DATASHEET - EMT6-DBK

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

Powering Business Worldwide

Part no.	**EMT6-DBK**
	066168
EL Number (Norway)	**4131788**

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 O
Short-circuit protection rating	Max. 6 A gG/gL, Fuse, Contacts
Trip resistance	3600 O
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 Pdiss			0 W
Heat dissipation per pole, current-dependent Pvid			0 W
Rated operational current for specified heat dissipation (In)			0 A
Static heat dissipation, non-current-dependent Pvs			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 (ecl@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			Yes
External reset possible			Yes
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