BIMETAL OVERLOAD RELAYS
278460

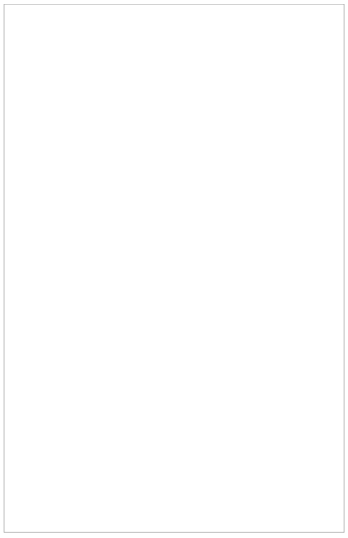

Photo is representative

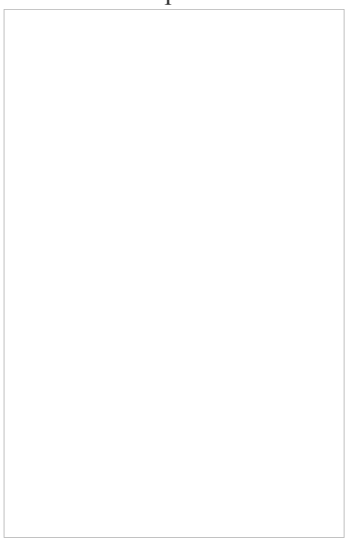

Photo is representative

278460

Eaton Moeller® series ZB Overload relay, ZB65, Ir=
Direct mounting, IP00

How to buy

Photo is representative

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Designed to work together

Discover other Eaton products and accessories built to enhance this product.

278208

Eaton Moeller® series DIUL Reversing contactor combination, 380 V 400 V: 18.5 kW, 110 V 50 Hz, 120 V 60 Hz, AC operation

278211

Eaton Moeller® series DIUL Reversing contactor combination, 380 V 400 V: 18.5 kW, 230 V 50 Hz, 240 V 60 Hz, AC operation

278261

Eaton Moeller® series DIUL Reversing contactor combination, 380 V 400 V: 30 kW, 230 V 50 Hz, 240 V 60 Hz, AC operation

277864

Eaton Moeller® series DILM Co
V 400 V 22 kW, 2 N/O, 2 NC,
Hz, 440 V 60 Hz, AC operation,
terminals

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General specifications >

Product specifications >

GENERAL SPECIFICATIONS

PRODUCT NAME	Eaton Moeller® series ZB Thermal overload relay
CATALOG NUMBER	278460
MODEL CODE	ZB65-65
UPC	782116358885
EAN	4015082784607
PRODUCT LENGTH/DEPTH	88 mm
PRODUCT HEIGHT	75 mm
PRODUCT WIDTH	60 mm
PRODUCT WEIGHT	0.23 kg
CERTIFICATIONS	CSA IEC/EN 60947-4-1 UL 60947-4-1 CE VDE 0660 UL File No.: E29184 CSA-C22.2 No. 60947-4-1-14 UL CSA File No.: 012528 IEC/EN 60947 UL Category Control No.: NKCR CSA Class No.: 3211-03

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	65 A
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 × (1 - 25) mm², Main cables 2 x (1 - 25) 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 specificatio 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.
	Is the panel builder's responsibility. The specificatio

10.12 ELECTROMAGNETIC COMPATIBILITY	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)	11 mm
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 480 V)	100 kA, Fuse, SCCR (UL/CSA) 100 A, max. CB, SCCR (UL/CSA) 125 A, Class J/CC, max. Fuse, SCCR (UL/CSA) 65 kA, CB, SCCR (UL/CSA)
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 (BASIC RATING)	150 A, max. CB, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA) 200 A, max. Fuse, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)	125 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	M3.5, Terminal screw, Control circuit cables M6, Terminal screw, Main cables
ADJUSTABLE CURRENT RANGE - MIN	50 A
PROTECTION	Finger and back-of-hand proof, Protection against di actuated from front (EN 50274)
TERMINAL CAPACITY (STRANDED)	1 x (16 - 25) mm², Main cables
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	Phase-failure sensitivity (according to IEC/EN 6094 102) Reset pushbutton manual/auto Test/off button Trip-free release
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
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, 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 inf 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	4.5 W
PRODUCT CATEGORY	• Accessories • Overload relay ZB up to 150 A
OVERLOAD RELEASE CURRENT SETTING - MIN	50 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 60 V	0.75 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	13.5 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 (1 - 16) mm², Main cables 2 x (0.75 - 4) mm², Control circuit cables 1 x (1 - 16) mm², Main cables 1 x (0.75 - 4) mm², 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	Meets the product standard's requirements.

HEAT/FIRE BY INTERNAL ELECT. EFFECTS	
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	65 A
TERMINAL CAPACITY (SOLID/STRANDED AWG)	14 - 2, 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	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)	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 devi
TIGHTENING TORQUE	1.2 Nm, Screw terminals, Control circuit cables 3.5 Nm, Screw terminals, Main cables
ADJUSTABLE CURRENT RANGE - MAX	65 A
FRAME SIZE	ZB65
SCREWDRIVER SIZE	1 x 6 mm, Terminal screw, Standard screwdriver 2, Terminal screw, Pozidriv 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	Max. 6 A gG/gL, fuse, Without welding, Auxiliary 160 A gG/gL, Fuse, Type “1” coordination 100 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	690 V
SHOCK RESISTANCE	10 g, Mechanical, Sinusoidal, Shock duration 10 m
RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V	0.9 A
SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	B300 at opposite polarity, AC operated (UL/CSA) R300, DC 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

278460

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solve the world’s most urgent power management challenges.