



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

Part no. EMT6-DB
066167
EL Number 4110420
(Norway)

General specifications		
Product name		Eaton Moeller® series EMT6 Thermistor overload relay
Part no.		EMT6-DB
EAN		4015080661672
Product Length/Depth		103 millimetre
Product height		83 millimetre
Product width		23 millimetre
Product weight		0.132 kilogram
Certifications		IEC/EN 61000-4-2 UL Category Control No.: NKCR UL 508 CSA Class No.: 3211-03 UL File No.: E29184 UL CSA VDE 0660 CE IEC/EN 60947-8 CSA File No.: 12528 IEC/EN 60947 EN 55011 CSA-C22.2 No. 14 IEC/EN 61000-4-3
Product Tradename		EMT6
Product Type		Thermistor overload relay
Product Sub Type		None
Features & Functions		
Electric connection type		Screw connection
Functions		Manual reset External reset possible Test function via separate button Notifications of mains and faults via LED display Manual or remote resetting
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)		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
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 2 kV, Supply cable 1 kV, Signal cable
Contact discharge		6 kV
Electromagnetic fields		1 V/m at 2.0 - 2.7 GHz (according to IEC EN 61000-4-3) 3 V/m at 1.4 - 2 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 2 kV, symmetrical, power pulses (Surge), EMC According to IEC/EN 61000-4-5, power pulses (Surge), EMC
Terminal capacities		
Terminal capacity		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 1 x (0.5 - 2.5) mm ² , flexible with ferrule 1 x (0.5 - 2.5) mm ² , solid
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 I _{th} of auxiliary contacts (1-pole, open)		6 A
Pick-up voltage		0.85 - 1.1 V x U _#
Power consumption		3.5 VA at AC 2 W at DC
Rated control supply voltage (U _s) at AC, 50 Hz - min		24 V
Rated control supply voltage (U _s) at AC, 50 Hz - max		240 V
Rated control supply voltage (U _s) at AC, 60 Hz - min		24 V
Rated control supply voltage (U _s) at AC, 60 Hz - max		240 V
Rated control supply voltage (U _s) at DC - min		24 V
Rated control supply voltage (U _s) at DC - max		240 V
Rated insulation voltage (U _i)		400 V
Rated operational current (I _e)		1 A at AC-15, 380 V 400 V 415 V (NC) 1 A at AC-15, 300 V (NO) 3 A at AC-14, 380 V 400 V 415 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-15, 220 V 230 V 240 V 3 A at AC-15, 220 V 230 V 240 V (NC) 3 A at AC-15, 220 V 230 V 240 V (NO) 3 A at AC-14, 380 V 400 V 415 V (NC) 3 A at AC-14, 400 V (NC)
Rated operational voltage (U _e) - 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 P _{vid}		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 (ec1@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			No
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