# EAT·N

## CURRENT IN MULTIPLES OF CONTINUOUS CURRENT SETTING (CCS)

1.60x (nominal)

1.44x → ← 1.76x

Long Time Delay Maximum Clearing Time

Long Time Delay Minimum Clearing Time

Available Short Delay Pickup Settings:
2x, 3x, 5x, 7x, 9x, 10x, 13x and 14x

See Note 6

Short Delay Pickup - 2x →

Short Delay Pickup - 14x

300 ms - Short Delay Time
200ms
100ms
Minimum or 50ms

Instantaneous Setting Determines End of Curve

**Circuit Breaker Time / Current Curves (Phase Current)**

## Type AQB-A103RMS Circuit Breakers

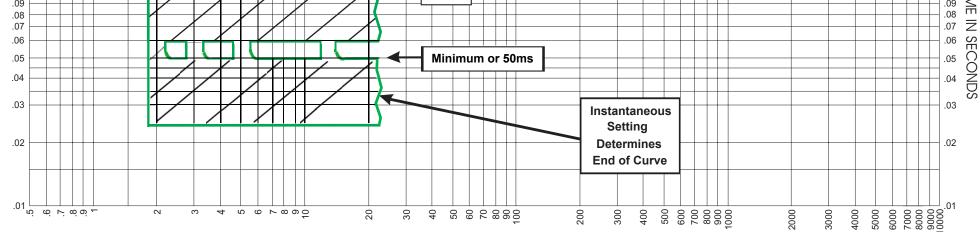Catalog Types (Basic Type):   25A - 1376D96G01
100A - 1376D96G02

**Curve:  Long Delay and Short Delay with Flat Response**

### Available Settings

| Frame Rating ($I_n$) | Continuous Current Setting (CCS) .4 -1.0 x ($I_n$) | Short Delay Pickup Setting x CCS (2x - 14x) |
|---|---|---|
| 25 | 10<br>12.5<br>15<br>18.75<br>20<br>25 | 20 - 140<br>25 - 175<br>30 - 210<br>37.5 - 262.5<br>40 - 280<br>50 - 350 |
| 100 | 40<br>50<br>60<br>75<br>80<br>100 | 80 - 560<br>100 - 700<br>120 - 840<br>150 - 1050<br>160 - 1120<br>200 - 1400 |

| Breaker Type | Voltage Rating | 500 Vac | |
|---|---|---|---|
| AQB-A103RMS | Frequency | 60 Hz | 400 Hz |
| (Without Fuse) | Interrupting Current | 15 kA Asym. | 10 kA Asym |

### Notes:

1. Curve accuracy applies from -20ºC to +55ºC ambient.  For possible continuous ampere derating for ambient above 50ºC, refer to EATON.

2. The end of the curve is determined by the instantaneous setting of the circuit breaker.

3. AQB-A103RMS breakers are suitable for functional field testing with test kit catalog number STK2.

4. There is memory effect that can act to shorten the Long Delay.  The memory effect comes into play if a current above the Long Delay Pickup value exists for a time and then is cleared by the tripping of a downstream device or the circuit breaker itself.  A subsequent overload will cause the circuit breaker to trip in shorter time than normal.  The amount of time delay reduction is inverse to the amount of time that has elapsed since the previous overload. Approximately five minutes is required between overloads to completely reset memory.

5. Long Delay Pickup is ± 10%.

6. Long Delay Time at 6x is 20-32 seconds.  (26 seconds nominal)

7. Short Delay Pickup is ± 10% at 60Hz (±15% at 400Hz)

8. Total clearing times shown include the response times of the trip unit, the breaker opening, and the interruption of the current.

TIME IN SECONDS

## CURRENT IN MULTIPLES OF CONTINUOUS CURRENT SETTING (CCS)

## Time-Current Curve for AQB-A103RMS Circuit Breaker
## (Long Delay and Short Delay with Flat Response)

Curve No.  SC-7238-02
September 2019