Specifications



Eaton 066167

Eaton Moeller® series EMT6 Thermistor overload relay for machine protection, 24-240V50/60HZ/DC

General specifications

PRODUCT NAME	Eaton Moeller® series EMT6 Thermistor overload relay
CATALOG NUMBER	066167
MODEL CODE	EMT6-DB
EAN	4015080661672
PRODUCT LENGTH/DEPTH	103 mm
PRODUCT HEIGHT	83 mm
PRODUCT WIDTH	23 mm
PRODUCT WEIGHT	0.132 kg
CERTIFICATIONS	UL File No.: E29184 UL EN 55011 CSA Class No.: 3211-03 IEC/EN 60947 CE UL 508 IEC/EN 61000-4-2 CSA UL Category Control No.: NKCR IEC/EN 60947-8 CSA-C22.2 No. 14 CSA File No.: 12528 VDE 0660 IEC/EN 61000-4-3

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Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	60 °C
AMBIENT STORAGE TEMPERATURE - MAX	85 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	45 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MIN	-45 °C
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

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

Electrical rating

CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)	6 A
PICK-UP VOLTAGE	0.85 - 1.1 V x U_e
POWER CONSUMPTION	2 W at DC 3.5 VA at AC
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	240 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	24 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	240 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	24 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	240 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	24 V
RATED INSULATION VOLTAGE (UI)	400 V
RATED OPERATIONAL CURRENT (IE)	3 A at AC-14, 400 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 (NO) 3 A at AC-15, 220 V 230 V 240 V (NC) 3 A at AC-15, 220 V 230 V 240 V 3 A at AC-14, 300 V (NC) 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 (NO) 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 (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

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
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

Features & functions

ELECTRIC CONNECTION TYPE	Screw connection
FUNCTIONS	Manual or remote resetting Notifications of mains and faults via LED display Test function via separate button External reset possible Manual reset

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

Terminal capacities

SCREW SIZE	M3.5, Terminal screw
SCREWDRIVER SIZE	1 x 6 mm, Terminal screw, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver
TERMINAL CAPACITY	1 x (0.5 - 2.5) mm², solid 1 x (0.5 - 2.5) mm², flexible with ferrule 2 x (0.5 - 1.5) mm², flexible with ferrule 2 x (0.5 - 1.5) mm², solid 20 - 14 AWG, solid or stranded
TIGHTENING TORQUE	1.2 Nm, Screw terminals

Resources

BROCHURES	EMR6 - EMT6 - ETR4 brochure
CATALOGUES	eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf
CHARACTERISTIC CURVE	eaton-tripping-emt6-thermistor-overload-relay-characteristic-curve.eps eaton-tripping-emt6-thermistor-overload-relay-characteristic-curve-002.eps
DECLARATIONS OF CONFORMITY	eaton-thermistor-overload-relay-declaration-of-conformity-eu251559en.pdf eaton-thermistor-overload-relay-declaration-of-conformity-uk250987en.pdf
DRAWINGS	eaton-tripping-thermistor-relay-emt6-dimensions.eps eaton-tripping-devices-relay-emt6-thermistor-overload-relay-dimensions.eps eaton-tripping-devices-relay-emt6-thermistor-overload-relay-3d-drawing-002.eps
ECAD MODEL	DA-CE-ETN.EMT6-DB
INSTALLATION INSTRUCTIONS	eaton-emt6-thermistor-motor-protection-relays-il121016zu.pdf
MANUALS AND USER GUIDES	MN03407006Z_DE_EN
MCAD MODEL	DA-CS-emt6_db
WIRING DIAGRAMS	eaton-tripping-devices-emt6-thermistor-overload-relay-wiring-diagram.eps eaton-tripping-devices-auto-mode-emt6-thermistor-overload-relay-wiring-diagram.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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