**UL 1077 DIN Rail Supplementary Protectors** 

#### **FAZ Circuit Breakers**



**Optimum and Efficient Protection for Every Application** 

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#### **FAZ Circuit Breakers**

#### **Product Overview**

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

# Powerful offering for machine and system builders

The FAZ is available with B, C, D, K, S, and Z characteristics in accordance with UL 1077, CSA C22.2 No.235 and IEC 60947-2. These devices are CE marked.

## **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 up to 277/480 Vac
- Current limiting design provides fast short-circuit interruption that reduces the let-through energy, which can damage the circuit
- Suitable for supplementary protection
- Thermal-magnetic overcurrent protection
  - Six levels of short-circuit protection, categorized by B, C, D, K, S, and Z 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 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

UL 1077 DIN Rail Supplementary Protectors

#### **Discover These Advanced Features**

Breakers install on standard DIN rail

Available in one-, two-, three-, four-pole, 1+N and 3+N models

Color-coded indicator provides breaker status for easy troubleshooting



Captive Posidrive terminal screws with finger and back-ofhand 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

FAZ complies with the latest national and international standards.

- UL 1077, CSA C22.2 No. 235
  - Apply to supplementary protectors intended for use as overcurrent, or overvoltage or undervoltage protection within an appliance or other electrical equipment where branch circuit protection is already provided, or is not required
- · RoHS compliant
- VDE compliant
  - · Devices with B, C, and D curves are VDE compliant
- - Devices with B, C, and D curves are CCC compliant
- · ABS compliant









#### **Catalog Number Selection**



**Breaker Family** FAZ = Supplementary protector

Trip Characteristics ①  $B = 3-5X I_n$  $C = 5 - 10X I_n$  $\mathbf{D} = 10 - 20 \text{X I}_{\text{n}}$  $K = 8-12X I_n$  $S = 13-17X I_n$  $Z = 2 - 3X I_n$ 

	Amper	e Rating
0.5	= 0.5A	<b>13</b> = 13A
1	= 1A	<b>15</b> = 15A
2	= 2A	<b>16</b> = 16A
3	= 3A	<b>20</b> = 20A
4	= 4A	<b>25</b> = 25A
5	= 5A	<b>30</b> = 30A
6	= 6A	<b>32</b> = 32A
7	= 7A	<b>40</b> = 40A
8	= 8A	<b>50</b> = 50A
10	= 10A	<b>63</b> = 63A

Number of Poles		
1 = Single-pole	4 = Single-pole	
2 = Two-pole	1N = Single-pole +	
3 = Three-pole	neutral	
	3N = Three-pole +	
	neutral	

Single Package = Single packaging of singlepole curve B, C and D for select amperes only **Blank** = Standard packaging

#### Note

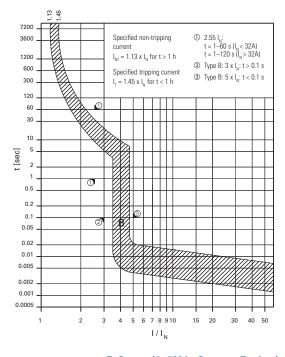
 $^{\circ}$   $I_n$  = Rated current for instantaneous trip characteristics.

#### **Product Selection**

### FAZ B curve (3–5X I<sub>n</sub> current rating)

- · Designed for resistive or slightly inductive loads
- Response time of instantaneous trip:  $3-5X I_n$  current rating
- UL recognized and CSA Certified as supplementary protectors
- For international and domestic use (conform to IEC 60947-2)
- UL file number 177451

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 ( $I_n$ ). Applications include PLC wiring, business equipment, lighting, appliances and some motors. Low magnetic trip point.



UL 1077 DIN Rail Supplementary Protectors

Single-Pole

# FACE HELD

Two-Pole

Three-Pole

B Curve (3–5X I<sub>n</sub> Current Rating) — Designed for Resistive or Slightly Inductive Loads **⊕** 

Amperes	Single-Pole <sup>②</sup> Catalog Number	Two-Pole Catalog Number	Three-Pole Catalog Number
1	FAZ-B1/1-SP	FAZ-B1/2	FAZ-B1/3
2	FAZ-B2/1-SP	FAZ-B2/2	FAZ-B2/3
3	FAZ-B3/1-SP	FAZ-B3/2	FAZ-B3/3
4	FAZ-B4/1-SP	FAZ-B4/2	FAZ-B4/3
5	FAZ-B5/1-SP	FAZ-B5/2	FAZ-B5/3
6	FAZ-B6/1-SP	FAZ-B6/2	FAZ-B6/3
7	FAZ-B7/1-SP	FAZ-B7/2	FAZ-B7/3
8	FAZ-B8/1-SP	FAZ-B8/2	FAZ-B8/3
10	FAZ-B10/1-SP	FAZ-B10/2	FAZ-B10/3
12	FAZ-B12/1-SP	FAZ-B12/2	FAZ-B12/3
13	FAZ-B13/1-SP	FAZ-B13/2	FAZ-B13/3
15	FAZ-B15/1-SP	FAZ-B15/2	FAZ-B15/3
16	FAZ-B16/1-SP	FAZ-B16/2	FAZ-B16/3
20	FAZ-B20/1-SP	FAZ-B20/2	FAZ-B20/3
25	FAZ-B25/1-SP	FAZ-B25/2	FAZ-B25/3
30	FAZ-B30/1-SP	FAZ-B30/2	FAZ-B30/3
32	FAZ-B32/1-SP	FAZ-B32/2	FAZ-B32/3
40	FAZ-B40/1-SP	FAZ-B40/2	FAZ-B40/3
50	FAZ-B50/1-SP	FAZ-B50/2	FAZ-B50/3
63	FAZ-B63/1-SP	FAZ-B63/2	FAZ-B63/3

Four-Pole



Single-Pole + Neutral



Three-Pole + Neutral



B Curve (3–5X  $I_n$  Current Rating) — Designed for Resistive or Slightly Inductive Loads, continued  $^{\odot}$ 

Single-Pole

Three-Pole

	Four-Pole	+ Neutral	+ Neutral
Amperes	Catalog Number	Catalog Number	Catalog Number
1	FAZ-B1/4	FAZ-B1/1N	FAZ-B1/3N
2	FAZ-B2/4	FAZ-B2/1N	FAZ-B2/3N
3	FAZ-B3/4	FAZ-B3/1N	FAZ-B3/3N
4	FAZ-B4/4	FAZ-B4/1N	FAZ-B4/3N
5	FAZ-B5/4	FAZ-B5/1N	FAZ-B5/3N
6	FAZ-B6/4	FAZ-B6/1N	FAZ-B6/3N
7	FAZ-B7/4	FAZ-B7/1N	FAZ-B7/3N
8	FAZ-B8/4	FAZ-B8/1N	FAZ-B8/3N
10	FAZ-B10/4	FAZ-B10/1N	FAZ-B10/3N
12	FAZ-B12/4	FAZ-B12/1N	FAZ-B12/3N
13	FAZ-B13/4	FAZ-B13/1N	FAZ-B13/3N
15	FAZ-B15/4	FAZ-B15/1N	FAZ-B15/3N
16	FAZ-B16/4	FAZ-B16/1N	FAZ-B16/3N
20	FAZ-B20/4	FAZ-B20/1N	FAZ-B20/3N
25	FAZ-B25/4	FAZ-B25/1N	FAZ-B25/3N
30	FAZ-B30/4	FAZ-B30/1N	FAZ-B30/3N
32	FAZ-B32/4	FAZ-B32/1N	FAZ-B32/3N
40	FAZ-B40/4	FAZ-B40/1N	FAZ-B40/3N
50	FAZ-B50/4	FAZ-B50/1N	FAZ-B50/3N
63	FAZ-B63/4	FAZ-B63/1N	FAZ-B63/3N

#### 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 Option for single packaging on single-pole B, C and D curves only; add suffix SP when ordering.