

BIMETAL OVERLOAD RELAYS

278466



Overview



Specifications



Resources

How to buy

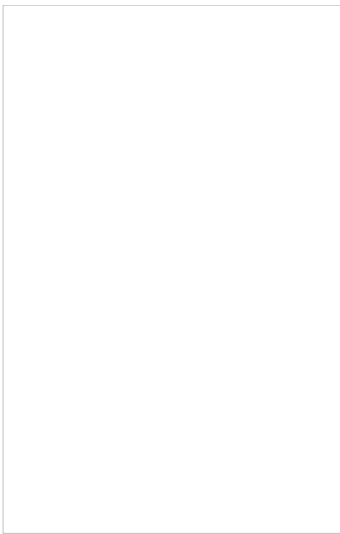


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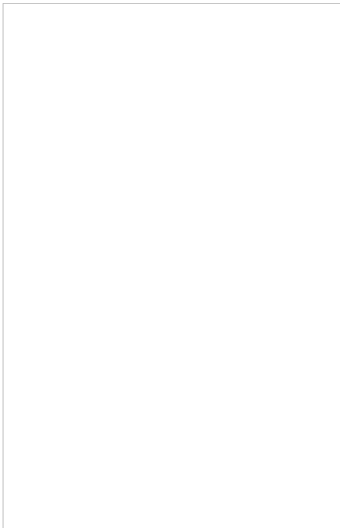


Photo is representative

278466

Eaton Moeller® series ZB Overload relay, ZB150, IP00
Direct mounting, IP00

How to buy

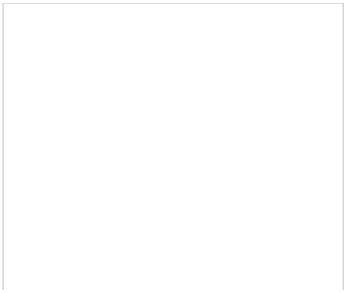


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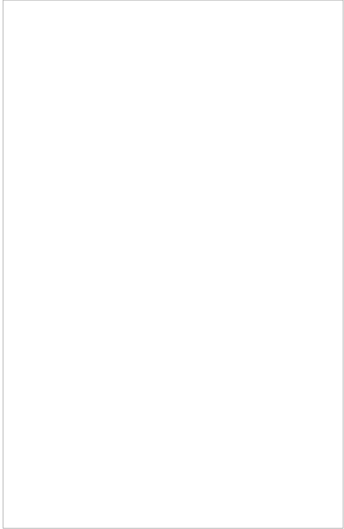


Photo is representative



Designed to work together

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254833

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

218194

Eaton Moeller® series M22 Button plate, flat red, STOP

239577

Eaton Moeller® series DILM Contactor, 380 V 400 V 55 kW, 2 N/O, 2 NC, RAC 120: 110 - 120 V 50/60 Hz, AC operation, Screw terminals

239541

Eaton Moeller® series DILM Contactor, 380 V 400 V 45 kW, 2 N/O, 2 NC, - 27 V DC, DC operation, Screw terminals

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GENERAL SPECIFICATIONS

General specifications	>	PRODUCT NAME	Eaton Moeller® series ZB Thermal overload relay.
		CATALOG NUMBER	278466
Product specifications	>	MODEL CODE	ZB150-150
		EAN	4015082784669
		PRODUCT LENGTH/DEPTH	134 mm
		PRODUCT HEIGHT	135 mm
		PRODUCT WIDTH	118 mm
		PRODUCT WEIGHT	1.214 kg

CERTIFICATIONS

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

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	150 A
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (4 - 70) mm ² , Main cables 2 x (4 - 70) mm ² , Main cables 2 x (0.75 - 2.5) mm ² , Control circuit cables 1 x (0.75 - 2.5) mm ² , 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 mounting Direct attachment
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be lifted.
STRIPPING LENGTH (MAIN CABLE)	24 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	Automatic Push-button
SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	600 A Class J, max. Fuse, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA) 600 A, max. CB, SCCR (UL/CSA)
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
SCREW SIZE	M10, Terminal screw, Main cables M3.5, Terminal screw, Control circuit cables 5 mm AF, Hexagon socket-head spanner, Terminal
ADJUSTABLE CURRENT RANGE - MIN	120 A
PROTECTION	Finger and back-of-hand proof, Protection against dirt, actuated from front (EN 50274)
TERMINAL CAPACITY (STRANDED)	2 x (16 - 70) mm ² , Main cables 1 x (16 - 70) mm ² , Main cables
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 Test/off button Trip-free release Phase-failure sensitivity (according to IEC/EN 60941-102)
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.
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 tested.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be tested.
SAFE ISOLATION	440 V AC, Between main circuits, According to EN 60941-102 240 V AC, Between auxiliary contacts, According to EN 60941-102

	440 V, Between auxiliary contacts and main contact 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 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	8.5 W
PRODUCT CATEGORY	<ul style="list-style-type: none"> • Accessories • Overload relay ZB up to 150 A
OVERLOAD RELEASE CURRENT SETTING - MIN	120 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 60 V	0.75 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	25.5 W
HEAT DISSIPATION CAPACITY PDISS	0 W
SUITABLE FOR	Branch circuits, (UL/CSA)
TEMPERATURE COMPENSATION	Continuous ≤ 0.25 %/K, residual error for T > 40°
TERMINAL CAPACITY (SOLID)	1 x (0.75 - 4) mm ² , Control circuit cables 1 x (4 - 16) mm ² , Main cables 2 x (4 - 16) mm ² , Main cables 2 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 ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)	6 A

OVERLOAD RELEASE CURRENT SETTING - MAX	150 A
TERMINAL CAPACITY (SOLID/STRANDED AWG)	2 x (18 - 14), Control circuit cables 3/0, Main cables
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
DEGREE OF PROTECTION	IP00
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)	8000 V AC 4000 V (auxiliary and control circuits)
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 10 Nm, Screw terminals, Main cables
ADJUSTABLE CURRENT RANGE - MAX	150 A
FRAME SIZE	ZB150
SCREWDRIVER SIZE	1 x 6 mm, Terminal screw, Control circuit cables, S 2, Terminal screw, Control circuit cables, Pozidriv
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	315 A gG/gL, Fuse, Type "1" coordination Max. 6 A gG/gL, fuse, Without welding, Auxiliary 250 A gG/gL, Fuse, Type "2" coordination
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	1000 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, ...)	R300, DC operated (UL/CSA) B300 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

278466



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