



BIMETAL OVERLOAD RELAYS  
210071

  
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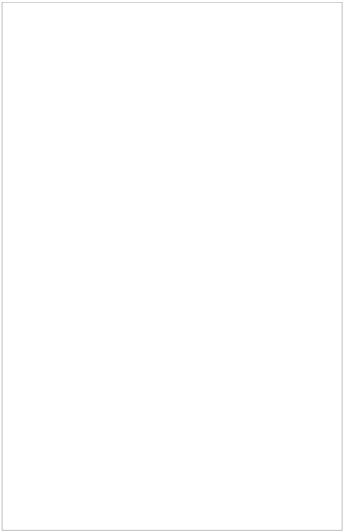


Photo is representative

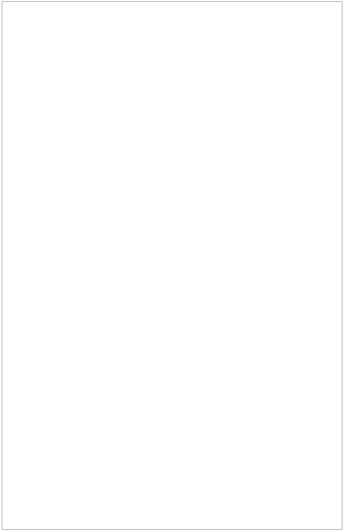


Photo is representative

210071

Eaton Moeller® series Z5 Overload relay, Ir= 70 - 100 A, 3P+N, 230V AC, 50/60 Hz, with: DILM250

How to buy

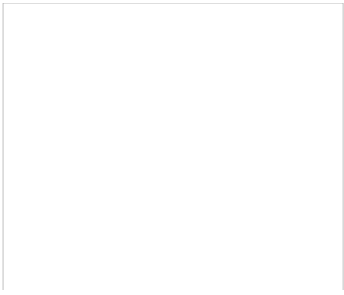


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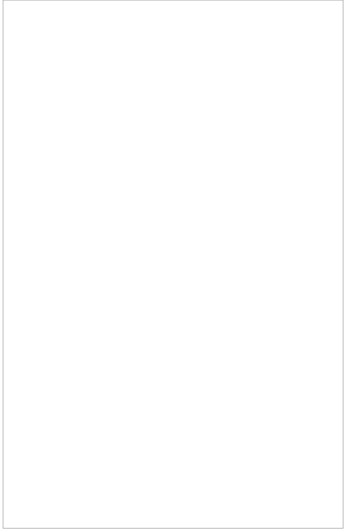


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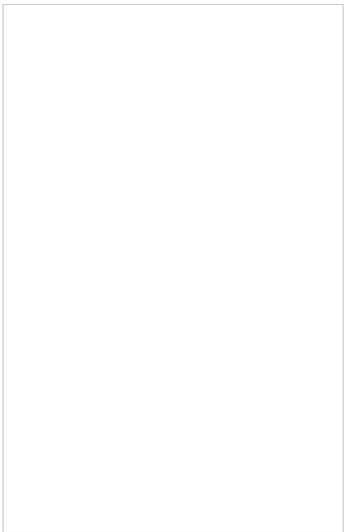


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254834

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

254833

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

216423

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

218153

Eaton Moeller® series M22 Butt  
flat red

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### GENERAL SPECIFICATIONS

General specifications	>	PRODUCTNAME	Eaton Moeller® series Z5 Thermal overload relay
		CATALOG NUMBER	210071
Product specifications	>	MODEL CODE	Z5-100/FF250
		EAN	4015082100711
		PRODUCTLENGTH/DEPTH	146 mm
		PRODUCTHEIGHT	167 mm
		PRODUCTWIDTH	128 mm
		PRODUCTWEIGHT	1.727 kg

### CERTIFICATIONS

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

PRODUCT SPECIFICATIONS

<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	100 A
<b>TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)</b>	2 x (0.75 - 2.5) mm², Control circuit cables 1 x (0.75 - 2.5) mm², Control circuit cables
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility. The specification must be observed.
<b>STRIPPING LENGTH (CONTROL CIRCUIT CABLE)</b>	8 mm
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN</b>	25 °C
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility. The specification must be observed.
<b>MOUNTING METHOD</b>	Direct mounting Direct attachment Separate mounting
<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX</b>	40 °C
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<b>RESET FUNCTION</b>	Automatic Push-button
<b>SHORT-CIRCUIT CURRENT RATING (BASIC RATING)</b>	10 kA, SCCR (UL/CSA) 400 A, max. CB, SCCR (UL/CSA) 400 A Class J, max. Fuse, SCCR (UL/CSA)
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>SCREW SIZE</b>	M10 x 35, Terminal screw, Main connections M3.5, Terminal screw, Control circuit cables
<b>ADJUSTABLE CURRENT RANGE - MIN</b>	70 A
<b>TERMINAL CAPACITY (FLEXIBLE WITH CABLE LUG)</b>	185 mm²
<b>PROTECTION</b>	With terminal cover, Protection against direct contact front (EN 50274)
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	60 °C
<b>CLIMATIC PROOFING</b>	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
<b>FEATURES</b>	Trip-free release Phase-failure sensitivity (according to IEC/EN 60941-102) Test/off button Reset pushbutton manual/auto
<b>STATIC HEAT DISSIPATION. NON-CURRENT-</b>	

HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	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
TERMINAL CAPACITY (BUSBAR)	25 mm width, Main connection
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be considered.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be considered.
SAFE ISOLATION	240 V AC, Between auxiliary contacts, According to EN 60947-2 500 V AC, Between main circuits, According to EN 60947-2 440 V, Between auxiliary contacts and main contacts, According to EN 60947-2 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 instructions in the instruction leaflet (IL) is observed.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to be considered.
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 be considered.
RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V	0.9 A
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	7.9 W
PRODUCT CATEGORY	Overload relay Z5
OVERLOAD RELEASE CURRENT SETTING - MIN	70 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 60 V	0.75 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	23.7 W
HEAT DISSIPATION CAPACITY PDISS	0 W
SUITABLE FOR	Branch circuits, (UL/CSA)
TERMINAL CAPACITY (STRANDED WITH CABLE LUG)	185 mm²
TEMPERATURE COMPENSATION	Continuous ≤ 0.25 %/K, residual error for T > 40°

<b>TERMINAL CAPACITY (SOLID)</b>	2 x (0.75 - 4) mm <sup>2</sup> , Control circuit cables 1 x (0.75 - 4) mm <sup>2</sup> , Control circuit cables
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b>	1
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>WIDTH ACROSS FLATS</b>	16 mm (Hexagon head spanner SW)
<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 220 V, 230 V</b>	0.2 A
<b>CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN)</b>	6 A
<b>OVERLOAD RELEASE CURRENT SETTING - MAX</b>	100 A
<b>TERMINAL CAPACITY (SOLID/STRANDED AWG)</b>	2/0 - 500 MCM, Main cables 2 x (18 - 14), Control circuit cables
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>DEGREE OF PROTECTION</b>	IP00
<b>OVERVOLTAGE CATEGORY</b>	III
<b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>	0
<b>POLLUTION DEGREE</b>	3
<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>	4000 V (auxiliary and control circuits) 8000 V AC
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the devi
<b>TIGHTENING TORQUE</b>	1.2 Nm, Screw terminals, Control circuit cables 18 Nm, Main cable connection screw/bolt
<b>ADJUSTABLE CURRENT RANGE - MAX</b>	100 A
<b>SCREWDRIVER SIZE</b>	2, Terminal screw, Control circuit cables, Pozidriv 1 x 6 mm, Terminal screw, Control circuit cables, S
<b>RATED OPERATIONAL CURRENT (IE) AT AC-15, 120 V</b>	1.5 A
<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	Meets the product standard's requirements.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.
<b>NUMBER OF CONTACTS (NORMALLY OPEN</b>	1

<b>CONTACTS)</b>	
<b>SHORT-CIRCUIT PROTECTION RATING</b>	Max. 6 A gG/gL, fuse, Without welding, Auxiliary 200 A gG/gL, Fuse, Type “2” coordination 315 A gG/gL, Fuse, Type “1” coordination
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>	1
<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 110 V</b>	0.4 A
<b>RATED OPERATIONAL VOLTAGE (UE) - MAX</b>	1000 V
<b>SHOCK RESISTANCE</b>	10 g, Mechanical, Sinusoidal, Shock duration 10 m
<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V</b>	0.9 A
<b>SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)</b>	R300, DC operated (UL/CSA) B300 at opposite polarity, AC 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



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