

## Eaton 050075

**Eaton Moeller® series ZW7 Current  
transformer-operated overload relay,  
420-630A, 1N/O+1N/C**

PRODUCT NAME	Eaton Moeller® series ZW7 Current transformer-operated overload relay
CATALOG NUMBER	050075
PRODUCT LENGTH/DEPTH	162.5 mm
PRODUCT HEIGHT	97 mm
PRODUCT WIDTH	200.5 mm
PRODUCT WEIGHT	0.64 kg
CERTIFICATIONS	IEC/EN 60947 VDE 0660
CATALOG NOTES	Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified.

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

CHARACTERISTIC CURVE	<a href="#">eaton-tripping-devices-zw7-characteristic-curve-005.eps</a>
	<a href="#">eaton-tripping-devices-tripping-characteristic-zw7-characteristic-curve.eps</a>
	<a href="#">IL04210001Z</a>
	<a href="#">eaton-tripping-devices-circuit-zw7-wiring-diagram.eps</a>
	<a href="#">eaton-tripping-devices-current-zw7-dimensions-002.eps</a>
	<a href="#">eaton-tripping-devices-current-zw7-dimensions.eps</a>
	<a href="#">eaton-tripping-devices-current-zw7-3d-drawing.eps</a>

	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.
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, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
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	0.2 A

<b>CURRENT (IE) AT DC-13, 220 V, 230 V</b>	
<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V</b>	<b>0.9 A</b>
<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 60 V</b>	<b>0.75 A</b>
<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	<b>630 A</b>
<b>STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS</b>	<b>0 W</b>
<b>STRIPPING LENGTH (CONTROL CIRCUIT CABLE)</b>	<b>8 mm</b>
<b>PRODUCT CATEGORY</b>	<b>ZW7 current transformer-operated overload relays</b>
<b>PROTECTION</b>	<b>Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)</b>
<b>ADJUSTABLE CURRENT RANGE - MAX</b>	<b>630 A</b>
<b>ADJUSTABLE CURRENT RANGE - MIN</b>	<b>420 A</b>
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	<b>50 °C</b>
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	<b>-25 °C</b>
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX</b>	<b>40 °C</b>
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN</b>	<b>-25 °C</b>
<b>CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)</b>	<b>6 A</b>
<b>EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID</b>	<b>8.1 W</b>
<b>HEAT DISSIPATION CAPACITY PDISS</b>	<b>0 W</b>
<b>HEAT DISSIPATION PER</b>	<b>2.7 W</b>

<b>POLE, CURRENT-DEPENDENT PVID</b>	
<b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>	<b>0</b>
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b>	<b>1</b>
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>	<b>1</b>
<b>NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)</b>	<b>1</b>
<b>NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)</b>	<b>1</b>
<b>OVERLOAD RELEASE CURRENT SETTING - MAX</b>	<b>630 A</b>
<b>OVERLOAD RELEASE CURRENT SETTING - MIN</b>	<b>420 A</b>
<b>RATED OPERATIONAL VOLTAGE (UE) - MAX</b>	<b>690 V</b>
<b>RATED OPERATIONAL CURRENT (IE) AT AC-15, 120 V</b>	<b>1.5 A</b>
<b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>	<b>Screw connection</b>
<b>RESET FUNCTION</b>	<b>Automatic Push-button</b>
<b>SCREWDRIVER SIZE</b>	<b>2, Terminal screw, Pozidriv screwdriver 1 x 6 mm, Terminal screw, Control circuit cables, Standard screwdriver</b>
<b>MOUNTING POSITION</b>	<b>As required</b>
<b>MOUNTING METHOD</b>	<b>Separate positioning Separate mounting</b>
<b>DEGREE OF PROTECTION</b>	<b>IP00</b>
<b>OVERVOLTAGE CATEGORY</b>	<b>III</b>
<b>SAFE ISOLATION</b>	<b>440 V AC, Between auxiliary contacts and main contacts, According to EN 61140 240 V AC, Between auxiliary contacts, According to EN 61140</b>

	440 V AC, Between main circuits, 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)	B600 at opposite polarity, AC operated (UL/CSA) R300, DC operated (UL/CSA) B300 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 <sup>2</sup> 1 x (0.75 - 2.5) mm <sup>2</sup>
TERMINAL CAPACITY (SOLID)	2 x (0.75 - 4) mm <sup>2</sup> 1 x (0.75 - 4) mm <sup>2</sup>
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

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**PROJECT NAME:**

**PROJECT NUMBER:**

**PREPARED BY:**

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