

BIMETAL OVERLOAD RELAYS

278434



Overview



Specifications



Resources

How to buy

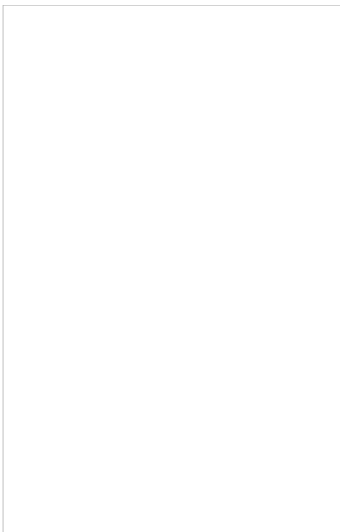


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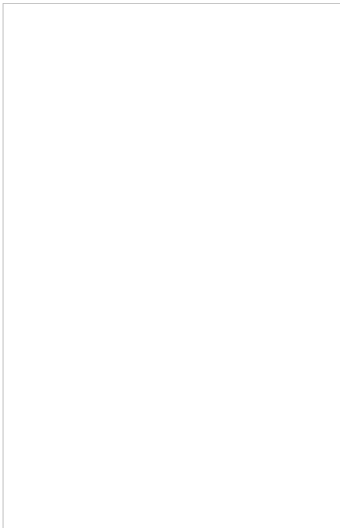


Photo is representative

278434

Eaton Moeller® series ZB Overload relay, ZB12, Ir-
Direct mounting, IP20

How to buy

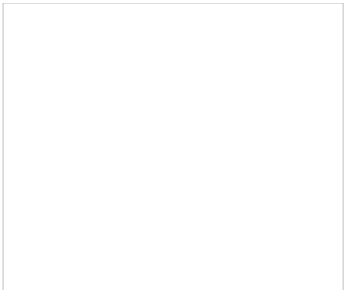


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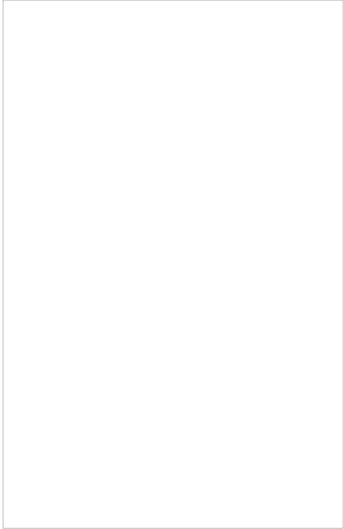


Photo is representative



Designed to work together

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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 Button plate, flat red, blank

218153

Eaton Moeller® series M22 Button plate, flat red

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GENERAL SPECIFICATIONS

General specifications	>	PRODUCT NAME	Eaton Moeller® series ZB Thermal overload relay
		CATALOG NUMBER	278434
Product specifications	>	MODEL CODE	ZB12-0,6
		EAN	4015082784348
		PRODUCT LENGTH/DEPTH	88 mm
		PRODUCT HEIGHT	67 mm
		PRODUCT WIDTH	45 mm
		PRODUCT WEIGHT	0.141 kg
		CERTIFICATIONS	CE CSA File No.: 012528 IEC/EN 60947 UL File No.: E29184 UL 60947-4-1 CSA CSA Class No.: 3211-03 IEC/EN 60947-4-1 UL Category Control No.: NKCR UL CSA-C22.2 No. 60947-4-1-14 VDE 0660

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	0.6 A
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x (0.75 - 2.5) mm ² , Control circuit cables 2 x (1 - 4) mm ² , Main cables 1 x (0.75 - 2.5) mm ² , Control circuit cables 1 x (1 - 4) mm ² , Main 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 mounting Direct attachment
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to
STRIPPING LENGTH (MAIN CABLE)	10 mm
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
RESET FUNCTION	Push-button Automatic
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)	1 A, Class J/CC, max. Fuse, SCCR (UL/CSA) 100 kA, 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	0.4 A
PROTECTION	Finger and back-of-hand proof Protection against di actuated from front (EN 50274)
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
FEATURES	Reset pushbutton manual/auto Trip-free release Test/off button Phase-failure sensitivity (according to IEC/EN 6094 102)
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.
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to
SAFE ISOLATION	440 V AC, Between main circuits, According to EN 240 V AC, Between auxiliary contacts, According t 440 V AC, Between auxiliary contacts and main con EN 61140
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 inf instruction leaflet (IL) is observed.

10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to
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	1.6 W
PRODUCT CATEGORY	<ul style="list-style-type: none"> • Accessories • Overload relay ZB up to 150 A
OVERLOAD RELEASE CURRENT SETTING - MIN	0.4 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 60 V	0.75 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	4.8 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)	2 x (0.75 - 4) mm ² , Control circuit cables 1 x (1 - 6) mm ² , Main cables 2 x (1 - 6) mm ² , Main cables 1 x (0.75 - 4) mm ² , Control circuit 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 I_{TH} OF AUXILIARY CONTACTS (1-POLE, OPEN)	6 A
OVERLOAD RELEASE CURRENT SETTING - MAX	0.6 A
TERMINAL CAPACITY (SOLID/STRANDED AWG)	2 x (18 - 14), Control circuit cables 18 - 8, Main 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
ADJUSTABLE CURRENT RANGE - MAX	0.6 A
FRAME SIZE	ZB12
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	4 A gG/gL, Fuse, Type "2" coordination 25 A gG/gL, Fuse, Type "1" 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
SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	R300, DC operated (UL/CSA) B300 at opposite polarity, AC operated (UL/CSA) B600 at opposite polarity, AC operated (UL/CSA)

Catalogs

Characteristic curve

Declarations of conformity

Drawings

eCAD model

Installation instructions

Manuals and user guides

mCAD model

Wiring diagrams

278434



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