

**Thermistor overload relay for machine protection, multi-function,
24-240V50/60HZ/DC**

Part no. EMT6-DBK

066168

EL Number

4131788

(Norway)

General specifications	
Product name	Eaton Moeller® series EMT6 Thermistor overload relay
Part no.	EMT6-DBK
EAN	4015080661689
Product Length/Depth	103 millimetre
Product height	83 millimetre
Product width	23 millimetre
Product weight	0.134 kilogram
Certifications	CE CSA-C22.2 No. 14 IEC/EN 61000-4-3 UL UL 508 VDE 0660 IEC/EN 60947-8 EN 55011 CSA CSA Class No.: 3211-03 UL Category Control No.: NKCR CSA File No.: 12528 IEC/EN 61000-4-2 UL File No.: E29184 IEC/EN 60947
Product Tradename	EMT6
Product Type	Thermistor overload relay
Product Sub Type	None
Features & Functions	
Electric connection type	Screw connection
Functions	Manual reset Notifications of mains and faults via LED display Test function via separate button External reset possible Manual or remote resetting Trip with short-circuit in the sensor cable Zero-voltage safe Error registration possible Short-circuit recognition and zero-voltage safety can be deactivated
Temperature measuring range - min	0 °C
Temperature measuring range - max	0 °C
General information	
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)	6000 V AC 4000 V AC
Safe isolation	250 V AC, Between the contacts and power supply, According to EN 61140 250 V AC, Between the contacts, 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
Climatic environmental conditions	
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, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Electro magnetic compatibility		
Air discharge		8 kV
Burst impulse		According to IEC/EN 61000-4-4 1 kV, Signal cable 2 kV, Supply cable
Contact discharge		6 kV
Electromagnetic fields		10 V/m at 80 - 1000 MHz (according to IEC EN 61000-4-3) 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)
Immunity to line-conducted interference		10 V (according to IEC/EN 61000-4-6)
Radio interference class		Class B (EN 55011)
Surge rating		According to IEC/EN 61000-4-5, power pulses (Surge), EMC 2 kV, symmetrical, power pulses (Surge), EMC 4 kV, asymmetrical, power pulses (Surge), EMC
Terminal capacities		
Terminal capacity		1 x (0.5 - 2.5) mm ² , solid 1 x (0.5 - 2.5) mm ² , flexible with ferrule 20 - 14 AWG, solid or stranded 2 x (0.5 - 1.5) mm ² , solid 2 x (0.5 - 1.5) mm ² , flexible with ferrule
Screw size		M3.5, Terminal screw
Screwdriver size		2, Terminal screw, Pozidriv screwdriver 1 x 6 mm, Terminal screw, Standard screwdriver
Tightening torque		1.2 Nm, Screw terminals
Electrical rating		
Conventional thermal current Ith 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)		240 V
Rated operational current (Ie)		3 A at AC-14, 300 V (NC) 3 A at AC-14, 380 V 400 V 415 V (NC) 3 A at AC-15, 220 V 230 V 240 V 3 A at AC-14, 400 V (NC) 3 A at AC-15, 220 V 230 V 240 V (NC) 3 A at AC-14, 380 V 400 V 415 V (NO) 1 A at AC-15, 300 V (NO) 1 A at AC-15, 380 V 400 V 415 V (NO) 3 A at AC-15, 220 V 230 V 240 V (NO) 1 A at AC-15, 300 V (NC) 3 A at AC-14, 300 V (NO) 1 A at AC-15, 380 V 400 V 415 V (NC)
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
Contacts		
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		1
Number of contacts (normally open contacts)		1
Design verification		
Equipment heat dissipation, current-dependent Pvid		0 W

Heat dissipation capacity P _{diss}			0 W
Heat dissipation per pole, current-dependent P _{vid}			0 W
Rated operational current for specified heat dissipation (I _n)			0 A
Static heat dissipation, non-current-dependent P _{vs}			0.8 W

Technical data ETIM 9.0

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 (ecl@ss13-27-37-18-10 [AKF104019])			
Type of electric connection			Screw connection
With detachable clamps			No
Voltage type (supply voltage)			AC/DC
Supply voltage AC 50 Hz		V	24 - 240
Supply voltage AC 60 Hz		V	24 - 240
Supply voltage DC		V	24 - 240
Number of measuring circuits			1
Error registration possible			Yes
External reset possible			Yes
Temperature measuring range		°C	0 - 0
Resistance measuring range		Ohm	750 - 12000
Connection type auxiliary circuit			Screw connection
Number of contacts as normally closed contact			1
Number of contacts as normally open contact			1
Number of contacts as change-over contact			0
Voltage type (operating voltage)			AC/DC
Operating voltage AC 50 Hz		V	24 - 240
Operating voltage AC 60 Hz		V	24 - 240
Operating voltage DC		V	24 - 240
Rated switch current		A	6
Width		mm	23
Height		mm	83
Depth		mm	103