

Specifications

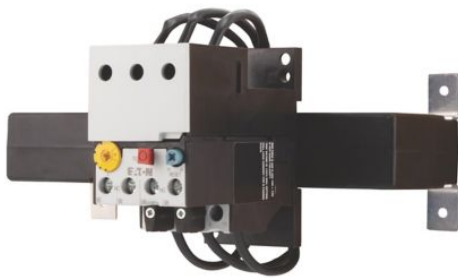
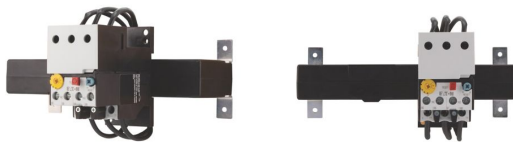


Photo is representative



Eaton 052448

Eaton Moeller® series ZW7 Current transformer-operated overload relay, 190-290A, 1N/O+1N/C

General specifications

PRODUCT NAME	Eaton Moeller® series ZW7 Current transformer-operated overload relay
CATALOG NUMBER	052448
MODEL CODE	ZW7-290
EAN	4015080524489
PRODUCT LENGTH/DEPTH	162.5 mm
PRODUCT HEIGHT	97 mm
PRODUCT WIDTH	200.5 mm
PRODUCT WEIGHT	0.622 kg
CERTIFICATIONS	CE CSA CSA File No.: 012528 CSA-C22.2 No. 14 UL File No.: E29184 UL Category Control No.: NKCR CSA Class No.: 3211-03 IEC/EN 60947-4-1 UL UL 508 IEC/EN 60947 VDE 0660
CATALOG NOTES	Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified.
GLOBAL CATALOG	052448

Product specifications

FEATURES	Test/off button Reset pushbutton manual/auto Protection with heavy starting duty Trip-free release
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.
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.

Resources

CATALOGS	eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf Product Range Catalog Switching and protecting motors
CHARACTERISTIC CURVE	eaton-tripping-devices-zw7-characteristic-curve-002.eps eaton-tripping-devices-tripping-characteristic-zw7-characteristic-curve.eps
DECLARATIONS OF CONFORMITY	eaton-current-transformer-operated-overload-relay-declaration-of-conformity-uk251272en.pdf eaton-current-transformer-operated-overload-relay-declaration-of-conformity-eu250789en.pdf
DRAWINGS	eaton-tripping-devices-current-zw7-dimensions.eps eaton-tripping-devices-current-zw7-dimensions-002.eps eaton-tripping-devices-current-zw7-3d-drawing.eps
ECAD MODEL	ETN.ZW7-290
INSTALLATION INSTRUCTIONS	IL03407129Z2017_08 IL04210001Z
MCAD MODEL	DA-CD-zw7 DA-CS-zw7
WIRING DIAGRAMS	eaton-tripping-devices-circuit-zw7-wiring-diagram.eps

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.
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.
POLLUTION DEGREE	3
CLASS	Other
OPENING DIAMETER	27 mm
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	8000 V AC 4000 V (auxiliary and control circuits)
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 CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	290 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
STRIPPING LENGTH (CONTROL CIRCUIT CABLE)	8 mm
VOLTAGE RATING - MAX	600 VAC
PRODUCT CATEGORY	ZW7 current transformer-operated overload relays
PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
ADJUSTABLE CURRENT RANGE - MAX	290 A
ADJUSTABLE CURRENT RANGE - MIN	190 A
AMBIENT OPERATING TEMPERATURE - MAX	50 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	25 °C
CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)	6 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	7.2 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	2.4 W
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF AUXILIARY CONTACTS (NORMALLY	1

OPEN CONTACTS)	
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	1
OVERLOAD RELEASE CURRENT SETTING - MAX	290 A
OVERLOAD RELEASE CURRENT SETTING - MIN	190 A
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
RATED OPERATIONAL CURRENT (IE) AT AC-15, 120 V	1.5 A
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
RESET FUNCTION	Automatic Push-button
SCREWDRIVER SIZE	1 x 6 mm, Terminal screw, Control circuit cables, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver
MOUNTING POSITION	As required
MOUNTING METHOD	Separate positioning Separate mounting
DEGREE OF PROTECTION	IP00
OVERVOLTAGE CATEGORY	III
SAFE ISOLATION	240 V AC, Between auxiliary contacts, According to EN 61140 440 V AC, Between main circuits, According to EN 61140 440 V AC, Between auxiliary contacts and main contacts, According to EN 61140
SCREW SIZE	M3.5, Terminal screw
SHOCK RESISTANCE	10 g, Mechanical, Sinusoidal, Shock duration 10 ms
SHORT-CIRCUIT PROTECTION	With overload relay in conjunction with a transformer as required for the contactor, Max. Fuse, Main conducting paths

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)
SHORT-CIRCUIT PROTECTION RATING	Max. 6 A gG/gL, Fuse, Auxiliary contacts
SUITABLE FOR	Branch circuits, (UL/CSA)
TEMPERATURE COMPENSATION	Continuous
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x (0.75 - 2.5) mm ² 1 x (0.75 - 2.5) mm ²
TERMINAL CAPACITY (SOLID)	2 x (0.75 - 4) mm ² 1 x (0.75 - 4) mm ²
TERMINAL CAPACITY (SOLID/STRANDED AWG)	2 x (18 - 14)
TIGHTENING TORQUE	1.2 Nm, Screw terminals, Control circuit cables
RATED FREQUENCY - MIN	50 Hz
RATED FREQUENCY - MAX	60 Hz

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

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