Thermistor overload relay for machine protection, 1N/O+1N/C, 24-240VAC/ DC, with reclosing lockout



Part no. EMT6-KDB

269471

EL Number

4110424

(Norway)

(Notway)	
General specifications	
Product name	Eaton Moeller® series EMT6 Thermistor overload relay
Part no.	EMT6-KDB
EAN	4015082694715
Product Length/Depth	103 millimetre
Product height	83 millimetre
Product width	23 millimetre
Product weight	0.132 kilogram
Certifications	CSA IEC/EN 61000-4-2 CSA File No.: 12528 CSA-C22.2 No. 14 IEC/EN 60947-8 IEC/EN 60947 CE UL File No.: E29184 CSA Class No.: 3211-03 UL Category Control No.: NKCR VDE 0660 UL UL 508 EN 55011 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 Notifications of mains and faults via LED display Short-circuit in the sensor cable Test function via separate button External reset possible 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)	6000 V AC 4000 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
Climatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	0°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
Electro magnetic compatibility	
Air discharge	8 kV
Burst impulse	1 kV, Signal cable 2 kV, Supply 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	2 kV, symmetrical, power pulses (Surge), EMC According to IEC/EN 61000-4-5, power pulses (Surge), EMC 4 kV, asymmetrical, power pulses (Surge), EMC
Terminal capacities	
Terminal capacity Screw size	1 x (0.5 - 2.5) mm², flexible with ferrule 1 x (0.5 - 2.5) mm², solid 2 x (0.5 - 1.5) mm², flexible with ferrule 20 - 14 AWG, solid or stranded 2 x (0.5 - 1.5) mm², solid 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)	400 V
Rated operational current (le)	3 A at AC-14, 380 V 400 V 415 V (NC) 1 A at AC-15, 300 V (NC) 3 A at AC-14, 400 V (NC) 3 A at AC-14, 300 V (NO) 1 A at AC-15, 300 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 3 A at AC-14, 300 V (NC) 3 A at AC-14, 380 V 400 V 415 V (NO) 3 A at AC-15, 220 V 230 V 240 V (NO) 1 A at AC-15, 320 V 230 V 240 V (NO) 3 A at AC-15, 220 V 230 V 240 V (NO) 1 A at AC-15, 220 V 230 V 240 V (NC) 3 A at AC-15, 220 V 230 V 240 V (NC)
Rated operational voltage (Ue) - max	240 V
Reset resistance	1600 0
Short-circuit protection rating	Max. 6 A gG/gL, Fuse, Contacts
Trip resistance	3600 0
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 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])

With detachable clamps No Voltage type (supply voltage) 4 Z/DC Supply voltage AC 50 Hz V 24 - 240 Supply voltage DC V 24 - 240 Number of measuring circuits I 1 Error registration possible No Yes External reset possible C 0 - 0 Temperature measuring range °C 0 - 0 Resistance measuring range Ohm 750 - 12000 Connection type auxiliary circuit I 1 Number of contacts as normally closed contact I 1 Number of contacts as change-over contact I 1 Voltage type (operating voltage) V 24 - 240 Operating voltage AC 50 Hz V 24 - 240 Operating voltage AC 50 Hz V 24 - 240 Operating voltage AC 50 Hz V 24 - 240 Operating voltage AC 50 Hz V 24 - 240 Operating voltage AC 50 Hz V 24 - 240 Operating voltage AC 50 Hz V 24 - 240 Operating volt	(eci@ss13-27-37-18-10 [AKF104019])		
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Supply voltage AC 50 Hz V 24 - 240 Supply voltage DC V 24 - 240 Number of measuring circuits V 24 - 240 Error registration possible No External reset possible Ves Ves Temperature measuring range °C 0 - 0 Resistance measuring range Om 750 - 12000 Connection type auxiliary circuit External reset possible 2 crew connection Number of contacts as normally closed contact F 1 crew connection Number of contacts as normally open contact 1 1 crew connection Voltage type (operating voltage) AC/DC Crew connection Operating voltage AC 50 Hz V 2 - 240 Operating voltage AC 50 Hz V 2 - 240 Operating voltage DC V 2 - 240 Rated switch current A 6 Width M 6 Width M 3 Height M 3	With detachable clamps		No
Supply voltage AC 60 Hz V 24 - 240 Supply voltage DC V 24 - 240 Number of measuring circuits I 1 Error registration possible No Ves External reset possible Vo 20 - 0 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 1 Number of contacts as normally open contact 1 1 Number of contacts as change-over contact 0 AC/DC Voltage type (operating voltage) V 24 - 240 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 3	Voltage type (supply voltage)		AC/DC
Supply voltage DC V 24 - 240 Number of measuring circuits 1 Error registration possible No External reset possible Yes External reset possible 0 - 0 External reset possible Scroy Resistance measuring range 0 - 0 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) V Operating voltage AC 50 Hz V Operating voltage AC 60 Hz V Operating voltage DC V Rated switch current A Height mm Beight mm 1 3 1 4 2 4 3 4 4 4 4 4 4 4 4 4 4 4	Supply voltage AC 50 Hz	V	24 - 240
Number of measuring circuits Error registration possible External reset possible External reset possible External reset possible Temperature measuring range Connection type auxiliary circuit Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as change-over contact Voltage type (operating voltage) Operating voltage AC 50 Hz Operating voltage AC 60 Hz Operating voltage DC Rated switch current Height Height I O O O O O O O O O O O O	Supply voltage AC 60 Hz	V	24 - 240
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External reset possible Temperature measuring range Connection type auxiliary circuit Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as change-over contact Voltage type (operating voltage) Voperating voltage AC 50 Hz Operating voltage AC 60 Hz Operating voltage DC Rated switch current Width Height Height	Number of measuring circuits		1
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Resistance measuring range Connection type auxiliary circuit Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as normally open contact Number of contacts as change-over contact Voltage type (operating voltage) Voltage type (operating voltage) Vy 24-240 Operating voltage AC 50 Hz Operating voltage AC 60 Hz Operating voltage DC Rated switch current Width Height Number of contacts as normally open contact Voltage type (operating voltage) Vy 24-240 Vy 24-2	External reset possible		Yes
Connection type auxiliary circuit Number of contacts as normally closed contact Number of contacts as normally open contact Number of contacts as change-over contact Number of contacts as change-over contact Voltage type (operating voltage) Operating voltage AC 50 Hz Operating voltage AC 60 Hz Operating voltage DC Rated switch current A 6 Width Height Screw connection 1 A 6 Screw connection 1 A 6 Screw connection A 6 Screw connection A 6 Screw connection 1 A 6 Screw connection A 6 Screw connection A 6 Screw connection 1 A 6 Width mm 23 Height	Temperature measuring range	°C	0 - 0
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Number of contacts as normally open contact Number of contacts as change-over contact Voltage type (operating voltage) Operating voltage AC 50 Hz Operating voltage AC 60 Hz Operating voltage DC Rated switch current Width Height I 0 AC/DC AC/DC 24 - 240 24 - 240 24 - 240 24 - 240 4 - 240 5 - 240 6 - 240 Mmm Mmm Mmm Mmm Mmm Mmm Mmm M	Connection type auxiliary circuit		Screw connection
Number of contacts as change-over contact Voltage type (operating voltage) Operating voltage AC 50 Hz Operating voltage AC 60 Hz Operating voltage DC Rated switch current Width Height Operating voltage AC 60 Hz Number of contacts as change-over contact AC/DC AC/DC 24 - 240 24 - 240 24 - 240 4 - 240 5 - 240 6 - 240 Mmm Mmm Mmm Mmm Mmm Mmm Mmm M	Number of contacts as normally closed contact		1
Voltage type (operating voltage) AC/DC Operating voltage AC 50 Hz Operating voltage AC 60 Hz V 24 - 240 Operating voltage AC 60 Hz V 24 - 240 Operating voltage DC Rated switch current A 6 Width mm 23 Height	Number of contacts as normally open contact		1
Operating voltage AC 50 Hz Operating voltage AC 60 Hz V 24 - 240 Operating voltage DC Rated switch current A 6 Width mm 23 Height mm 83	Number of contacts as change-over contact		0
Operating voltage AC 60 Hz Operating voltage DC Rated switch current A 6 Width mm 23 Height mm 83	Voltage type (operating voltage)		AC/DC
Operating voltage DC V 24 - 240 Rated switch current A 6 Width mm 23 Height mm 83	Operating voltage AC 50 Hz	V	24 - 240
Rated switch current A 6 Width mm 23 Height mm 83	Operating voltage AC 60 Hz	V	24 - 240
Width mm 23 Height mm 83	Operating voltage DC	V	24 - 240
Height mm 83	Rated switch current	Α	6
	Width	mm	23
Depth mm 103	Height	mm	83
	Depth	mm	103