Specifications

Eaton 171890

Eaton Moeller® series EMT6 Thermistor overload relays for machine protection, 2 N/O, 24 - 240 V 50 - 400 Hz, 24 - 240 V DC, with reclosing lockout, with 2 sensor circuits

General specifications

PRODUCT NAME	Eaton Moeller® series EMT6 Thermistor overload relay
CATALOG NUMBER	171890
MODEL CODE	EMT62-DB
EAN	4015081685158
PRODUCT LENGTH/DEPTH	103 mm
PRODUCT HEIGHT	83 mm
PRODUCT WIDTH	23 mm
PRODUCT WEIGHT	0.153 kg
CERTIFICATIONS	CE IEC/EN 60947-8 CSA CSA Class No.: 3211-03 IEC/EN 61000-4-2 EN 55011 UL Category Control No.: NKCR CSA File No.: 12528 IEC/EN 60947 VDE 0660 IEC/EN 61000-4-3 UL UL File No.: E29184 CSA-C22.2 No. 14 UL 508

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Features & Functions

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

General

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
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	2 kV, Supply cable 1 kV, Signal 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) 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

Terminal capacities

TERMINAL CAPACITY	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 20 - 14 AWG, solid or stranded 2 x (0.5 - 1.5) 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

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)	1 A at AC-15, 380 V 400 V 415 V (NO) 3 A at AC-15, 220 V 230 V 240 V (NO) 3 A at AC-15, 220 V 230 V 240 V 3 A at AC-14, 400 V (NC) 3 A at AC-14, 380 V 400 V 415 V (NO)
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-002.eps
ECAD MODEL	DA-CE-ETN.EMT62-DB
INSTALLATION INSTRUCTIONS	eaton-tripping-device-emt62-emt62-db-thermistor-overload-relay-il049002zu.pdf
MANUALS AND USER GUIDES	MN03407006Z_DE_EN
MCAD MODEL	DA-CS-emt6_db DA-CD-emt6_db
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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