Miniature Circuit Breakers and Supplementary Protectors

UL 1077 DIN Rail Supplementary Protectors

WMZS Circuit Breakers

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WMZS Circuit Breaker

Product Overview

Optimum product quality, tested reliability and safety stand for best protection of personnel, installations and plant. Eaton's WMZS DIN rail mountable circuit breaker is designed for use in control panel applications. The WMZS is available with B, C and D characteristics in accordance with UL 1077, CSA C22.2 No.235 and IEC 60947-2.

Application Description

Supplementary protection:

- Control circuits
- Lighting
- Business equipment
- Appliances

Features

- Complete range of UL 1077 Recognized DIN rail mounted miniature circuit breakers up to 63A current rating
- Standard ratings of 10 kAIC at 277/480 Vac
- Current limiting design provides fast short-circuit interruption that reduces the let-through energy, which can damage the circuit
- Offers supplementary protection
- Thermal-magnetic overcurrent protection
 - Three levels of shortcircuit protection, categorized by B, C and D curves

- Trip-free design—breaker can not be defeated by holding the handle in the ON position
- Captive screws cannot
 be lost
- Fulfill UL 1077, CSA C22.2 No.235 and also IEC 60947-2 Standard
- Field-installable shunt trip and auxiliary switch subsequent mounting
- Module width of only 0.69 inches (17.5 mm) per pole
- Contact Position Indicator (red/green)
- Easy installation on DIN rail
- Possibility for sealing the toggle in ON or OFF position

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UL 1077 DIN Rail Supplementary Protectors

Advanced Features

Breakers install on standard DIN rail

Available in single-, two- and three-pole models

Color-coded indicator provides breaker status for easy troubleshooting



E-T-N

C20 10000 3 WMZS1C20 Captive posidrive terminal screws with finger and backof-hand protection (IP20)

Trip-free design; breaker cannot be defeated by holding the handle in the ON position

Breaker information printed on the front of the device for quick identification

Standards and Certifications

Worldwide Acceptance

WMZS Supplementary Protectors are UL Recognized for use in the United States in accordance with NFPA® 70 (NEC). The devices comply with UL 1077 and CSA 22.2 No. 235, meeting the requirements for supplementary protectors. These devices are for international and domestic use, and also comply with IEC 60947-2 and are CE marked. These devices are RoHS compliant.



06 = 6A

20 = 20A

Catalog Number Selection

| <u>WMZS 1 B 10</u> | | | | | |
|--------------------------------|-----------------|--|------------------|-----------------|-----------------|
| Breaker Family | | | | Ampere Rat | ing |
| WMZS = Supplementary Protector | Number of Poles | Protective Curve | 00 = 0.5A | 07 = 7A | 25 = 25A |
| | 1 = Single-pole | $\mathbf{B} = B Curve (3-5X I_n)$ | 01 = 1A | 08 = 8A | 30 = 30A |
| | 2 = Two-pole | $C = C Curve (5-10X I_p)$ | 02 = 2A | 10 = 10A | 32 = 32A |
| | 3 = Three-pole | $\mathbf{D} = D$ Curve (10–20X I _n) | 03 = 3A | 13 = 13A | 40 = 40A |
| | | $\mathbf{D} = \mathbf{D} \operatorname{Guive} (10 - 20 \times I_{\mathrm{n}})$ | 04 = 4A | 15 = 15A | 50 = 50A |
| | | | 05 = 5A | 16 = 16A | 63 = 63A |

Product Selection

WMZS Product Selection—B Curve (3–5X In Current Rating)

Suitable for applications where protection against low level short circuit faults in control wiring is desired. Instantaneous trip is 3–5X continuous rating of device (In). Applications include PLC wiring, business equipment, lighting, appliances and some motors. Low magnetic trip point.

Single-Pole

B Curve (3–5X In Current Rating)-**Designed for Resistive or Slightly** Inductive Loads 123



Two-Pole



Three-Pole



| | Single-Pole | Two-Pole | Three-Pole | |
|---------|-------------------|-------------------|-------------------|--|
| Amperes | Catalog Number | Catalog Number | Catalog Number | |
| 6 | WMZS1B06 | WMZS2B06 | WMZS3B06 | |
| 7 | WMZS1B07 | WMZS2B07 | WMZS3B07 | |
| 8 | WMZS1B08 | WMZS2B08 | WMZS3B08 | |
| 10 | WMZS1B10 | WMZS2B10 | WMZS3B10 | |
| 13 | WMZS1B13 | WMZS2B13 | WMZS3B13 | |
| 15 | WMZS1B15 | WMZS2B15 | WMZS3B15 | |
| 16 | WMZS1B16 | WMZS2B16 | WMZS3B16 | |
| 20 | WMZS1B20 | WMZS2B20 | WMZS3B20 | |
| 25 | WMZS1B25 | WMZS2B25 | WMZS3B25 | |
| 30 | WMZS1B30 | WMZS2B30 | WMZS3B30 | |
| 32 | WMZS1B32 | WMZS2B32 | WMZS3B32 | |
| 40 | WMZS1B40 | WMZS2B40 | WMZS3B40 | |
| 50 | WMZS1B50 | WMZS2B50 | WMZS3B50 | |
| 63 | WMZS1B63 | WMZS2B63 | WMZS3B63 | |

| WM7S Product | Selection— | C Curve | (5-10X I | Current Rating) |
|----------------|------------|---------|----------|-----------------|
| TTTLO I TOUUCI | 0010001011 | | J IUNIn | ourront nating/ |

Suitable for applications where medium levels of inrush current are expected. Instantaneous trip is 5–10X rating of device (In). Applications include small transformers, lighting, pilot devices, control circuits, and coils. Medium magnetic trip point.

| Single-Pole | C Curve (5–10X In Current Rating)— Designed for Inductive Loads 145 | | | |
|-------------|--|-------------------|-------------------|-------------------|
| | | Single-Pole | Two-Pole | Three-Pole |
| | Amperes | Catalog Number | Catalog Number | Catalog Number |
| | 0.5 | WMZS1C00 | WMZS2C00 | WMZS3C00 |
| | 1 | WMZS1C01 | WMZS2C01 | WMZS3C01 |
| | 2 | WMZS1C02 | WMZS2C02 | WMZS3C02 |
| Two-Pole | 3 | WMZS1C03 | WMZS2C03 | WMZS3C03 |
| | 4 | WMZS1C04 | WMZS2C04 | WMZS3C04 |
| | 5 | WMZS1C05 | WMZS2C05 | WMZS3C05 |
| | 6 | WMZS1C06 | WMZS2C06 | WMZS3C06 |
| | 7 | WMZS1C07 | WMZS2C07 | WMZS3C07 |
| | 8 | WMZS1C08 | WMZS2C08 | WMZS3C08 |
| | 10 | WMZS1C10 | WMZS2C10 | WMZS3C10 |
| | 13 | WMZS1C13 | WMZS2C13 | WMZS3C13 |
| Three-Pole | 15 | WMZS1C15 | WMZS2C15 | WMZS3C15 |
| | 16 | WMZS1C16 | WMZS2C16 | WMZS3C16 |
| | 20 | WMZS1C20 | WMZS2C20 | WMZS3C20 |
| 0.0.0. | 25 | WMZS1C25 | WMZS2C25 | WMZS3C25 |
| | 30 | WMZS1C30 | WMZS2C30 | WMZS3C30 |
| | 32 | WMZS1C32 | WMZS2C32 | WMZS3C32 |
| | 40 | WMZS1C40 | WMZS2C40 | WMZS3C40 |
| | 50 | WMZS1C50 | WMZS2C50 | WMZS3C50 |
| | 63 | WMZS1C63 | WMZS2C63 | WMZS3C63 |
| | | | | |

Notes

① In North America, these switches are UL recognized and CSA certified as Supplementary Protection devices. Per the intent of NEC (National Electrical Code), Article 240, and CEC (Canadian Electrical Code), Part 1 C22.1, supplementary breakers cannot be used as a substitute for the branch circuit protective device. They can be used to provide overcurrent protection within an appliance or other electrical equipment where branch circuit overcurrent protection is already provided, or is not required.

② Designed for resistive or slightly inductive loads.

 $\ensuremath{^{\circ}}$ Response time of instantaneous trip: 3–5X $\ensuremath{\mathsf{I}_{n}}$ current rating.

④ Designed for inductive loads.

⁽⁶⁾ Response time of instantaneous trip: 5–10X I_n current rating.