# Miniature Circuit Breakers and Supplementary Protectors

# UL 489 DIN Rail Miniature Circuit Breakers

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FAZ-NA Circuit Breakers

**Optimum and Efficient Protection for Every Application** 

# FAZ-NA Circuit Breakers

#### **Product Overview**

Optimum product quality. tested reliability and safety stand for best protection of personnel, installations and plant. Eaton's FAZ-NA DIN rail mountable circuit breaker is designed for use in branch service applications.

#### Powerful Offering for Machine and System Builders

The FAZ-NA is available with B, C and D characteristics in accordance with UL® 489. CSA® C22.2 No.5; UL 1077, CSA C22.2 No.235 and IEC 60947-2. These devices are CE marked.

## Application Description

Feeder and branch circuit protection for:

- Convenience receptacle circuits (internal/external)
- Motor control circuits
- Load circuits leaving the equipment (external)
- HACR internal/external equipment (heating, air conditioning, refrigeration)
- PLC I/O points
- Computers
- Power supplies
- Control instrumentation
- Relays
- UPS
- Power conditioners •

# **Features**

- Complete range of UL 489 listed DIN rail mounted miniature circuit breakers up to 40A current rating
- Standard ratings of 10 kAIC • up to 277/480 Vac
- Select amperages available at 14 kAIC up to 277/480 Vac and 10 kAIC up to 125 Vdc per pole
- Current limiting design provides fast short-circuit interruption that reduces the let-through energy, which can damage the circuit
- Suitable for branch circuit device 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

- SWD (switching duty)suitable for switching fluorescent lighting loads  $(I_n \le 20A)$
- Fulfill UL 489. CSA C22.2 No.5 and also IEC 60947-2 Standard
- For use in applications for which UL 1077 or CSA C22.2 No.235 are also allowed
- Field-installable shunt trip and auxiliary switch subsequent mounting
- Separate version for ringtongue connection (Type FAZ-RT), terminal screws can be removed (on both sides)
- Module width of only 17.7 mm (per pole)
- Contact Position Indicator (red/green)
- Easy installation on DIN rail
- Possibility for sealing the toggle in ON or OFF position

## **Device Printing on Front and Side** Installation options

These branch circuit breakers are available in two terminal configurations: standard box terminals that accept multiple conductors and ring-tongue terminals, ideally suited to demanding requirements of the semi-conductor industry. All breakers mount on standard 35 mm DIN rail. Bus connectors and feeder terminal facilitate mounting and wiring of multiple miniature circuit breaker arrays in control panel assemblies. These circuit breakers can also be reverse feed.

# **Contents** Description FAZ-NA Circuit Breakers

# 1

# Standards and Certifications

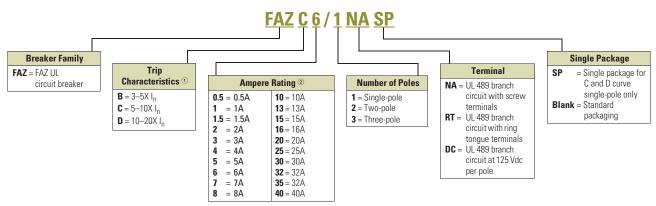
FAZ-NA complies with the latest national and international standards.

- UL 489
  - Standard for molded case circuit breakers (MCCB) for feeder and branch circuit protection
  - Products meet the requirements of the National Electrical Code<sup>®</sup> (NEC<sup>®</sup>)
- CSA C22.2 No.5
  - Standard for molded case circuit breakers (MCCB) for feeder and branch circuit protection (corresponds closely to UL 489 Standard)
  - Products meet the requirements of the Canadian Electrical Code (CEC)

# **Catalog Number Selection**

- RoHS compliantVDE compliant
- ABS compliant





#### Notes

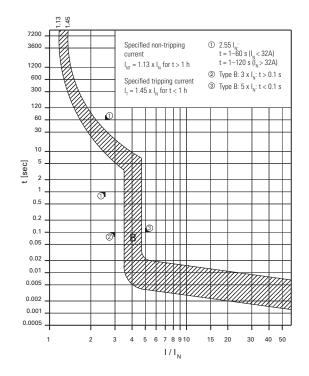
 $\bigcirc$  I<sub>n</sub> = Rated current for instantaneous trip characteristics.

B curve starts at 1 ampere.

## **Product Selection**

# FAZ-NA B Curve

- UL approved (UL 489) and CSA Certified (CSA C22.2 No.5-02) as branch circuit breakers
- Interrupting capacity: 10 kA UL/CSA; 15 kA IEC 60947-2
- Current limiting device
- UL file number E235139 •



Single-Pole



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35 ©

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Two-Pole



Three-Pole



Amperes	Catalog Number	Catalog Number	Catalog Number
B Curve	(3–5X I <sub>n</sub> Currer	nt Rating)	
1	FAZ-B1/1-NA	FAZ-B1/2-NA	FAZ-B1/3-NA
1.5	FAZ-B1.5/1-NA	FAZ-B1.5/2-NA	FAZ-B1.5/3-NA
2	FAZ-B2/1-NA	FAZ-B2/2-NA	FAZ-B2/3-NA

FAZ-B3/2-NA

FAZ-B4/2-NA

FAZ-B5/2-NA

FAZ-B6/2-NA

FAZ-B7/2-NA

FAZ-B8/2-NA

FAZ-B10/2-NA

FAZ-B13/2-NA

FAZ-B15/2-NA

FAZ-B16/2-NA

FAZ-B20/2-NA

FAZ-B25/2-NA

FAZ-B30/2-NA

FAZ-B32/2-NA

FAZ-B35/2-NA

FAZ-B40/2-NA

Single-Pole 1 Two-Pole

FAZ-NA UL 489 Circuit Breakers – 10 kAIC,

14 kAIC B Curve (15-25A)

FAZ-B3/1-NA

FAZ-B4/1-NA

FAZ-B5/1-NA

FAZ-B6/1-NA

FAZ-B7/1-NA

FAZ-B8/1-NA

FAZ-B10/1-NA

FAZ-B13/1-NA

FAZ-B15/1-NA

FAZ-B16/1-NA

FAZ-B20/1-NA

FAZ-B25/1-NA

FAZ-B30/1-NA

FAZ-B32/1-NA

FAZ-B35/1-NA

FAZ-B40/1-NA

Two-Pole FAZ-B3/3-NA

Three-Pole

FAZ-B4/3-NA

FAZ-B5/3-NA

FAZ-B6/3-NA

FAZ-B7/3-NA

FAZ-B8/3-NA

FAZ-B10/3-NA

FAZ-B13/3-NA

FAZ-B15/3-NA

FAZ-B16/3-NA

FAZ-B20/3-NA

FAZ-B25/3-NA

FAZ-B30/3-NA

FAZ-B32/3-NA

FAZ-B35/3-NA

FAZ-B40/3-NA



Single-Pole



**FAZ-RT UL 489 Circuit Breakers with** Ring-Tongue Terminals-10 kAIC, 14 kAIC B Curve (15–25A)

Amperes	Single-Pole ① Catalog Number	Two-Pole Catalog Number	Three-Pole Catalog Number
	with Ring-Ton Current Rating		
1	FAZ-B1/1-RT	FAZ-B1/2-RT	FAZ-B1/3-RT
1.5	FAZ-B1.5/1-RT	FAZ-B1.5/2-RT	FAZ-B1.5/3-R1
2	FAZ-B2/1-RT	FAZ-B2/2-RT	FAZ-B2/3-RT
3	FAZ-B3/1-RT	FAZ-B3/2-RT	FAZ-B3/3-RT
4	FAZ-B4/1-RT	FAZ-B4/2-RT	FAZ-B4/3-RT
5	FAZ-B5/1-RT	FAZ-B5/2-RT	FAZ-B5/3-RT
6	FAZ-B6/1-RT	FAZ-B6/2-RT	FAZ-B6/3-RT
7	FAZ-B7/1-RT	FAZ-B7/2-RT	FAZ-B7/3-RT
8	FAZ-B8/1-RT	FAZ-B8/2-RT	FAZ-B8/3-RT
10	FAZ-B10/1-RT	FAZ-B10/2-RT	FAZ-B10/3-RT
13	FAZ-B13/1-RT	FAZ-B13/2-RT	FAZ-B13/3-RT
15	FAZ-B15/1-RT	FAZ-B15/2-RT	FAZ-B15/3-RT
16	FAZ-B16/1-RT	FAZ-B16/2-RT	FAZ-B16/3-RT
20	FAZ-B20/1-RT	FAZ-B20/2-RT	FAZ-B20/3-RT
25	FAZ-B25/1-RT	FAZ-B25/2-RT	FAZ-B25/3-RT
30	FAZ-B30/1-RT	FAZ-B30/2-RT	FAZ-B30/3-RT
32	FAZ-B32/1-RT	FAZ-B32/2-RT	FAZ-B32/3-RT
35 ©	FAZ-B35/1-RT	FAZ-B35/2-RT	FAZ-B35/3-RT
40 @	FAZ-B40/1-RT	FAZ-B40/2-RT	FAZ-B40/3-RT

#### Notes

① Two-piece order. Quantities of two per box.

240 Vac rated only.

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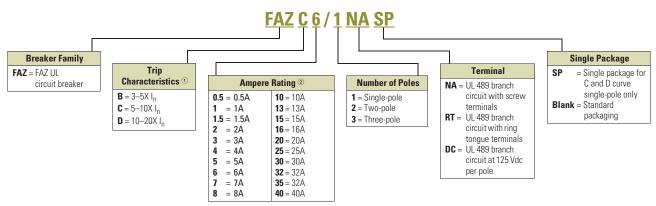
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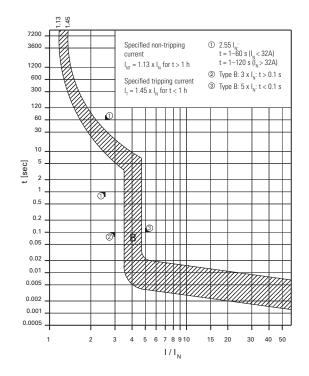
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2	FAZ-B2/1-NA	FAZ-B2/2-NA	FAZ-B2/3-NA

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FAZ-B4/2-NA

FAZ-B5/2-NA

FAZ-B6/2-NA

FAZ-B7/2-NA

FAZ-B8/2-NA

FAZ-B10/2-NA

FAZ-B13/2-NA

FAZ-B15/2-NA

FAZ-B16/2-NA

FAZ-B20/2-NA

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FAZ-B32/2-NA

FAZ-B35/2-NA

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Single-Pole 1 Two-Pole

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FAZ-B13/1-NA

FAZ-B15/1-NA

FAZ-B16/1-NA

FAZ-B20/1-NA

FAZ-B25/1-NA

FAZ-B30/1-NA

FAZ-B32/1-NA

FAZ-B35/1-NA

FAZ-B40/1-NA

Two-Pole FAZ-B3/3-NA

Three-Pole

FAZ-B4/3-NA

FAZ-B5/3-NA

FAZ-B6/3-NA

FAZ-B7/3-NA

FAZ-B8/3-NA

FAZ-B10/3-NA

FAZ-B13/3-NA

FAZ-B15/3-NA

FAZ-B16/3-NA

FAZ-B20/3-NA

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Single-Pole



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2	FAZ-B2/1-RT	FAZ-B2/2-RT	FAZ-B2/3-RT
3	FAZ-B3/1-RT	FAZ-B3/2-RT	FAZ-B3/3-RT
4	FAZ-B4/1-RT	FAZ-B4/2-RT	FAZ-B4/3-RT
5	FAZ-B5/1-RT	FAZ-B5/2-RT	FAZ-B5/3-RT
6	FAZ-B6/1-RT	FAZ-B6/2-RT	FAZ-B6/3-RT
7	FAZ-B7/1-RT	FAZ-B7/2-RT	FAZ-B7/3-RT
8	FAZ-B8/1-RT	FAZ-B8/2-RT	FAZ-B8/3-RT
10	FAZ-B10/1-RT	FAZ-B10/2-RT	FAZ-B10/3-RT
13	FAZ-B13/1-RT	FAZ-B13/2-RT	FAZ-B13/3-RT
15	FAZ-B15/1-RT	FAZ-B15/2-RT	FAZ-B15/3-RT
16	FAZ-B16/1-RT	FAZ-B16/2-RT	FAZ-B16/3-RT
20	FAZ-B20/1-RT	FAZ-B20/2-RT	FAZ-B20/3-RT
25	FAZ-B25/1-RT	FAZ-B25/2-RT	FAZ-B25/3-RT
30	FAZ-B30/1-RT	FAZ-B30/2-RT	FAZ-B30/3-RT
32	FAZ-B32/1-RT	FAZ-B32/2-RT	FAZ-B32/3-RT
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