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

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
- CCC
 - Devices with B, C, and D curves are CCC compliant
- ABS compliant











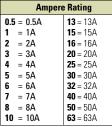
Catalog Number Selection



FAZ = Supplementary protector

Characteristics B = 3-5X I_n C = 5-10X I_n D = 10-20X I_n K = 8-12X I_n S = 13-17X I_n Z = 2-3X I_n

Trip



Number of Poles

1 = Single-pole
2 = Two-pole
3 = Three-pole
3N = Three-pole + neutral

Single Package

SP = Single packaging of single-pole curve B, C and D for select amperes only

Blank = Standard packaging

Note

① I_n = Rated current for instantaneous trip characteristics.

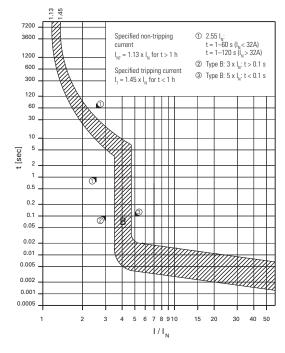
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Product Selection

FAZ B curve (3-5X I_n 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.



Single-Pole



Two-Pole



Three-Pole



B Curve (3–5X I_n Current Rating) – Designed for Resistive or Slightly Inductive Loads ①

Amperes	Single-Pole ^② 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 ^①

Amperes	Four-Pole Catalog Number	Single-Pole + Neutral Catalog Number	Three-Pole + Neutral 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

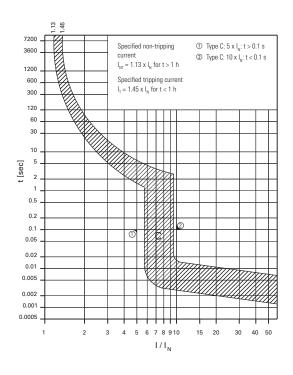
① In North America, these switches are UL recognized and CSA Certified as supplementary protection devices. Per the intent of NEC (National Electrical Code), Article 240, and CEC (Canadian Electrical Code), Part 1 C22.1, supplementary breakers cannot be used as a substitute for the branch circuit protective 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.

FAZ C curve (5-10X I_n current rating)

- Designed for inductive loads
- Response time of instantaneous trip: $5-10X I_n$ 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 medium levels of inrush current are expected. Instantaneous trip is 5–10X rating of device (I_n) . Applications include small transformers, lighting, pilot devices, control circuits and coils. Medium magnetic trip point.



Single-Pole

Two-Pole



Three-Pole



C Curve (5-10X I_n Current Rating) — **Designed Inductive Loads ①**

	Single-Pole ^②	Two-Pole	Three-Pole
Amperes	Catalog Number	Catalog Number	Catalog Number
0.5	FAZ-C0.5/1-SP	FAZ-C0.5/2	FAZ-C0.5/3
1	FAZ-C1/1-SP	FAZ-C1/2	FAZ-C1/3
1.6	FAZ-C1.6/1-SP	FAZ-C1.6/2	FAZ-C1.6/3
2	FAZ-C2/1-SP	FAZ-C2/2	FAZ-C2/3
3	FAZ-C3/1-SP	FAZ-C3/2	FAZ-C3/3
4	FAZ-C4/1-SP	FAZ-C4/2	FAZ-C4/3
5	FAZ-C5/1-SP	FAZ-C5/2	FAZ-C5/3
6	FAZ-C6/1-SP	FAZ-C6/2	FAZ-C6/3
7	FAZ-C7/1-SP	FAZ-C7/2	FAZ-C7/3
8	FAZ-C8/1-SP	FAZ-C8/2	FAZ-C8/3
10	FAZ-C10/1-SP	FAZ-C10/2	FAZ-C10/3
13	FAZ-C13/1-SP	FAZ-C13/2	FAZ-C13/3
15	FAZ-C15/1-SP	FAZ-C15/2	FAZ-C15/3
16	FAZ-C16/1-SP	FAZ-C16/2	FAZ-C16/3
20	FAZ-C20/1-SP	FAZ-C20/2	FAZ-C20/3
25	FAZ-C25/1-SP	FAZ-C25/2	FAZ-C25/3
30	FAZ-C30/1-SP	FAZ-C30/2	FAZ-C30/3
32	FAZ-C32/1-SP	FAZ-C32/2	FAZ-C32/3
40	FAZ-C40/1-SP	FAZ-C40/2	FAZ-C40/3
50	FAZ-C50/1-SP	FAZ-C50/2	FAZ-C50/3
63	FAZ-C63/1-SP	FAZ-C63/2	FAZ-C63/3

Four-Pole

Designed Inductive Loads, continued ①



Single-Pole + Neutral



Three-Pole + Neutral



C Curve (5-10X I_n Current Rating) -

	Four-Pole	Single-Pole + Neutral	Three-Pole + Neutral
Amperes	Catalog Number	Catalog Number	Catalog Number
0.5	FAZ-C0.5/4	FAZ-C0.5/1N	FAZ-C0.5/3N
1	FAZ-C1/4	FAZ-C1/1N	FAZ-C1/3N
1.6	FAZ-C1.6/4	FAZ-C1.6/1N	FAZ-C1.6/3N
2	FAZ-C2/4	FAZ-C2/1N	FAZ-C2/3N
3	FAZ-C3/4	FAZ-C3/1N	FAZ-C3/3N
4	FAZ-C4/4	FAZ-C4/1N	FAZ-C4/3N
5	FAZ-C5/4	FAZ-C5/1N	FAZ-C5/3N
6	FAZ-C6/4	FAZ-C6/1N	FAZ-C6/3N
7	FAZ-C7/4	FAZ-C7/1N	FAZ-C7/3N
8	FAZ-C8/4	FAZ-C8/1N	FAZ-C8/3N
10	FAZ-C10/4	FAZ-C10/1N	FAZ-C10/3N
13	FAZ-C13/4	FAZ-C13/1N	FAZ-C13/3N
15	FAZ-C15/4	FAZ-C15/1N	FAZ-C15/3N
16	FAZ-C16/4	FAZ-C16/1N	FAZ-C16/3N
20	FAZ-C20/4	FAZ-C20/1N	FAZ-C20/3N
25	FAZ-C25/4	FAZ-C25/1N	FAZ-C25/3N
32	FAZ-C32/4	FAZ-C32/1N	FAZ-C32/3N
40	FAZ-C40/4	FAZ-C40/1N	FAZ-C40/3N
50	FAZ-C50/4	FAZ-C50/1N	FAZ-C50/3N
63	FAZ-C63/4	FAZ-C63/1N	FAZ-C63/3N

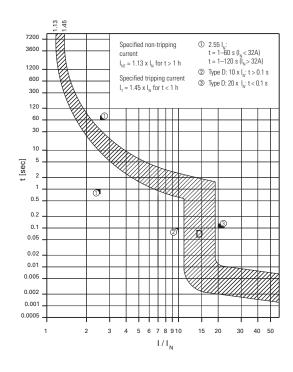
- 10 In North America, these switches are UL recognized and CSA Certified as supplementary protection devices. Per the intent of NEC (National Electrical Code), Article 240, and CEC (Canadian Electrical Code), Part 1 C22.1, supplementary breakers cannot be used as a substitute for the branch circuit 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.

1

FAZ D curve (10-20X I_n current rating)

- · Designed for highly inductive loads
- Response time of instantaneous trip: 10–20X 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 high levels of inrush current are expected. Instantaneous trip is 10–20X rating of device (I_n). The high magnetic trip point prevents nuisance tripping in high inductive applications such as motors, transformers and power supplies.



Single-Pole

Two-Pole



Three-Pole



D Curve (10–20X I_n Current Rating)— Designed for Inductive Loads ^①

Amperes	Single-Pole ^② Catalog Number	Two-Pole Catalog Number	Three-Pole Catalog Number
0.5	FAZ-D0.5/1-SP	FAZ-D0.5/2	FAZ-D0.5/3
1	FAZ-D1/1-SP	FAZ-D1/2	FAZ-D1/3
2	FAZ-D2/1-SP	FAZ-D2/2	FAZ-D2/3
3	FAZ-D3/1-SP	FAZ-D3/2	FAZ-D3/3
4	FAZ-D4/1-SP	FAZ-D4/2	FAZ-D4/3
5	FAZ-D5/1-SP	FAZ-D5/2	FAZ-D5/3
6	FAZ-D6/1-SP	FAZ-D6/2	FAZ-D6/3
7	FAZ-D7/1-SP	FAZ-D7/2	FAZ-D7/3
8	FAZ-D8/1-SP	FAZ-D8/2	FAZ-D8/3
10	FAZ-D10/1-SP	FAZ-D10/2	FAZ-D10/3
13	FAZ-D13/1-SP	FAZ-D13/2	FAZ-D13/3
15	FAZ-D15/1-SP	FAZ-D15/2	FAZ-D15/3
16	FAZ-D16/1-SP	FAZ-D16/2	FAZ-D16/3
20	FAZ-D20/1-SP	FAZ-D20/2	FAZ-D20/3
25	FAZ-D25/1-SP	FAZ-D25/2	FAZ-D25/3
30	FAZ-D30/1-SP	FAZ-D30/2	FAZ-D30/3
32	FAZ-D32/1-SP	FAZ-D32/2	FAZ-D32/3
40	FAZ-D40/1-SP	FAZ-D40/2	FAZ-D40/3
50 ③	FAZ-D50/1-SP	FAZ-D50/2	FAZ-D50/3
63 ③	FAZ-D63/1-SP	FAZ-D63/2	FAZ-D63/3

Four-Pole

D Curve (10–20X I_n Current Rating) — Designed for Inductive Loads, continued ①

Single-Pole

Three-Pole



Single-Pole + Neutral



Three-Pole + Neutral



	Four-Pole Catalog	+ Neutral Catalog	+ Neutral Catalog
Amperes	Number	Number	Number
0.5	FAZ-D0.5/4	FAZ-D0.5/1N	FAZ-D0.5/3N
1	FAZ-D1/4	FAZ-D1/1N	FAZ-D1/3N
2	FAZ-D2/4	FAZ-D2/1N	FAZ-D2/3N
3	FAZ-D3/4	FAZ-D3/1N	FAZ-D3/3N
4	FAZ-D4/4	FAZ-D4/1N	FAZ-D4/3N
5	FAZ-D5/4	FAZ-D5/1N	FAZ-D5/3N
6	FAZ-D6/4	FAZ-D6/1N	FAZ-D6/3N
7	FAZ-D7/4	FAZ-D7/1N	FAZ-D7/3N
8	FAZ-D8/4	FAZ-D8/1N	FAZ-D8/3N
10	FAZ-D10/4	FAZ-D10/1N	FAZ-D10/3N
13	FAZ-D13/4	FAZ-D13/1N	FAZ-D13/3N
15	FAZ-D15/4	FAZ-D15/1N	FAZ-D15/3N
16	FAZ-D16/4	FAZ-D16/1N	FAZ-D16/3N
20	FAZ-D20/4	FAZ-D20/1N	FAZ-D20/3N
25	FAZ-D25/4	FAZ-D25/1N	FAZ-D25/3N
30	FAZ-D30/4	FAZ-D30/1N	FAZ-D30/3N
32	FAZ-D32/4	FAZ-D32/1N	FAZ-D32/3N
40	FAZ-D40/4	FAZ-D40/1N	FAZ-D40/3N
50 ③	FAZ-D50/4	FAZ-D50/1N	FAZ-D50/3N
63 ③	FAZ-D63/4	FAZ-D63/1N	FAZ-D63/3N

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.

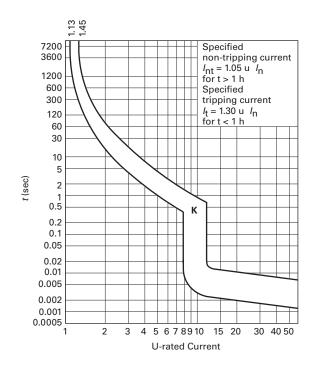
② Option for single packaging on single-pole B, C and D curves only; add suffix SP when ordering.

③ IEC 60947-2 only.

FAZ K curve (8-12X I_n current rating)

- Designed for motors, transformers and upstream electronics
- Response time of instantaneous trip: 8–12X 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 medium levels of inrush current are expected. Instantaneous trip is 8–12X rating of device (I_n) . Applications include small transformers, lighting, pilot devices, control circuits and coils. Medium magnetic trip point.



Single-Pole

Two-Pole



Three-Pole



K Curve (8–12X I_n Current Rating) — Designed for Inductive Loads 102

Amperes	Single-Pole ^③ Catalog Number	Two-Pole Catalog Number	Three-Pole Catalog Number
0.5	FAZ-K0.5/1	FAZ-K0.5/2	FAZ-K0.5/3
1	FAZ-K1/1	FAZ-K1/2	FAZ-K1/3
1.6	FAZ-K1.6/1	FAZ-K1.6/2	FAZ-K1.6/3
2	FAZ-K2/1	FAZ-K2/2	FAZ-K2/3
3	FAZ-K3/1	FAZ-K3/2	FAZ-K3/3
4	FAZ-K4/1	FAZ-K4/2	FAZ-K4/3
6	FAZ-K6/1	FAZ-K6/2	FAZ-K6/3
8	FAZ-K8/1	FAZ-K8/2	FAZ-K8/3
10	FAZ-K10/1	FAZ-K10/2	FAZ-K10/3
13	FAZ-K13/1	FAZ-K13/2	FAZ-K13/3
16	FAZ-K16/1	FAZ-K16/2	FAZ-K16/3
20	FAZ-K20/1	FAZ-K20/2	FAZ-K20/3
25	FAZ-K25/1	FAZ-K25/2	FAZ-K25/3
32	FAZ-K32/1	FAZ-K32/2	FAZ-K32/3
40	FAZ-K40/1	FAZ-K40/2	FAZ-K40/3
50	FAZ-K50/1	FAZ-K50/2	FAZ-K50/3
63	FAZ-K63/1	FAZ-K63/2	FAZ-K63/3

Four-Pole

K Curve (8–12X I_n Current Rating) — Designed for Inductive Loads, continued 102



Single-Pole + Neutral



Three-Pole + Neutral



	Four-Pole ^③ Catalog	+ Neutral Catalog	+ Neutral Catalog
Amperes	Number	Number	Number
0.5	FAZ-K0.5/4	FAZ-K0.5/1N	FAZ-K0.5/3N
1	FAZ-K1/4	FAZ-K1/1N	FAZ-K1/3N
1.6	FAZ-K1.6/4	FAZ-K1.6/1N	FAZ-K1.6/3N

FAZ-K2/4 FAZ-K2/1N FAZ-K2/3N 3 FAZ-K3/4 FAZ-K3/1N FAZ-K3/3N 4 FAZ-K4/4 FAZ-K4/1N FAZ-K4/3N 6 FAZ-K6/4 FAZ-K6/1N FAZ-K6/3N 8 FAZ-K8/4 FAZ-K8/1N FAZ-K8/3N 10 FAZ-K10/4 FAZ-K10/1N FAZ-K10/3N 13 FAZ-K13/4 FAZ-K13/1N FAZ-K13/3N 16 FAZ-K16/4 FAZ-K16/1N FAZ-K16/3N 20 FAZ-K20/4 FAZ-K20/1N FAZ-K20/3N 25 FAZ-K25/4 FAZ-K25/1N FAZ-K25/3N 32 FAZ-K32/4 FAZ-K32/1N FAZ-K32/3N 40 FAZ-K40/4 FAZ-K40/1N FAZ-K40/3N 50 FAZ-K50/4 FAZ-K50/1N FAZ-K50/3N

FAZ-K63/1N

FAZ-K63/4

- 10 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 These breakers are available by special order and may result in additional delivery time.
- ③ Two-piece box order, quantities of 2.

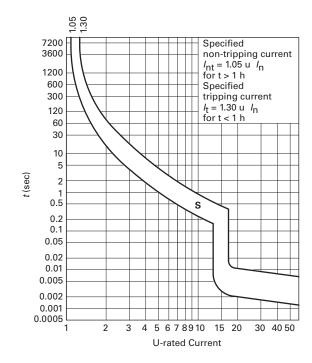
FAZ-K63/3N

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FAZ S curve (13–17X I_n current rating)

- Designed for control circuits with high inrush
- Response time of instantaneous trip: 13–17X 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 high levels of inrush current are expected. Instantaneous trip is 13–17X rating of device ($I_{\rm n}$). The high magnetic trip point prevents nuisance tripping in high inductive applications such as motors, transformers and power supplies.



Single-Pole

250

Two-Pole



S Curve (13–17X I_n Current Rating) — Designed for Inductive Loads (12)

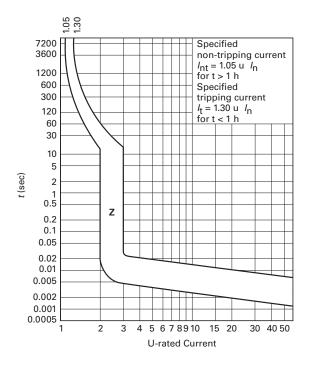
	Single-Pole ³	Two-Pole
Amnoroo	Catalog Number	Catalog Number
Amperes	Nulliber	Nulliber
1	FAZ-S1/1	FAZ-S1/2
2	FAZ-S2/1	FAZ-S2/2
3	FAZ-S3/1	FAZ-S3/2
4	FAZ-S4/1	FAZ-S4/2
6	FAZ-S6/1	FAZ-S6/2
10	FAZ-S10/1	FAZ-S10/2
16	FAZ-S16/1	FAZ-S16/2
20	FAZ-S20/1	FAZ-S20/2
25	FAZ-S25/1	FAZ-S25/2
32	FAZ-S32/1	FAZ-S32/2
40	FAZ-S40/1	FAZ-S40/2

- 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.
- These breakers are available by special order and may result in additional delivery time.
- $\ensuremath{^{\scriptsize \textcircled{3}}}$ Two-piece box order, quantities of 2.

FAZ Z curve (2–3X I_n current rating)

- Designed for protection of electronic devices
- Response time of instantaneous trip: 2–3X I_n current rating
- UL recognized and CSA Certified as supplementary protectors
- For international and domestic use (conform to IEC 60947-2)

Suitable for applications where low levels of inrush current are expected. Instantaneous trip is 2–3X rating of device (I_n). Applications include small transformers, lighting, pilot devices, control circuits and coils. Medium magnetic trip point.



Single-Pole

130

Two-Pole



Z Curve (2–3X I_n Current Rating) — Designed for Inductive Loads ©2

	Single-Pole ³	Two-Pole
Amperes	Catalog Number	Catalog Number
0.5	FAZ-Z0.5/1	FAZ-Z0.5/2
1	FAZ-Z1/1	FAZ-Z1/2
1.6	FAZ-Z1.6/1	FAZ-Z1.6/2
2	FAZ-Z2/1	FAZ-Z2/2
3	FAZ-Z3/1	FAZ-Z3/2
4	FAZ-Z4/1	FAZ-Z4/2
6	FAZ-Z6/1	FAZ-Z6/2
8	FAZ-Z8/1	FAZ-Z8/2
10	FAZ-Z10/1	FAZ-Z10/2
13	FAZ-Z13/1	FAZ-Z13/2
16	FAZ-Z16/1	FAZ-Z16/2
20	FAZ-Z20/1	FAZ-Z20/2
25	FAZ-Z25/1	FAZ-Z25/2
32	FAZ-Z32/1	FAZ-Z32/2
40	FAZ-Z40/1	FAZ-Z40/2
50	FAZ-Z50/1	FAZ-Z50/2
63	FAZ-Z63/1	FAZ-Z63/2

Three-Pole



Four-Pole



Z Curve (2–3X I_n Current Rating) — Designed for Inductive Loads, continued ®

	Three-Pole	Four-Pole
Amperes	Catalog Number	Catalog Number
0.5	FAZ-Z0.5/3	FAZ-Z0.5/4
1	FAZ-Z1/3	FAZ-Z1/4
1.6	FAZ-Z1.6/3	FAZ-Z1.6/4
2	FAZ-Z2/3	FAZ-Z2/4
3	FAZ-Z3/3	FAZ-Z3/4
4	FAZ-Z4/3	FAZ-Z4/4
6	FAZ-Z6/3	FAZ-Z6/4
8	FAZ-Z8/3	FAZ-Z8/4
10	FAZ-Z10/3	FAZ-Z10/4
13	FAZ-Z13/3	FAZ-Z13/4
16	FAZ-Z16/3	FAZ-Z16/4
20	FAZ-Z20/3	FAZ-Z20/4
25	FAZ-Z25/3	FAZ-Z25/4
32	FAZ-Z32/3	FAZ-Z32/4
40	FAZ-Z40/3	FAZ-Z40/4
50	FAZ-Z50/3	FAZ-Z50/4
63	FAZ-Z63/3	FAZ-Z63/4

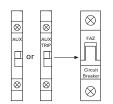
- ① In North America, these switches are UL recognized and CSA Certified as supplementary protection devices. Per the intent of NEC (National Electrical Code), Article 240, and CEC (Canadian Electrical Code), Part 1 C22.1, supplementary breakers cannot be used as a substitute for the branch circuit protective 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 These breakers are available by special order and may result in additional delivery time.
- ^③ Two-piece box order, quantities of 2.

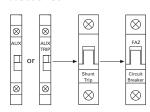
Accessories

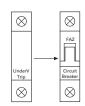
FAZ Auxiliary Contacts and Voltage Trips

	Circuit Diagram	Description	Rated Operational Voltage	Catalog Number
Standard Auxiliary Contact	s			
T .	13 21 	 ■ 1NO/1NC ■ Installs on left side of FAZ or shunt trip ■ Max. one per FAZ (1077) device ■ Switches when FAZ is tripped electrically or manually 	230 Vac	FAZ-XHIN11
= = = = = = = = = = = = = = = = = = = =	12 14	■ 1 changeover contact ■ Installs on left side of FAZ or shunt trip ■ Max. one per FAZ (1077) device ■ Switches when FAZ is tripped electrically or manually	230 Vac	FAZ-XHINW1
Auxiliary/Trip Indicating Co	ntact			
The state of the s	Two-pole auxiliary mode	■ Small selector screw changes mode ■ Two Form C (changeover) contacts ■ Installs on left side of FAZ or shunt trip ■ Auxiliary contacts switch when FAZ is tripped electrically or manually ■ Trip indicating contact switches only when FAZ is tripped electrically	230 Vac	FAZ-XAM002
	12 14 22 24 22 24 21 21			
Jndervoltage Trip				
7700	D1	 Prevents FAZ from operating unless voltage is present 	115 Vac 230 Vac	FAZ-XUA(115VAC) FAZ-XUA(230VAC)
Extra de la companya	D2	■ Installs on left side of FAZ ■ Includes test button	400 Vac	FAZ-XUA(400VAC)
Shunt Trip				
	C1	■ Allows remote trip of FAZ ■ Installs on left side of FAZ	12–110 Vac 12–60 Vdc	FAZ-XAA-C-12-110VA
7.7 (B)	C2		110–415 Vac 110–230 Vdc	FAZ-XAA-C-110- 415VAC

Allowable Combinations of Accessories





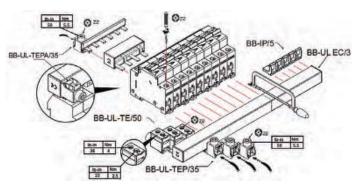


Busbar System

Description	Rated Operational Current	Number of Poles per Device	Number of Terminals	Catalog Number ⊙
Without Auxiliary Contacts				
For connecting FAZ supplementary protectors without auxiliary contacts. May be fed from line or load side.	80A	1	57	BB-UL-18/1P-1M/57
		2	56	BB-UL-18/2P-2M/56
S S S FAZ FAZ		3	57	BB-UL-18/3P-3M/57
	100A	1	57	BB-UL-25/1P-1M/57
igorplus igoppu igorplus igoppu		2	56	BB-UL-25/2P-2M/56
		3	57	BB-UL-25/3P-3M/57
Auxiliary/Trip Indicating Contacts				
For connecting FAZ supplementary protectors with auxiliary contacts. May be fed from line or load side.	80A	1	37	BB-UL-18/1P-1,5M/37
		2	46	BB-UL-18/2P+AS-2,5M/46
⊗ ⊗ ⊗ FAZ FAZ		3	48	BB-UL-18/3P+AS-3,5M/48
	100A	1	37	BB-UL-25/1P-1,5M/37
		2	46	BB-UL-25/2P+AS-2,5M/46
		3	48	BB-UL-25/3P+AS-3,5M/48

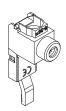
Note

 $^{\scriptsize \textcircled{\scriptsize 1}}$ Bus may be center fed for high current capacity.



Incoming Terminal

Pin Type Incoming Supply Terminals



Description	Number
■ Accommodates conductors from 6–35 mm²/#10–2 AWG	BB-UL-TEP/35

- 4-5.5 Nm/35-50 lb-in
- Two- and three-pole

Incoming Terminal

Bus Incoming Supply Terminals



p	
50 mm ²	BB-UL-TE/50

Catalog

Number

■ #14-1 AWG

Description

- 75 Deg wire
- 115 A/Y, 480V UL
- 160 A/Y 690V IEC

Incoming Terminal

Pin Type Incoming Supply Terminals— Single-Phase Only



Description	Catalog Number
■ Accommodates conductors from 6–35 mm²/#10–2 AWG	BB-UL-TEPA/35
■ 4-5.5 Nm/35-50 lb-in	

Protective Accessories

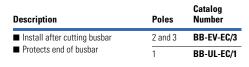
Busbar Terminal Cover					

Description	Catalog Number	
For covering unused terminals	BB-IP/5	

Fork Connector

Busbar End Cap



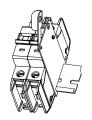




Lockoff Device

UL lockoff device

FAZPLOFF



Padlock Hasp

- Prevents reactivation of the device Z-IS/SPE-1TE during maintenance
 - Holds one padlock



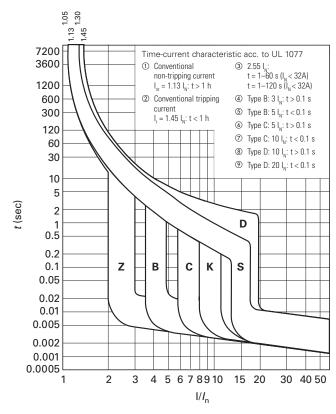
Technical Data and Specifications

Trip Curves Chart

Eaton FAZ supplementary protectors are available with six different tripping characteristics, including Type B, C, D, K, S and Z. Definitions for each trip curve are contained on the ordering pages and can be used to determine the optimal characteristic for your application. For example, low-level short-circuit faults in control wiring, such as PLCs, are best protected by devices with Type B trip characteristics (3-5X continuous rating of the device (I_n) .

Even though not required by NEC or CEC for supplementary protectors, Eaton's FAZ devices are current limiting, which means that they interrupt fault currents within one half cycle. Current limiting devices offer superior protection by reducing peak let-through current and energy.

Tripping Characteristics



FAZ Miniature Circuit Breakers Technical Data

Description	B Curve	C Curve	D Curve
Electrical			
Approvals	UR (UL 1077), CSA (CSA 22.2 No. 235), CE		
Standards	IEC/EN 60947-2		
Short-circuit trip response	3–5 <i>I</i> _n	5–10 <i>I</i> _n	10–20 <i>I</i> _n
Supplementary Protectors—UL/CSA			
Current range	1–63A	0.5-63A	0.5–40A
Maximum voltage ratings—UL/CSA	077.1/	077.1/	0771/
Single-pole, single-pole + neutral	277 Vac 48 Vdc	277 Vac 48 Vdc	277 Vac 48 Vdc
Two-, three-pole, four-pole and three-pole + neutral	480Y/277 Vac	480Y/277 Vac	480Y/277 Vac
Two poles in series	96 Vdc	96 Vdc	96 Vdc
Thermal tripping characteristics			
Single-pole Multi-pole	1.35 x I _n @ 40°C 1.45 x I _n @ 40°C	1.35 x I _n @ 40°C 1.45 x I _n @ 40°C	1.35 x I _n @ 40°C 1.45 x I _n @ 40°C
Short-circuit ratings (at max. voltage)			
Single-pole	10 kA (5 kA for 40–63A device)	10 kA (5 kA for 40–63A device)	5 kA
Two-, three-pole Single-pole	10 kA (5 kA for 40–63A device) 10 kA @ 48 Vdc	10 kA (5 kA for 40–63A device) 10 kA @ 48 Vdc	5 kA 10 kA @ 48 Vdc
Two poles in series	10 kA @ 96 Vdc	10 kA @ 96 Vdc	10 kA @ 96 Vdc
Miniature Circuit Breaker—IEC			
Current range	1–63A	0.5–63A	0.5–63A
Maximum voltage ratings—IEC 68898-1	220 Vas	220 Vaa	220 Van
Single-pole Two-, three-pole	230 Vac 230/400 Vac	230 Vac 230/400 Vac	230 Vac 230/400 Vac
Maximum voltage ratings—IEC 60947-2			
Single-pole	240 Vac	240 Vac	240 Vac
Two-, three-pole	48 Vdc 240/415 Vac	48 Vdc 240/415 Vac	48 Vdc 240/415 Vac
Two poles in series	96 Vdc	96 Vdc	96 Vdc
Thermal tripping characteristics	41 @405 1	41 - 0405 1	41 @4.05
Single-pole Multi-pole	> 1 hour @ 1.05 x l _n < 1 hour @ 1.3 x l _n	> 1 hour @ 1.05 x l _n < 1 hour @ 1.3 x l _n	> 1 hour @ 1.05 x I _n < 1 hour @ 1.3 x I _n
Interrupt ratings (at max. voltage)	"	·	"
IEC 60947-2 IEC 60898	15 kA 10 kA	15 kA 10 kA	15 kA (10 kA for 50 and 63A) 10 kA (50 and 63A not available)
Operational switching capacity	7.5 kA	7.5 kA	7.5 kA
Max. backup fuse [gL/gG]	125A	125A	125A
Rated impulse withstand— U_{imp} Rated insulation voltage— U_{i}	4000 Vac 440 Vac	4000 Vac 440 Vac	4000 Vac 440 Vac
Environmental/General			
Selectivity class	3	3	3
Lifespan (operations)	> 10,000 (1 operation = ON/OFF)	> 10,000 (1 operation = ON/OFF)	> 10,000 (1 operation = ON/OFF)
Shock (IEC 68-2-22) Operating temperature range	10g-120 ms -40 to +167°F (-40 to +75°C)	10g–120 ms –40 to +167°F (–40 to +75°C)	10g–120 ms –40 to +167°F (–40 to +75°C)
Shipment and short-term storage	-40 to +185°F (-40 to +85°C)	-40 to +185°F (-40 to +85°C)	-40 to +185°F (-40 to +85°C)
Housing material Mechanical	Nylon	Nylon	Nylon
Standard front dimension			
Device height	80 mm	80 mm	80 mm
Terminal protection	Finger and back-of-hand proof to IEC 536	Finger and back-of-hand proof to IEC 536 17.5 mm	Finger and back-of-hand proof to IEC 536
Mounting width per pole Mounting	17.5 mm IEC/EN 60715 top-hat rail	IEC/EN 60715 top-hat rail	17.5 mm IEC/EN 60715 top-hat rail
Degree of protection	IP20	IP20	IP20
Terminals top and bottom Supply connection	Twin-purpose terminals Line or load side	Twin-purpose terminals Line or load side	Twin-purpose terminals Line or load side
Terminal capacity [mm ²]	1 x 25 (AWG 4–18)/2 x 10 (AWG 8–18)	1 x 25 (AWG 4–18)/2 x 10 (AWG 8–18)	1 x 25 (AWG 4–18)/2 x 10 (AWG 8–18)
Torque	2.4 Nm	2.4 Nm	2.4 Nm
Imperial torque	21 lb-in (AWG 18–12), 25 lb-in (AWG 10–8), 36 lb-in (AWG 6–4)	21 lb-in (AWG 18–12), 25 lb-in (AWG 10–8), 36 lb-in (AWG 6–4)	21 lb-in (AWG 18–12), 25 lb-in (AWG 10–8), 36 lb-in (AWG 6–4)
Thickness of busbar material	0.8–2 mm	0.8–2 mm	0.8–2 mm
Mounting position	As required	As required	As required

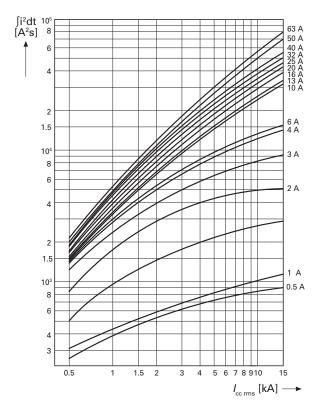
FAZ Miniature Circuit Breakers Technical Data, continued

Description	K Curve	S Curve	Z Curve
Electrical			
Approvals	UR (UL 1077), CSA (CSA 22.2 No. 235), CE		
Standards	IEC/EN 60947-2, E177451, 204453		
Short-circuit trip response	8–12 / n	13–17 <i>I</i> _n	2–3 <i>I</i> _n
Supplementary Protectors—UL/CSA			
Current range	0.5–63A	0.5–40A	1–63A
Maximum voltage ratings—UL/CSA Single-pole, single-pole + neutral	277 Vac 48 Vdc	277 Vac 48 Vdc	277 Vac 48 Vdc
Two-, three-, four-pole and three-pole + neutral Two poles in series	480Y/277 Vac 96 Vdc	480Y/277 Vac 96 Vdc	480Y/277 Vac 96 Vdc
Thermal tripping characteristics Single-pole Multi-pole	1.35 x I _n @ 40°C 1.45 x I _n @ 40°C	1.35 x I₁ @ 40°C 1.45 x I₂ @ 40°C	1.35 x I _n @ 40°C 1.45 x I _n @ 40°C
Short-circuit ratings (at max. voltage) Single-pole Single-pole + neutral Two-, three-, four-pole Two poles in series	5 kA @ 277 Vac 5 kA @ 277 Vac 5 kA @ 480Y/277 Vac —	5 kA @ 277 Vac 5 kA @ 277 Vac 5 kA @ 480Y/277 Vac —	5 kA @ 277 Vac 5 kA @ 277 Vac 5 kA @ 480Y/277 Vac —
Miniature Circuit Breaker—IEC			
Current range	0.5–63A	0.5–40A	1–63A
Maximum voltage ratings—IEC 60947-2 Single-pole, single-pole + neutral Two-, three-, four-pole, three-pole + neutral	240 Vac 240/415 Vac	240 Vac 240/415 Vac	240 Vac 240/415 Vac
Thermal tripping characteristics Single-pole Multi-pole	>1 Hour @ 1.05 x I _n <1 Hour @ 1.3 x I _n	> 1 Hour @ 1.05 x I _n < 1 Hour @ 1.3 x I _n	>1 Hour @ 1.05 x I _n <1 Hour @ 1.3 x I _n
Interrupt ratings (at max. voltage) IEC 60947-2 Operational switching capacity Max. backup fuse [gL/gG] Rated impulse withstand— U_{imp} Rated insulation voltage— U_i	15 kA 7.5 kA 125A 4000 Vac 440 Vac	10 kA 7.5 kA 125A 4000 Vac 440 Vac	10 kA 7.5 kA 125A 4000 Vac 440 Vac
Environmental/General			
Selectivity class Lifespan (operations) Shock (IEC 68-2-22) Operating temperature range Shipment and short-term storage Housing material	3 > 10,000 (1 operation = ON/OFF) 10g-120 ms -40 to +167°F (-40 to +75°C) -40 to +185°F (-40 to +85°C) Nylon	3 > 10,000 (1 operation = 0N/0FF) 10g-120 ms -40 to +167°F (-40 to +75°C) -40 to +185°F (-40 to +85°C) Nylon	3 > 10,000 (1 operation = ON/OFF) 10g-120 ms -40 to +167°F (-40 to +75°C) -40 to +185°F (-40 to +85°C) Nylon
Mechanical			
Standard front dimension Device height Terminal protection Mounting width per pole	80 mm Finger and back-of-hand proof to IEC 536 17.7 mm	80 mm Finger and back-of-hand proof to IEC 536 17.7 mm	80 mm Finger and back-of-hand proof to IEC 536 17.7 mm
Mounting Degree of protection Terminals top and bottom Supply connection	IEC/EN 60715 top-hat rail IP20 Twin-purpose terminals Line or load side	IEC/EN 60715 top-hat rail IP20 Twin-purpose terminals Line or load side	IEC/EN 60715 top-hat rail IP20 Twin-purpose terminals Line or load side
Terminal capacity [mm²] Torque Imperial torque Thickness of busbar material	1 x 25 (AWG 4–18) / 2 x 10 (AWG 8–18) 2.4 Nm 21 lb-in (AWG 18–12), 25 lb-in (AWG 10–8), 36 lb-in (AWG 6–4) 0.8–2 mm	1 x 25 (AWG 4–18) / 2 x 10 (AWG 8–18) 2.4 Nm 21 lb-in (AWG 18–12), 25 lb-in (AWG 10–8), 36 lb-in (AWG 6–4) 0.8–2 mm	1 x 25 (AWG 4–18) / 2 x 10 (AWG 8–18) 2.4 Nm 21 lb-in (AWG 18–12), 25 lb-in (AWG 10–8), 36 lb-in (AWG 6–4) 0.8–2 mm
Mounting position	As required	As required	As required

1

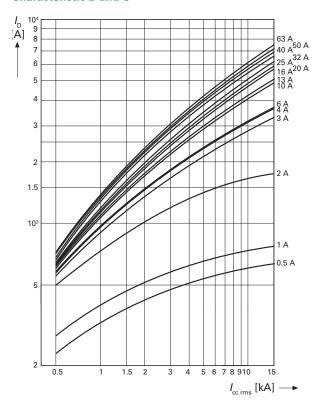
Let-Through Energy I²t

Characteristic B and C

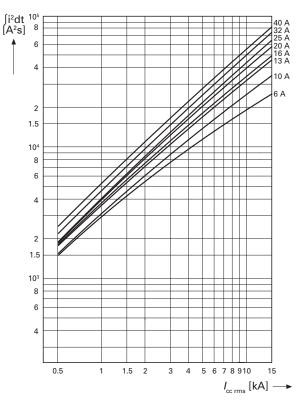


Let-Through Energy I_D

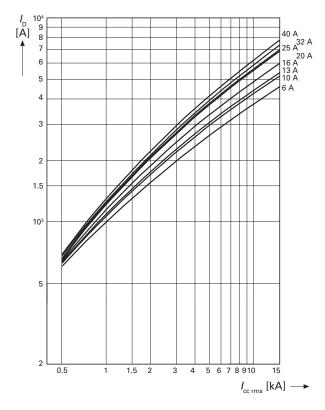
Characteristic B and C



Characteristic D

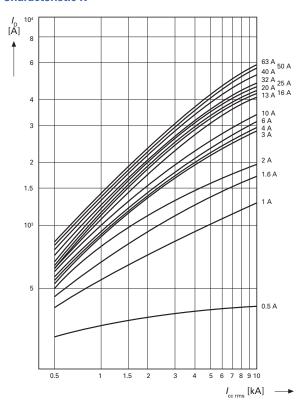


Characteristic D

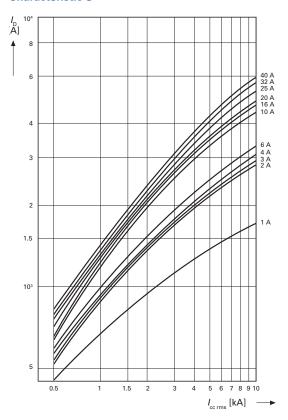


Let-Through Energy I²t

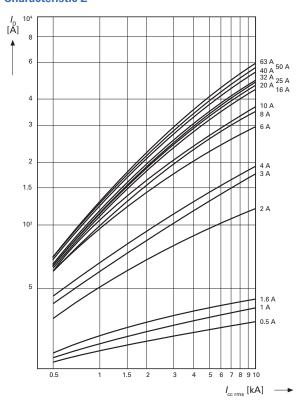
Characteristic K



Characteristic S



Characteristic Z



Influence of the Ambient Temperature on the Thermal Tripping Behavior

Corrected values of the rated current dependent on the ambient temperature

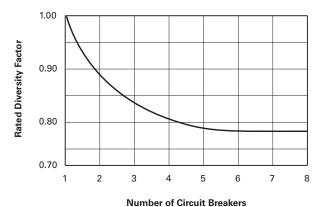
	Ambien	t Tempera	ture T														
I _n (A)	-40°C	-30°C	−20°C	–10°C	0°C	10°C	20°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C
0.16	0.20	0.20	0.19	0.19	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.13
0.25	0.32	0.31	0.30	0.29	0.28	0.27	0.26	0.25	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21
0.50	0.64	0.62	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.48	0.47	0.46	0.45	0.44	0.43	0.42	0.41
0.75	0.96	0.93	0.90	0.87	0.84	0.81	0.78	0.75	0.74	0.73	0.71	0.69	0.68	0.66	0.65	0.64	0.62
1.00	1.30	1.20	1.20	1.20	1.10	1.10	1.00	1.00	0.99	0.97	0.95	0.93	0.90	0.89	0.87	0.85	0.83
1.50	1.90	1.90	1.80	1.70	1.70	1.60	1.60	1.50	1.50	1.50	1.40	1.40	1.40	1.30	1.30	1.30	1.20
1.60	2.00	2.00	1.90	1.90	1.80	1.70	1.70	1.60	1.60	1.50	1.50	1.50	1.40	1.40	1.40	1.40	1.30
2.00	2.60	2.50	2.40	2.30	2.20	2.20	2.10	2.00	2.00	1.90	1.90	1.90	1.80	1.80	1.70	1.70	1.70
2.50	3.20	3.10	3.00	2.90	2.80	2.70	2.60	2.50	2.50	2.40	2.40	2.30	2.30	2.20	2.20	2.10	2.10
3.00	3.80	3.70	3.60	3.50	3.40	3.30	3.10	3.00	3.00	2.90	2.80	2.80	2.70	2.70	2.60	2.50	2.50
3.50	4.50	4.40	4.20	4.10	3.90	3.80	3.70	3.50	3.40	3.40	3.30	3.20	3.20	3.10	3.00	3.00	2.90
4.00	5.10	5.00	4.80	4.70	4.50	4.30	4.20	4.00	3.90	3.90	3.80	3.70	3.60	3.50	3.50	3.40	3.30
5.00	6.40	6.20	6.00	5.80	5.60	5.40	5.20	5.00	4.90	4.80	4.70	4.60	4.50	4.40	4.30	4.20	4.10
6.00	7.70	7.50	7.20	7.00	6.70	6.50	6.30	6.00	5.90	5.80	5.70	5.60	5.40	5.30	5.20	5.10	5.00
7.00	9.00	8.70	8.40	8.20	7.80	7.60	7.40	7.00	6.90	6.80	6.70	6.50	6.30	6.20	6.10	6.00	5.80
8.00	10.20	9.90	9.60	9.30	9.00	8.70	8.40	8.00	7.90	7.70	7.60	7.40	7.20	7.10	6.90	6.80	6.60
10.00	13.00	12.00	12.00	12.00	11.00	11.00	10.00	10.00	9.90	9.70	9.50	9.30	9.00	8.90	8.70	8.50	8.30
12.00	15.00	15.00	14.00	14.00	13.00	13.00	13.00	12.00	12.00	12.00	11.00	11.00	11.00	11.00	10.00	10.00	10.00
13.00	17.00	16.00	16.00	15.00	15.00	14.00	14.00	13.00	13.00	13.00	12.00	12.00	12.00	12.00	11.00	11.00	11.00
15.00	19.00	19.00	18.00	17.00	17.00	16.00	16.00	15.00	15.00	15.00	14.00	14.00	14.00	13.00	13.00	13.00	12.00
16.00	20.00	20.00	19.00	19.00	18.00	17.00	17.00	16.00	16.00	15.00	15.00	15.00	14.00	14.00	14.00	14.00	13.00
20.00	26.00	25.00	24.00	23.00	22.00	22.00	21.00	20.00	20.00	19.00	19.00	19.00	18.00	18.00	17.00	17.00	17.00
25.00	32.00	31.00	30.00	29.00	28.00	27.00	26.00	25.00	25.00	24.00	24.00	23.00	23.00	22.00	22.00	21.00	21.00
32.00	41.00	40.00	38.00	37.00	36.00	35.00	33.00	32.00	32.00	31.00	30.00	30.00	29.00	28.00	28.00	27.00	26.00
35.00	45.00	43.00	41.00	41.00	38.00	38.00	36.00	35.00	35.00	34.00	33.00	32.00	32.00	32.00	30.00	29.00	29.00
40.00	51.00	50.00	48.00	47.00	45.00	43.00	42.00	40.00	39.00	39.00	38.00	37.00	36.00	35.00	35.00	34.00	33.00
50.00	64.00	62.00	60.00	58.00	56.00	54.00	52.00	50.00	49.00	48.00	47.00	46.00	45.00	44.00	43.00	42.00	41.00
63.00	81.00	78.00	76.00	73.00	71.00	68.00	66.00	63.00	62.00	61.00	60.00	58.00	57.00	56.00	55.00	53.00	52.00

Influence of the Mains Frequency

Influence of the mains frequency on the tripping behavior ${\rm I}_{\rm MA}$ of the instantaneous release

	Mains Frequency f [Hz]								
	16 2/3	50	60	100	200	300	400		
I _{MA} (f)I _{MA} (50 Hz) [%]	91	100	101	106	115	134	141		

Load Carrying Capacity of Adjoining Miniature Circuit Breakers



Accessories Technical Data

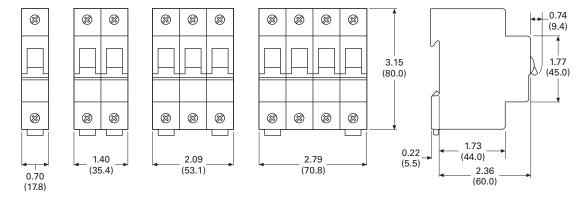
Description	FAZ-XHIN FAZ-XAM002	FAZ-XAA-C	FAZ-XUA
Electrical			
Contact function	1A + 1B 2 C/0	Ξ	_
Rated operational voltage $\it U_{\rm n}$	250 Vac	_	115 Vac 230 Vac 400 Vac
Voltage range	_	12–110 Vac 12–60 Vdc	_
Voltage range	_	110–415 Vac 110–230 Vdc	_
Closing threshold [x U_n]	_	_	0.8
Tripping threshold [x U_n]	_	_	0.5
Rated frequency f	50/60 Hz	50/60 Hz	50/60 Hz
General use (UL/CSA) AC—230/240 Vac DC—110/120 Vdc	2/2A 0.5/0.5A		
Pilot duty	A600/Q600	_	_
Conventional free air thermal current $\emph{I}_{ ext{th}}$	4A	_	_
Rated operational current AC-13 $I_{\rm e}$ AC-15 $I_{\rm e}$ DC-13 $I_{\rm e}$	3A (250 Vac) 2A (250 Vac) 0.5A (110 Vdc)	_ _ _	_ _ _
Rated insulation voltage $U_{\rm i}$	250 Vac	_	_
Minimum operating voltage per contract U_{\min}	5 Vdc	_	_
Rated impulse withstand voltage (1.2/50 μ) $U_{\rm imp}$	2.5 kV	_	_
Rated conditional short-circuit current with 6A backup fuse $I_{ m SC}$	1 kA	_	_
Max. admissible backup fuse	4A gL	_	_
Mechanical			
Standard front dimension	45 mm	45 mm	45 mm
Device height	80 mm	80 mm	80 mm
Mounting width	8.8 mm	17.6 mm	17.8 mm
Mounting	On MCB	IEC/EN 60715 top-hat rail	IEC/EN 60715 top-hat rail
Degree of protection enclosed	IP40	IP40	IP40
Terminal protection	Protection against electric shock to IEC 536	Protection against electric shock to IEC 536	Protection against electric shock to IEC 536
Terminals	Lift terminals	Twin-purpose terminals	Twin-purpose terminals
Terminal capacity Solid Flexible	0.5–2.5 mm ² 0.5–2.5 mm ²	1–2.5 mm ² 1–2.5 mm ²	2 x (1–2.5) mm ² 2 x (1–2.5) mm ²
Tightening torque of terminal screws	0.8–1.0 Nm (7–9 lb-in)	2.4 Nm (21 lb-in)	0.8 Nm (7 lb-in)

Dimensions

Approximate Dimensions in Inches (mm)

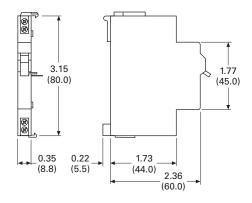
Miniature Circuit Breakers

FAZ

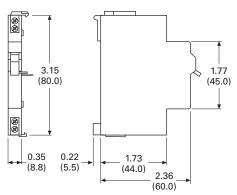


Auxiliary Contacts

FAZ-XHI11 and FAZ-XH1NW1

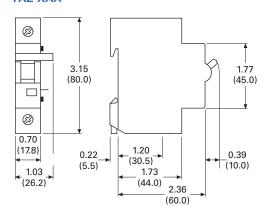


FAZ-XAM002



Shunt Releases

FAZ-XAA



Undervoltage Releases

FAZ-XUA

