



BIMETAL OVERLOAD RELAYS

278443



Overview



Specifications



Resources

How to buy



Photo is representative

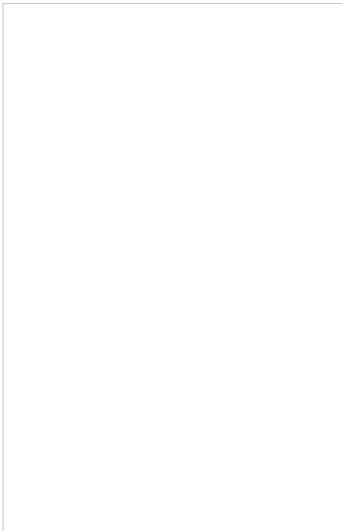


Photo is representative

278443

Eaton Moeller® series ZB Overload relay, ZB32, Ir
Direct mounting, IP20

How to buy

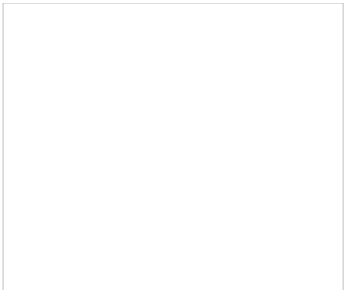


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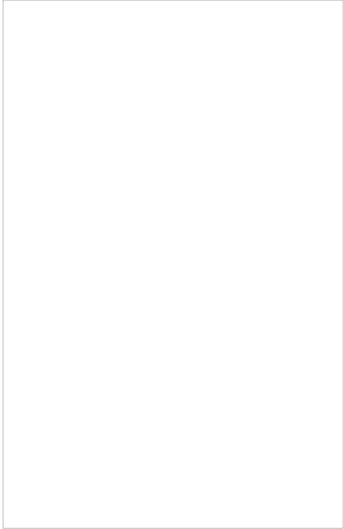


Photo is representative



Designed to work together

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278473

Eaton Moeller® series ZB Individual mounting base, for ZB32 overload relay

254834

Eaton Moeller® series M22 Release pushbutton, blue, Bezel: titanium, RESET

254833

Eaton Moeller® series M22 Release pushbutton, blue, Bezel: titanium

216423

Eaton Moeller® series M22 Butt flat red, blank

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GENERAL SPECIFICATIONS

General specifications

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PRODUCT NAME Eaton Moeller® series ZB Thermal overload relay**CATALOG NUMBER** 278443

Product specifications

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MODEL CODE ZB32-0,24**EAN** 4015082784430**PRODUCT LENGTH/DEPTH** 96 mm**PRODUCT HEIGHT** 67 mm**PRODUCT WIDTH** 45 mm**PRODUCT WEIGHT** 0.143 kg**COMPLIANCES** CE Marked

CERTIFICATIONS

IEC 60947
EN 60947
IEC/EN 60947 VDE 0660
CSA Certified
UL Listed
CSA-C22.2 No. 60947-4-1-14
IEC/EN 60947-4-1
VDE 0660
CSA Class No.: 3211-03
IEC/EN 60947
UL 60947-4-1
CE
CSA
UL Category Control No.: NKCR
CSA File No.: 012528
UL
UL File No.: E29184

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) 0.24 A**TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)**

1 x (1 - 4) mm², Main cables
2 x (1 - 4) mm², Main cables
2 x (0.75 - 2.5) mm², Control circuit cables
1 x (0.75 - 2.5) mm², Control circuit cables

10.11 SHORT-CIRCUIT RATING

Is the panel builder's responsibility. The specifications must be observed.

STRIPPING LENGTH (CONTROL CIRCUIT CABLE) 8 mm**AMBIENT OPERATING TEMPERATURE (ENCLOSED) -**

MIN	25 °C
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications must be observed.
MOUNTING METHOD	Direct attachment Direct mounting
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be lifted.
STRIPPING LENGTH (MAIN CABLE)	10 mm
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
RESET FUNCTION	Push-button Automatic
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)	100 kA, Fuse, SCCR (UL/CSA) 1 A, Class J/CC, max. Fuse, SCCR (UL/CSA)
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
SCREW SIZE	M4, Terminal screw M3.5, Terminal screw, Control circuit cables
ADJUSTABLE CURRENT RANGE - MIN	0.16 A
PROTECTION	Finger and back-of-hand proof, Protection against dirt, actuated from front (EN 50274)
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
FEATURES	Reset pushbutton manual/auto Trip-free release Phase-failure sensitivity (according to IEC/EN 60941-102) Test/off button
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
VOLTAGE RATING - MAX	600 VAC
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be lifted.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be lifted.
	440 V, Between auxiliary contacts and main contact

SAFE ISOLATION	61140 240 V AC, Between auxiliary contacts, According to 440 V AC, Between main circuits, According to EN
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	1.5 A
CLASS	CLASS 10 A
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the instruction leaflet (IL) is observed.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to
RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V	0.9 A
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	1.8 W
PRODUCT CATEGORY	<ul style="list-style-type: none"> • Accessories • Overload relay ZB up to 150 A
OVERLOAD RELEASE CURRENT SETTING - MIN	0.16 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 60 V	0.75 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	5.4 W
HEAT DISSIPATION CAPACITY PDISS	0 W
SUITABLE FOR	Branch circuits, (UL/CSA)
TEMPERATURE COMPENSATION	≤ 0.25 %/K, residual error for T > 40° Continuous
TERMINAL CAPACITY (SOLID)	1 x (1 - 6) mm ² , Main cables 2 x (0.75 - 4) mm ² , Control circuit cables 1 x (0.75 - 4) mm ² , Control circuit cables 2 x (1 - 6) mm ² , Main cables
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	1
10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT	Meets the product standard's requirements.
10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.
RATED OPERATIONAL CURRENT (IE) AT DC-13, 220 V, 230 V	0.2 A
CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)	6 A

OVERLOAD RELEASE CURRENT SETTING - MAX	0.24 A
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 8, Main cables 2 x (18 - 14), Control circuit cables
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
DEGREE OF PROTECTION	IP20
OVERVOLTAGE CATEGORY	III
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
POLLUTION DEGREE	3
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4000 V (auxiliary and control circuits) 6000 V AC
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the device
TIGHTENING TORQUE	1.2 Nm, Screw terminals, Control circuit cables 1.8 Nm, Screw terminals, Main cables
ADJUSTABLE CURRENT RANGE - MAX	0.24 A
FRAME SIZE	ZB32
SCREWDRIVER SIZE	2, Terminal screw, Pozidriv screwdriver 1 x 6 mm, Terminal screw, Standard screwdriver
RATED OPERATIONAL CURRENT (IE) AT AC-15, 120 V	1.5 A
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	1
SHORT-CIRCUIT PROTECTION RATING	25 A gG/gL, Fuse, Type "1" coordination 1 A gG/gL, Fuse, Type "2" coordination Max. 6 A gG/gL, fuse, Without welding, Auxiliary
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	1
RATED OPERATIONAL CURRENT (IE) AT DC-13, 110 V	0.4 A
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
SHOCK RESISTANCE	10 g, Mechanical, Sinusoidal, Shock duration 10 ms
RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V	0.9 A

Catalogs

Characteristic curve

Declarations of conformity

Drawings

eCAD model

Installation instructions

Manuals and user guides

mCAD model

Wiring diagrams

278443



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