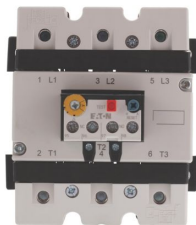


Specifications



Photo is representative



Eaton 278467

Eaton Moeller® series ZB Overload relay, ZB150, Ir= 25 - 35 A, 1 N/O, 1 N/C, Separate mounting, IP00

General specifications

PRODUCT NAME	Eaton Moeller® series ZB Thermal overload relay
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CATALOG NUMBER	278467
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MODEL CODE	ZB150-35/KK
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EAN	4015082784676
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PRODUCT LENGTH/DEPTH	134 mm
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PRODUCT HEIGHT	121 mm
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PRODUCT WIDTH	118 mm
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PRODUCT WEIGHT	1.394 kg
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CERTIFICATIONS

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



Powering Business Worldwide

Features & Functions

FEATURES

Reset pushbutton
manual/auto
Phase-failure sensitivity
(according to IEC/EN
60947, VDE 0660 Part 102)
Test/off button
Trip-free release

General information

AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
CLASS	CLASS 10 A
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
DEGREE OF PROTECTION	IP00
FRAME SIZE	ZB150
MOUNTING METHOD	Separate mounting Direct attachment
OVERLOAD RELEASE CURRENT SETTING - MIN	25 A
OVERLOAD RELEASE CURRENT SETTING - MAX	35 A
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
PRODUCT CATEGORY	- Accessories - Overload relay ZB up to 150 A
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 4000 V (auxiliary and control circuits)
SHOCK RESISTANCE	10 g, Mechanical, Sinusoidal, Shock duration 10 ms
SUITABLE FOR	Branch circuits, (UL/CSA)
TEMPERATURE COMPENSATION	Continuous ≤ 0.25 %/K, residual error for T > 40°

Terminal capacities

TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (0.75 - 2.5) mm ² , Control circuit cables 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
TERMINAL CAPACITY (SOLID)	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 1 x (0.75 - 4) mm ² , Control circuit cables
TERMINAL CAPACITY (SOLID/STRANDED AWG)	3/0, Main cables 2 x (18 - 14), Control circuit cables
TERMINAL CAPACITY (STRANDED)	1 x (16 - 70) mm ² , Main cables 2 x (16 - 70) mm ² , Main cables
STRIPPING LENGTH (MAIN CABLE)	24 mm
STRIPPING LENGTH (CONTROL CIRCUIT CABLE)	8 mm
SCREW SIZE	M10, Terminal screw, Main cables 5 mm AF, Hexagon socket- head spanner, Terminal screw, Main cables M3.5, Terminal screw, Control circuit cables
SCREWDRIVER SIZE	1 x 6 mm, Terminal screw, Control circuit cables, Standard screwdriver 2, Terminal screw, Control circuit cables, Pozidriv screwdriver
TIGHTENING TORQUE	1.2 Nm, Screw terminals, Control circuit cables 10 Nm, Screw terminals, Main cables

Electrical rating

CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)	6 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 120 V	1.5 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	1.5 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V	0.9 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 110 V	0.4 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 220 V, 230 V	0.2 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V	0.9 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 60 V	0.75 A
RATED OPERATIONAL VOLTAGE (UE) - MAX	1000 V
SAFE ISOLATION	440 V, Between auxiliary contacts and main contacts, According to EN 61140 240 V AC, Between auxiliary contacts, According to EN 61140 440 V AC, Between main circuits, According to EN 61140
SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	B600 at opposite polarity, AC operated (UL/CSA) R300, DC operated (UL/CSA) B300 at opposite polarity, AC operated (UL/CSA)
VOLTAGE RATING - MAX	600 VAC

Short-circuit rating

SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	5 kA, SCCR (UL/CSA) 60 A Class J, max. Fuse, SCCR (UL/CSA)
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SHORT-CIRCUIT PROTECTION RATING	100 A gG/gL, Fuse, Type "2" coordination 125 A gG/gL, Fuse, Type "1" coordination Max. 6 A gG/gL, fuse, Without welding, Auxiliary and control circuits
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Contacts

NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
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NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	1
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NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	1
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NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
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NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	1
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Design verification

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	21 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	7 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	35 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
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.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be evaluated.
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be evaluated.

Resources

CATALOGUES	Product Range Catalog Switching and protecting motors eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf
CHARACTERISTIC CURVE	eaton-tripping-zb-overload-relay-characteristic-curve.eps
DECLARATIONS OF CONFORMITY	eaton-thermal-overload-relay-declaration-of-conformity-eu250786en.pdf eaton-thermal-overload-relay-declaration-of-conformity-uk251269en.pdf
DRAWINGS	eaton-tripping-devices-overload-relay-zb-overload-relay-dimensions-007.eps eaton-tripping-devices-overload-relay-zb-overload-relay-3d-drawing-005.eps
ECAD MODEL	ETN.278467.edz
INSTALLATION INSTRUCTIONS	eaton-overload-relays-z5-zb150-il03407006z.pdf
MCAD MODEL	DA-CD-zb150 kk DA-CS-zb150 kk
WIRING DIAGRAMS	eaton-tripping-devices-overload-relay-zb-overload-relay-wiring-diagram.eps

10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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