

Specifications

Eaton 171889

Eaton Moeller® series EMT6 Thermistor overload relays for machine protection, 2 N/O, 24 - 240 V 50 - 400 Hz, 24 - 240 V DC, without reclosing lockout, with 2 sensor circuits

General specifications

PRODUCT NAME	Eaton Moeller® series EMT6 Thermistor overload relay
CATALOG NUMBER	171889
MODEL CODE	EMT62
EAN	4015081685141
PRODUCT LENGTH/DEPTH	103 mm
PRODUCT HEIGHT	83 mm
PRODUCT WIDTH	23 mm
PRODUCT WEIGHT	0.153 kg
CERTIFICATIONS	CSA-C22.2 No. 14 VDE 0660 UL 508 IEC/EN 60947 IEC/EN 61000-4-2 CE EN 55011 UL CSA File No.: 12528 IEC/EN 61000-4-3 IEC/EN 60947-8 CSA CSA Class No.: 3211-03 UL File No.: E29184 UL Category Control No.: NKCR

Features & Functions

ELECTRIC CONNECTION TYPE	Screw connection
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FITTED WITH:	2 sensor circuits
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FUNCTIONS	Test function via separate button Notifications of mains and faults via LED display
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TEMPERATURE MEASURING RANGE - MIN	0 °C
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TEMPERATURE MEASURING RANGE - MAX	0 °C
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General

DEGREE OF PROTECTION	IP20
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MOUNTING POSITION	As required
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OVERVOLTAGE CATEGORY	III
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POLLUTION DEGREE	3
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PRODUCT CATEGORY	EMT6 thermistor overload relay for machine protection
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PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
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RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
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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
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SHOCK RESISTANCE	10 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
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VOLTAGE TYPE	AC/DC
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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

Terminal capacities

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

Electro magnetic compatibility

AIR DISCHARGE	8 kV
BURST IMPULSE	According to IEC/EN 61000-4-4 2 kV, Supply cable 1 kV, Signal cable
CONTACT DISCHARGE	6 kV, Electrostatic discharge (ESD)
ELECTROMAGNETIC FIELDS	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) 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

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 - 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	240 V

VOLTAGE (US) AT AC, 60 HZ - MAX	
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	24 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	240 V
RATED INSULATION VOLTAGE (UI)	240 V
RATED OPERATIONAL CURRENT (IE)	3 A at AC-15, 220 V 230 V 240 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, 380 V 400 V 415 V (NO) 3 A at AC-14, 400 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) 0

NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS) 2

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 W

Resources

BROCHURES	EMR6 - EMT6 - ETR4 brochure
CATALOGUES	eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf
CHARACTERISTIC CURVE	eaton-tripping-devices- emt6-thermistor-overload-relay-characteristic-curve.eps
DECLARATIONS OF CONFORMITY	DA-DC-00003971.pdf DA-DC-00003562.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.eps
ECAD MODEL	DA-CE-ETN.EMT62
INSTALLATION INSTRUCTIONS	eaton-tripping-device- emt62- emt62-db-thermistor-overload-relay-il049002zu.pdf
MANUALS AND USER GUIDES	MN03407006Z_DE_EN
MCAD MODEL	DA-CD- emt6 DA-CS- emt6 eaton- emt6-drawing.dwg eaton- emt6-3d-model.stp
WIRING DIAGRAMS	eaton-tripping-devices- auto-mode- emt6-thermistor-overload-relay-wiring-diagram.eps

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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