

Specifications



Eaton 066401

Eaton Moeller® series EMT6 Thermistor overload relay for machine protection, 230V50/60Hz, with lock

General specifications

PRODUCT NAME	Eaton Moeller® series EMT6 Thermistor overload relay
CATALOG NUMBER	066401
MODEL CODE	EMT6-DB(230V)
EAN	4015080664017
PRODUCT LENGTH/DEPTH	103 mm
PRODUCT HEIGHT	83 mm
PRODUCT WIDTH	23 mm
PRODUCT WEIGHT	0.156 kg
CERTIFICATIONS	EN 55011 CSA File No.: 12528 CSA-C22.2 No. 14 IEC/EN 60947 UL File No.: E29184 CE CSA Class No.: 3211-03 UL UL Category Control No.: NKCR IEC/EN 61000-4-3 UL 508 VDE 0660 IEC/EN 60947-8 IEC/EN 61000-4-2 CSA



Powering Business Worldwide

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

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

Contacts

**NUMBER OF CONTACTS
(CHANGE-OVER
CONTACTS)** 0

**NUMBER OF CONTACTS
(NORMALLY CLOSED
CONTACTS)** 1

**NUMBER OF CONTACTS
(NORMALLY OPEN
CONTACTS)** 1

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 3.5 VA at AC
2 W at DC

**RATED CONTROL SUPPLY
VOLTAGE (US) AT AC, 50
HZ - MAX** 230 V

**RATED CONTROL SUPPLY
VOLTAGE (US) AT AC, 50
HZ - MIN** 230 V

**RATED CONTROL SUPPLY
VOLTAGE (US) AT AC, 60
HZ - MAX** 230 V

**RATED CONTROL SUPPLY
VOLTAGE (US) AT AC, 60
HZ - MIN** 230 V

**RATED CONTROL SUPPLY
VOLTAGE (US) AT DC -
MAX** 0 V

**RATED CONTROL SUPPLY
VOLTAGE (US) AT DC -
MIN** 0 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 (NO) 3 A at AC-15, 220 V 230 V 240 V (NO) 3 A at AC-14, 300 V (NO) 3 A at AC-15, 220 V 230 V 240 V 3 A at AC-14, 400 V (NC) 1 A at AC-15, 380 V 400 V 415 V (NC) 1 A at AC-15, 300 V (NC) 3 A at AC-14, 300 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, 380 V 400 V 415 V (NO)
RATED OPERATIONAL VOLTAGE (UE) - MAX	230 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	2 kV, Supply cable 1 kV, Signal cable According to IEC/EN 61000-4-4
CONTACT DISCHARGE	6 kV
ELECTROMAGNETIC FIELDS	3 V/m at 1.4 - 2 GHz (according to IEC EN 61000-4-3) 10 V/m at 80 - 1000 MHz (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 4 kV, asymmetrical, power pulses (Surge), EMC 2 kV, symmetrical, power pulses (Surge), EMC

Features & functions	
ELECTRIC CONNECTION TYPE	Screw connection
FUNCTIONS	Manual or remote resetting External reset possible Test function via separate button Notifications of mains and faults via LED display 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)	4000 V AC 6000 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

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	20 - 14 AWG, solid or stranded 2 x (0.5 - 1.5) mm ² , flexible with ferrule 2 x (0.5 - 1.5) mm ² , solid 1 x (0.5 - 2.5) mm ² , flexible with ferrule 1 x (0.5 - 2.5) mm ² , solid
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-uk250987en.pdf eaton-thermistor-overload-relay-declaration-of-conformity-eu251559en.pdf
DRAWINGS	eaton-tripping-devices-relay-emt6-thermistor-overload-relay-dimensions.eps eaton-tripping-thermistor-relay-emt6-dimensions.eps eaton-tripping-devices-relay-emt6-thermistor-overload-relay-3d-drawing-002.eps
ECAD MODEL	DA-CE-ETN.EMT6-DB(230V)
INSTALLATION INSTRUCTIONS	eaton-emt6-thermistor-motor-protection-relays-instruction-leaflet-il121016zu.pdf
MANUALS AND USER GUIDES	MN03407006Z DE EN
MCAD MODEL	DA-CS-emt6_db eaton-monitoring-relays-mcad-drawings-emt6-db.dwg
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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