DATASHEET - EMT6-KDB

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

Powering Business Worldwide

Part no.	**EMT6-KDB**
	269471
EL Number (Norway)	**4110424**

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	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

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	1 x (0.5 - 2.5) mm^2, flexible with ferrule 1 x (0.5 - 2.5) mm^2, solid 2 x (0.5 - 1.5) mm^2, flexible with ferrule 20 - 14 AWG, solid or stranded 2 x (0.5 - 1.5) 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 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 (Ie)	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, 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, 380 V 400 V 415 V (NC) 3 A at AC-15, 220 V 230 V 240 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 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])

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