.42 TO 60.57 mm <sup>2</sup> AWG 1		
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		MEASURED AT THE CONTACT AT DC 1A.			0.6mΩ MAX.			X	X
INSULATION RESISTANCE		MEASURED AT DC 500V.			1000MΩ MIN.			X	—
VOLTAGE PROOF		AC 2200V APPLIED FOR 1min.			NO FLASHOVER OR BREAKDOWN.			X	—
MECHANICAL CHARACTERISTICS									
CONNECTOR INSERTION AND WITHDRAWAL FORCES		MEASURED WITH AN APPLICABLE CONNECTOR WITHOUT A LOCKING DEVICE.			INSERTION AND WITHDRAWAL FORCES: 100N MAX.			X	—
TERMINAL RETENTION FORCE		280N APPLIED AT THE CONNECTION			NO DAMAGE			X	—
MECHANICAL OPERATION		INSERTED AND EXTRACTED 50 TIMES.			1) NO FUNCTION IMPAIRING DAMAGE, CRACKS, OR LOOSENESS IN THE PARTS. 2) CONTACT RESISTANCE: 0.8 mΩ MAX.			X	—
VIBRATION		FREQUENCY RANGE: 10 TO 500Hz/CYCLE, SINGLE AMPLITUDE OF 0.75mm, FOR 3 HOURS IN 3 AXIAL DIRECTIONS (MIL-STD-1344 method 2005, condition 2).			1) NO ELECTRICAL DISCONUITY OF 10μs. 2) NO DAMAGE, CRACKS, OR LOOSENESS IN THE PARTS.			X	—
SHOCK		IN 6 AXIAL DIRECTIONS AT AN ACCELERATION OF 490 m/s <sup>2</sup> , A PULSE DURATION OF 11ms AND PERFORMED 3 TIMES.			1) NO ELECTRICAL DISCONUITY OF 10μs. 2) NO DAMAGE, CRACKS, OR LOOSENESS IN THE PARTS.			X	—
ENVIRONMENTAL CHARACTERISTICS									
DAMP HEAT (STEADY STATE)		TEMPERATURE: 40 °C, HUMIDITY 90 TO 95%, LEFT FOR 96 HOURS.			1) INSULATION RESISTANCE: 10MΩ MIN (WHEN WET). 2) INSULATION RESISTANCE: 100MΩ MIN (WHEN DRY). 3) NO DAMAGE, CRACKS, OR LOOSENESS IN THE PARTS.			X	—
TEMPERATURE CYCLE		TEMPERATURE : -40 °C → R/T <sup>(3)</sup> → +105 °C → R/T TIME : 30 → 2 TO 3 → 30 → 2 TO 3 min TESTED OVER 5 CYCLES.			1) INSULATION RESISTANCE: 1000MΩ MIN. 2) NO DAMAGE, CRACKS, OR LOOSENESS IN THE PARTS.			X	—
RESISTANCE TO HEAT		EXPOSED AT A TEMPERATURE OF +105 °C FOR 96 HOURS.			NO DAMAGE, CRACKS, OR LOOSENESS IN THE PARTS.			X	—
RESISTANCE TO COLD		EXPOSED AT A TEMPERATURE OF -40 °C FOR 96 HOURS.			NO DAMAGE, CRACKS, OR LOOSENESS IN THE PARTS.			X	—
SEALING <sup>(2)</sup>		CONNECTED TO AN APPLICABLE CONTACT AT A WATER DEPTH OF 1m FOR 30 MINUTES.			NO WATER PENETRATION INSIDE THE CONNECTOR.			X	—
AIR TIGHTNESS <sup>(2)</sup>		CONNECTED TO AN APPLICABLE CONTACT, 17.6kPa OF AIR PRESSURE WAS APPLIED FOR 30 SECONDS.			NO AIR BUBBLES EMITTED FROM THE CONNECTOR.			X	—
	COUNT	DESCRIPTION OF REVISIONS			DESIGNED		CHECKED		DATE
	1	DIS-C-00013440			TY. TAKAHASHI		EJ. KUNII		20221130
<b>REMARKS</b>  Notes: (1) Above specifications show the values in assembled condition with applicable crimp contacts.  (2) Sealing and air tightness were tested under mated condition with an applicable connector, and SANKEI CO.,LTD KEIGLAND E2KD 2428 installed.  (3) R/T = room temperature  For unspecified specifications, refer to IEC 60512 (JIS C 5402).					APPROVED	TP. KOMATSU	20220520		
					CHECKED	EJ. KUNII	20220518		
					DESIGNED	HR. SATO	20220517		
					DRAWN	HR. SATO	20220516		
					Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	
	SPECIFICATION SHEET			PART NO.		EM30M-WBP-1PCA-K (81)			
	HIROSE ELECTRIC CO., LTD.			CODE NO.		CL0138-0074-0-81			1/2

SPECIFICATIONS



- Notes:
- 4) The derating curve is derived from the basic curve multiplied by the derating factor of 0.8.
  - 5) The value of rated current varies with the ambient temperature. It is recommended to use the product within the derating curve zone.  
When using a UL approved product, please use the product within the specified range as well as the derating curve area.
  - 6) The measurement method of the derating curve is shown below.
    - Test specimen: This product, unused prior to testing.
    - Test cable conductor cross sectional area: 50mm<sup>2</sup>
    - Test condition: Power supplied while the specimen is in a stationary state and then measured.

Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC-119508-81-00	
HRS	SPECIFICATION SHEET		PART NO.	EM30M-WBP-1PCA-K (81)	
	HIROSE ELECTRIC CO., LTD.		CODE NO	CL0138-0074-0-81	2/2