DATASHEET - EMT6-DB(230V)

Thermistor overload relay for machine protection, 230V50/60Hz, with lock

Part no.	**EMT6-DB(230V)**
	066401
EL Number (Norway)	**4131787**

General specifications

Product name	Eaton Moeller® series EMT6 Thermistor overload relay
Part no.	EMT6-DB(230V)
EAN	4015080664017
Product Length/Depth	103 millimetre
Product height	83 millimetre
Product width	23 millimetre
Product weight	0.156 kilogram
Certifications	CSA Class No.: 3211-03 IEC/EN 61000-4-2 IEC/EN 60947-8 CE UL 508 VDE 0660 UL File No.: E29184 EN 55011 CSA-C22.2 No. 14 IEC/EN 61000-4-3 IEC/EN 60947 CSA UL Category Control No.: NKCR UL CSA File No.: 12528
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
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

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	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) 3 V/m at 1.4 - 2 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	2 kV, symmetrical, power pulses (Surge), EMC 4 kV, asymmetrical, power pulses (Surge), EMC According to IEC/EN 61000-4-5, 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 2 x (0.5 - 1.5) mm^2, solid 2 x (0.5 - 1.5) mm^2, flexible with ferrule 20 - 14 AWG, solid or stranded
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	230 V
Rated control supply voltage (Us) at AC, 50 Hz - max	230 V
Rated control supply voltage (Us) at AC, 60 Hz - min	230 V
Rated control supply voltage (Us) at AC, 60 Hz - max	230 V
Rated control supply voltage (Us) at DC - min	0 V
Rated control supply voltage (Us) at DC - max	0 V
Rated insulation voltage (Ui)	400 V
Rated operational current (Ie)	1 A at AC-15, 380 V 400 V 415 V (NO) 3 A at AC-14, 380 V 400 V 415 V (NO) 3 A at AC-15, 220 V 230 V 240 V (NC) 3 A at AC-14, 300 V (NC) 1 A at AC-15, 300 V (NC) 1 A at AC-15, 380 V 400 V 415 V (NC) 3 A at AC-14, 400 V (NC) 3 A at AC-15, 220 V 230 V 240 V 3 A at AC-14, 300 V (NO) 3 A at AC-15, 220 V 230 V 240 V (NO) 1 A at AC-15, 300 V (NO) 3 A at AC-14, 380 V 400 V 415 V (NC)
Rated operational voltage (Ue) - max	230 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	1.5 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
Supply voltage AC 50 Hz	V	230 - 230
Supply voltage AC 60 Hz	V	230 - 230
Supply voltage DC	V	
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
Operating voltage AC 50 Hz	V	230 - 230
Operating voltage AC 60 Hz	V	230 - 230
Operating voltage DC	V	
Rated switch current	A	6
Width	mm	23
Height	mm	83
Depth	mm	103