

## Trip Characteristic C

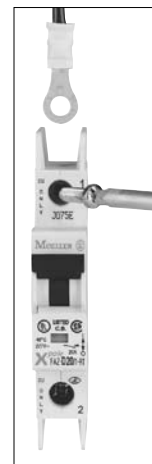
- > UL Approved (UL489) and CSA Certified (CSA C22.2 No. 5-02) as Branch Circuit Breakers
- > Connections for ring-tongue terminals
- > Trip characteristic C: Response time of instantaneous trip: 5 – 10 x  $I_n$  current rating
- > Interrupting capacity: 10kA UL/CSA; 15kA IEC 60947

### Type C Characteristics

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

## Trip Characteristic C – Designed for inductive loads

| Rated Current $I_n$ (A) | 1 pole        |       | 2 poles       |       | 3 poles       |       |
|-------------------------|---------------|-------|---------------|-------|---------------|-------|
|                         | Type          | Price | Type          | Price | Type          | Price |
| 0.5                     | FAZ-C0,5/1-RT | 38    | FAZ-C0,5/2-RT | 86    | FAZ-C0,5/3-RT | 132   |
| 1                       | FAZ-C1/1-RT   | 38    | FAZ-C1/2-RT   | 86    | FAZ-C1/3-RT   | 132   |
| 1.5                     | FAZ-C1,5/1-RT | 38    | FAZ-C1,5/2-RT | 86    | FAZ-C1,5/3-RT | 132   |
| 2                       | FAZ-C2/1-RT   | 38    | FAZ-C2/2-RT   | 86    | FAZ-C2/3-RT   | 132   |
| 3                       | FAZ-C3/1-RT   | 38    | FAZ-C3/2-RT   | 86    | FAZ-C3/3-RT   | 132   |
| 4                       | FAZ-C4/1-RT   | 38    | FAZ-C4/2-RT   | 86    | FAZ-C4/3-RT   | 132   |
| 5                       | FAZ-C5/1-RT   | 38    | FAZ-C5/2-RT   | 86    | FAZ-C5/3-RT   | 132   |
| 6                       | FAZ-C6/1-RT   | 38    | FAZ-C6/2-RT   | 86    | FAZ-C6/3-RT   | 132   |
| 7                       | FAZ-C7/1-RT   | 38    | FAZ-C7/2-RT   | 86    | FAZ-C7/3-RT   | 132   |
| 8                       | FAZ-C8/1-RT   | 38    | FAZ-C8/2-RT   | 86    | FAZ-C8/3-RT   | 132   |
| 10                      | FAZ-C10/1-RT  | 38    | FAZ-C10/2-RT  | 86    | FAZ-C10/3-RT  | 132   |
| 13                      | FAZ-C13/1-RT  | 38    | FAZ-C13/2-RT  | 86    | FAZ-C13/3-RT  | 132   |
| 15                      | FAZ-C15/1-RT  | 38    | FAZ-C15/2-RT  | 86    | FAZ-C15/3-RT  | 132   |
| 16                      | FAZ-C16/1-RT  | 38    | FAZ-C16/2-RT  | 86    | FAZ-C16/3-RT  | 132   |
| 20                      | FAZ-C20/1-RT  | 38    | FAZ-C20/2-RT  | 86    | FAZ-C20/3-RT  | 132   |
| 25                      | FAZ-C25/1-RT  | 38    | FAZ-C25/2-RT  | 86    | FAZ-C25/3-RT  | 132   |
| 30                      | FAZ-C30/1-RT  | 38    | FAZ-C30/2-RT  | 86    | FAZ-C30/3-RT  | 132   |
| 32                      | FAZ-C32/1-RT  | 38    | FAZ-C32/2-RT  | 86    | FAZ-C32/3-RT  | 132   |
| 35                      | FAZ-C35/1-RT  | 38    | FAZ-C35/2-RT  | 86    | FAZ-C35/3-RT  | 132   |
| 40                      | FAZ-C40/1-RT  | 38    | FAZ-C40/2-RT  | 86    | FAZ-C40/3-RT  | 132   |

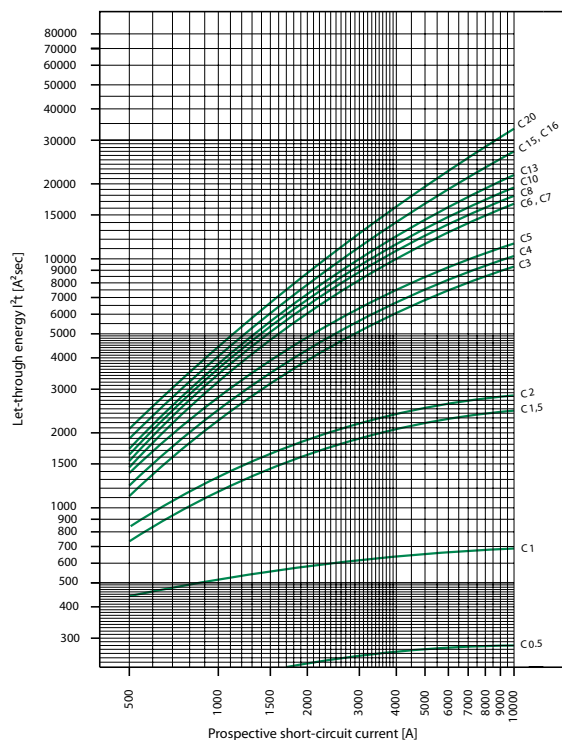


All breakers on this page are equipped with terminals that accommodate ring-tongue connectors.

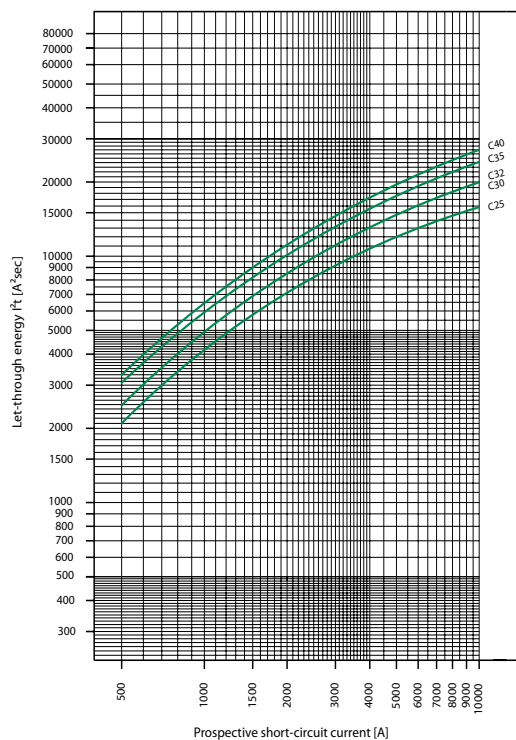
See Trip Curve chart on page 11

### Let-through Energy

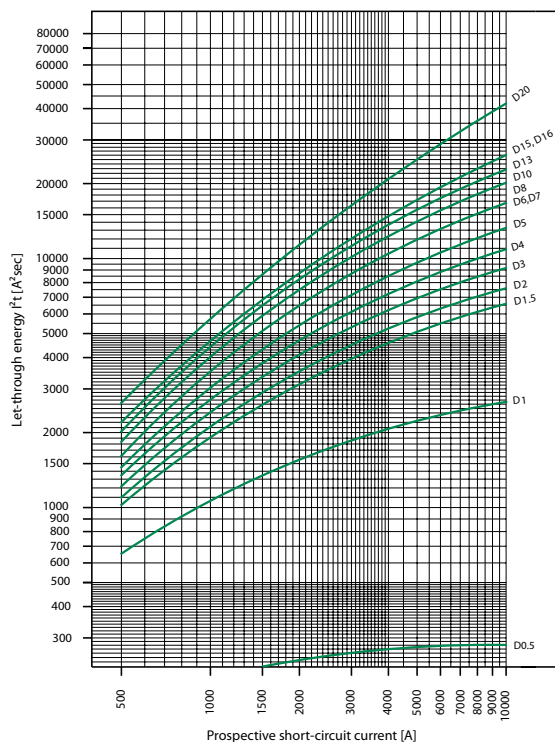
Characteristic C (0.5-20A), 277V



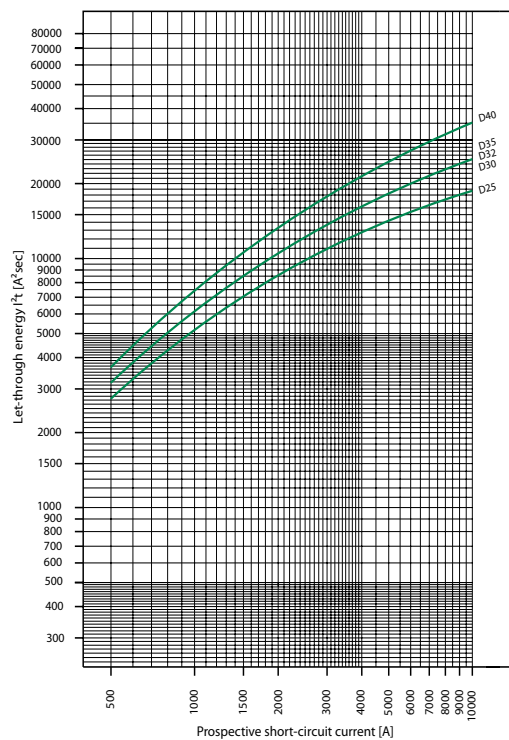
Characteristic C (25-40A), 240V



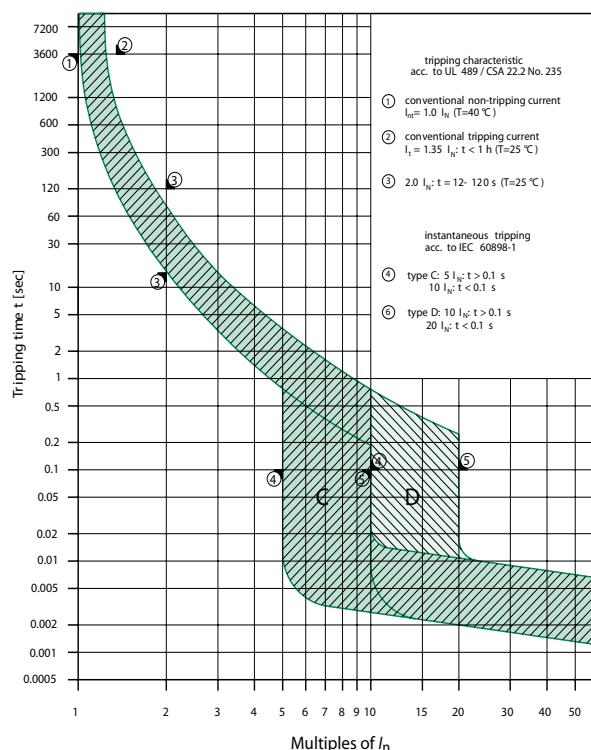
Characteristic D (0.5-20A), 277V



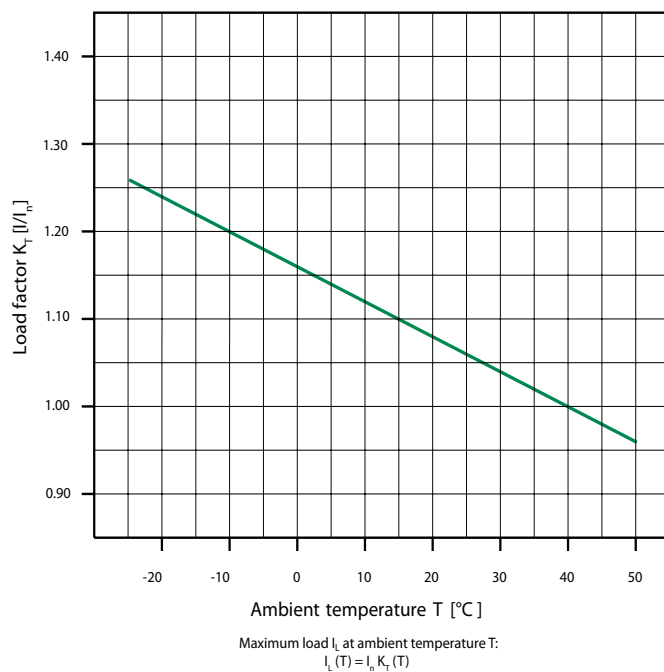
Characteristic D (25-40A), 240V



### Tripping Characteristics



### Influence of ambient temperature T on load carrying capacity



### Power loss at $I_n$

#### Characteristic C

| $I_n$ [A] | 1p<br>P[W] | 2p<br>P[W] | 3p<br>P[W] |
|-----------|------------|------------|------------|
| 0.5       | 1.6        | 3.2        | 4.7        |
| 1         | 1.1        | 2.2        | 3.4        |
| 1.5       | 1.3        | 2.6        | 3.9        |
| 2         | 1.4        | 2.8        | 4.3        |
| 3         | 1.2        | 2.4        | 3.6        |
| 4         | 1.4        | 2.9        | 4.3        |
| 5         | 1.9        | 3.7        | 5.6        |
| 6         | 1.2        | 2.3        | 3.5        |
| 7         | 1.4        | 2.8        | 4.3        |
| 8         | 1.4        | 2.8        | 4.2        |
| 10        | 1.8        | 3.6        | 5.3        |
| 13        | 2.4        | 4.7        | 7.1        |
| 15        | 1.9        | 3.8        | 5.6        |
| 16        | 2.1        | 4.3        | 6.4        |
| 20        | 2.9        | 5.8        | 8.7        |
| 25        | 3.1        | 6.2        | 9.3        |
| 30        | 3.0        | 6.0        | 9.0        |
| 32        | 3.4        | 6.8        | 10.2       |
| 35        | 3.7        | 7.4        | 11.0       |
| 40        | 4.0        | 8.1        | 12.1       |

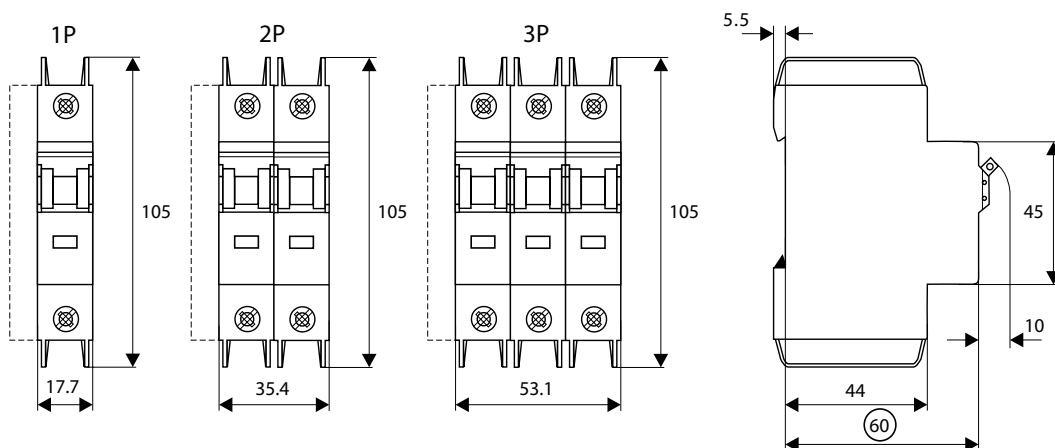
#### Characteristic D

| $I_n$ [A] | 1p<br>P[W] | 2p<br>P[W] | 3p<br>P[W] |
|-----------|------------|------------|------------|
| 0.5       | 1.6        | 3.2        | 4.8        |
| 1         | 0.8        | 1.5        | 2.3        |
| 1.5       | 1.0        | 2.1        | 3.1        |
| 2         | 1.0        | 2.1        | 3.1        |
| 3         | 1.2        | 2.4        | 3.6        |
| 4         | 1.4        | 2.9        | 4.3        |
| 5         | 1.5        | 2.9        | 4.4        |
| 6         | 1.2        | 2.3        | 3.5        |
| 7         | 1.4        | 2.8        | 4.3        |
| 8         | 1.2        | 2.4        | 3.7        |
| 10        | 1.5        | 3.0        | 4.5        |
| 13        | 2.0        | 4.1        | 6.1        |
| 15        | 1.5        | 3.1        | 4.6        |
| 16        | 1.7        | 3.5        | 5.2        |
| 20        | 1.8        | 3.7        | 5.5        |
| 25        | 2.6        | 5.1        | 7.7        |
| 30        | 2.7        | 5.4        | 8.1        |
| 32        | 3.1        | 6.2        | 9.3        |
| 35        | 3.8        | 7.6        | 11.3       |
| 40        | 3.9        | 7.8        | 11.6       |

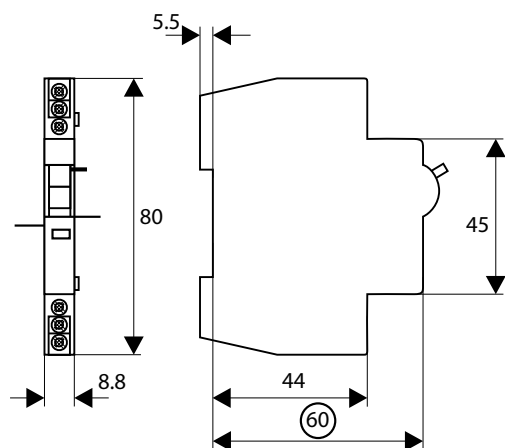
### FAZ-NA, FAZ-RT Miniature Circuit Breakers

| FAZ-NA, FAZ-RT                                                                |                                                                                            |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Electrical</b>                                                             |                                                                                            |
| Design according to<br>Current test marks as printed onto the device          | UL 489, CSA C22.2 No. 5, IEC 60947-2                                                       |
| Rated voltage<br>UL/CSA 0.5 – 20A<br>UL/CSA 25 – 40A<br>IEC                   | 277/480V VAC<br>240 VAC<br>240/415 VAC                                                     |
| Rated frequency                                                               | 50/60 Hz                                                                                   |
| Rated breaking capacity<br>UL/CSA<br>IEC                                      | 10 kA<br>15 kA                                                                             |
| Characteristic<br>Endurance<br>Line voltage connection                        | C, D<br>≥ 20,000 operating cycles<br>operational suitable for reverse feed                 |
| <b>Mechanical</b>                                                             |                                                                                            |
| Frame size<br>Device height<br>Device width                                   | 45 mm<br>105 mm<br>17.7 mm per pole                                                        |
| Mounting<br>Upper and lower terminals                                         | quick fastening with 2 lock-in positions on DIN rail EN 50022<br>open mouth/lift terminals |
| Terminal capacity                                                             | 1 Wire AWG 18-6<br>2 Wires AWG 18-10                                                       |
| Terminal fastening torque                                                     | 1 Wire 21 lb-in<br>2 Wires 25 lb-in                                                        |
| Mounting<br>Calibration temperature<br>UL 489, CSA C22.2 No. 5<br>IEC 60947-2 | independent of position<br>40°C<br>30°C                                                    |

**FAZ-NA, FAZ-RT**



**Z-NHK**



**FAZ-XAA-NA**

