

**Thermistor overload relay for machine protection, 1N/O+1N/C, 24-240VAC/  
DC, without reclosing lockout**



Powering Business Worldwide™

**Part no.** EMT6-K  
269470  
**EL Number**  
(Norway) 4110423

<b>General specifications</b>		
Product name		Eaton Moeller® series EMT6 Thermistor overload relay
Part no.		EMT6-K
EAN		4015082694708
Product Length/Depth		103 millimetre
Product height		83 millimetre
Product width		23 millimetre
Product weight		0.13 kilogram
Certifications		UL File No.: E29184 UL CSA IEC/EN 60947 EN 55011 UL Category Control No.: NKCR CSA File No.: 12528 CE CSA-C22.2 No. 14 IEC/EN 60947-8 CSA Class No.: 3211-03 IEC/EN 61000-4-3 UL 508 IEC/EN 61000-4-2 VDE 0660
Product Tradename		EMT6
Product Type		Thermistor overload relay
Product Sub Type		None
<b>Features &amp; Functions</b>		
Electric connection type		Screw connection
Functions		Notifications of mains and faults via LED display Short-circuit in the sensor cable Test function via separate button
Temperature measuring range - min		0 °C
Temperature measuring range - max		0 °C
<b>General information</b>		
Degree of protection		IP20
Mounting position		As required
Overvoltage category		III
Pollution degree		3
Product category		EMT6 thermistor overload relay for machine protection
Protection		Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
Rated impulse withstand voltage (Uimp)		4000 V AC 6000 V AC
Safe isolation		250 V AC, Between the contacts, According to EN 61140 250 V AC, Between the contacts and power supply, According to EN 61140
Shock resistance		10 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
Voltage type		AC/DC
<b>Climatic environmental conditions</b>		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		60 °C
Ambient operating temperature (enclosed) - min		25 °C
Ambient operating temperature (enclosed) - max		45 °C
Ambient storage temperature - min		45 °C
Ambient storage temperature - max		85 °C
Climatic proofing		Damp heat, cyclic, to IEC 60068-2-30

		Damp heat, constant, to IEC 60068-2-78
<b>Electro magnetic compatibility</b>		
Air discharge		8 kV
Burst impulse		2 kV, Supply cable 1 kV, Signal cable According to IEC/EN 61000-4-4
Contact discharge		6 kV, Electrostatic discharge (ESD)
Electromagnetic fields		3 V/m at 1.4 - 2 GHz (according to IEC EN 61000-4-3) 1 V/m at 2.0 - 2.7 GHz (according to IEC EN 61000-4-3) 10 V/m at 80 - 1000 MHz (according to IEC EN 61000-4-3)
Immunity to line-conducted interference		10 V (according to IEC/EN 61000-4-6)
Radio interference class		Class B (EN 55011)
Surge rating		4 kV, asymmetrical, power pulses (Surge), EMC According to IEC/EN 61000-4-5, power pulses (Surge), EMC 2 kV, symmetrical, power pulses (Surge), EMC
<b>Terminal capacities</b>		
Terminal capacity		1 x (0.5 - 2.5) mm <sup>2</sup> , solid 20 - 14 AWG, solid or stranded 2 x (0.5 - 1.5) mm <sup>2</sup> , solid 1 x (0.5 - 2.5) mm <sup>2</sup> , flexible with ferrule 2 x (0.5 - 1.5) mm <sup>2</sup> , flexible with ferrule
Screw size		M3.5, Terminal screw
Screwdriver size		1 x 6 mm, Terminal screw, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver
Tightening torque		1.2 Nm, Screw terminals
<b>Electrical rating</b>		
Conventional thermal current $I_{th}$ of auxiliary contacts (1-pole, open)		6 A
Pick-up voltage		0.85 - 1.1 V x U#
Power consumption		2 W at DC 3.5 VA at AC
Rated control supply voltage (Us) at AC, 50 Hz - min		24 V
Rated control supply voltage (Us) at AC, 50 Hz - max		240 V
Rated control supply voltage (Us) at AC, 60 Hz - min		24 V
Rated control supply voltage (Us) at AC, 60 Hz - max		240 V
Rated control supply voltage (Us) at DC - min		24 V
Rated control supply voltage (Us) at DC - max		240 V
Rated insulation voltage (Ui)		400 V
Rated operational current (Ie)		3 A at AC-14, 400 V (NC) 3 A at AC-14, 380 V 400 V 415 V (NO) 1 A at AC-15, 300 V (NO) 3 A at AC-15, 220 V 230 V 240 V (NO) 1 A at AC-15, 380 V 400 V 415 V (NO) 3 A at AC-14, 300 V (NO) 1 A at AC-15, 300 V (NC) 3 A at AC-14, 300 V (NC) 3 A at AC-14, 380 V 400 V 415 V (NC) 1 A at AC-15, 380 V 400 V 415 V (NC) 3 A at AC-15, 220 V 230 V 240 V (NC) 3 A at AC-15, 220 V 230 V 240 V
Rated operational voltage (Ue) - max		240 V
Reset resistance		1600 Ω
Short-circuit protection rating		Max. 6 A gG/gL, Fuse, Contacts
Trip resistance		3600 Ω
Voltage rating - max		600 V
<b>Contacts</b>		
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		1
Number of contacts (normally open contacts)		1
<b>Design verification</b>		
Equipment heat dissipation, current-dependent P <sub>vid</sub>		0 W
Heat dissipation capacity P <sub>diss</sub>		0 W
Heat dissipation per pole, current-dependent P <sub>vid</sub>		0 W
Rated operational current for specified heat dissipation (I <sub>n</sub> )		0 A
Static heat dissipation, non-current-dependent P <sub>vs</sub>		0.8 W

## Technical data ETIM 8.0

Relays (EG000019) / Temperature monitoring relay (EC001446)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Temperature monitoring equipment (ecI@ss10.0.1-27-37-18-10 [AKF104014])			
Type of electric connection			Screw connection
Rated control supply voltage Us at AC 50HZ		V	24 - 240
Rated control supply voltage Us at AC 60HZ		V	24 - 240
Rated control supply voltage Us at DC		V	24 - 240
Voltage type for actuating			AC/DC
With detachable clamps			No
Number of measuring circuits			1
Error registration possible			No
External reset possible			No
Number of contacts as normally closed contact			1
Number of contacts as normally open contact			1
Number of contacts as change-over contact			0
Temperature measuring range		°C	0 - 0
Resistance measuring range		Ohm	750 - 12000
Width		mm	23
Height		mm	83
Depth		mm	103