

Time Current Curves **TD012033EN**

Effective April 2014

Series C J-Frame

70-250 amperes, 240-600 volts

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Note:
Time/Current characteristic curves for Series C J-frame circuit breakers—voltages shown in curve headings are maximum at which the breaker may be applied. Interrupting capacity of individual breaker is tabulated on each curve.

Note:
The following curves are UL489 Listed for use in North America.
The following circuit breakers are derived from Eaton, Westinghouse, or Cutler-Hammer history.

Time Current Curves are engineering reference documents for application and coordination purposes only. For field testing molded case circuit breakers, refer to NEMA AB 4 guidelines.



Note: Unless noted below, all curves remain unchanged from their prior revision.

[illegible]

Catalog Number Selection

This information is presented only as an aid to understanding catalog numbers.
It is not to be used to build catalog numbers for circuit breakers or trip units.

Table 1. Trip Unit

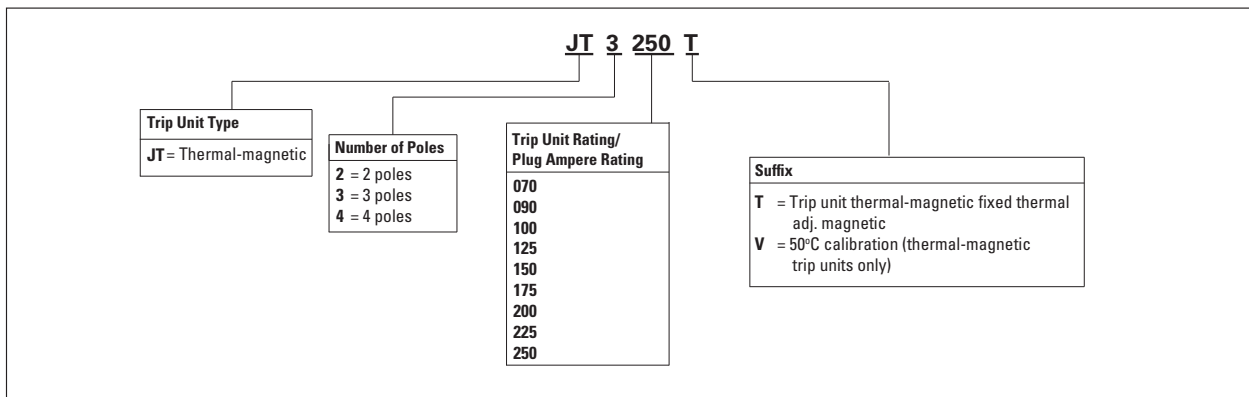
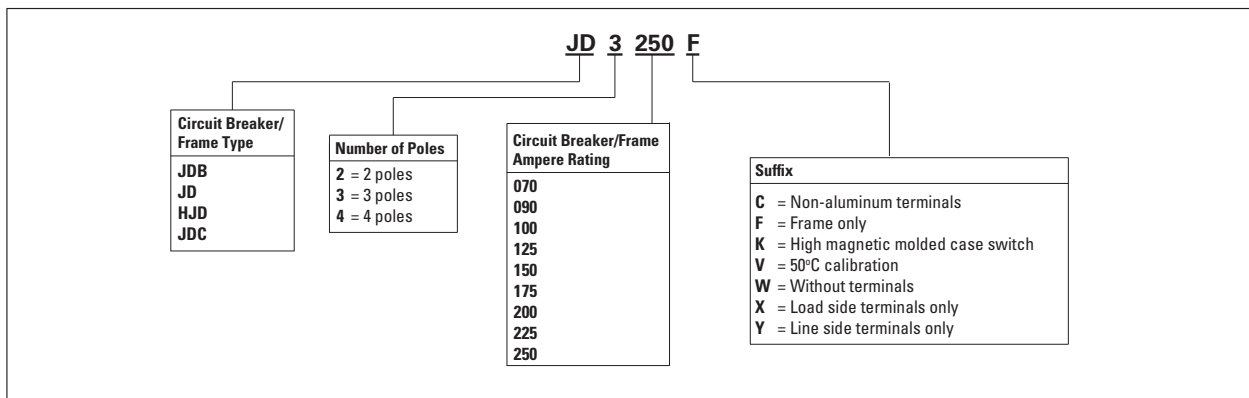


Table 2. Circuit Breaker/Frame



Series C types JDB, JD, HJD equipped with type JT thermal-magnetic trip unit



Circuit Breaker Time/Current Curves

Series C J-Frame Circuit Breakers

Equipped With Type JT Thermal-Magnetic Trip Unit

Catalog Types: JDB, JD, HJD Circuit Breakers, 2, 3 and 4 Poles.

For application and coordination purposes only. Thermal calibration based on 40°C ambient, cold start. Connected with four (4) feet of rated wire (60°C up to 125 amps, 75°C above 125 amps) per terminal. Tested in open air with current in all poles. Instantaneous calibration based on single-pole tests.

Maximum Voltage: 600V, AC (50/60 Hz) 250V, DC

Breaker Rating

Rated Amperes (I_n) **Instantaneous Trip Amperes (See Figure Below)**

70-250 500 to 1000% of trip unit rating (DC values are approximately 40% higher)

Interrupting Rating

Breaker Type	UL/CSA rms Sym. kA, 50/60 Hz			kA, DC
	240V	480V	600V	250V
JDB	65	35	18	10
JD	65	35	18	10
HJD	100	65	35	22

Breaker Type	IEC 60947-2 rms Sym. kA, 50/60 Hz			kA, DC
	240V, (Ue)	380V, (Ue)	415, (Ue)	250V, (Ue)
JDB	65	35	35	10
JD	65	35	35	10
HJD	100	65	65	22

Note:

- ① Single pole data at 25°C based on NEMA Procedures for verifying performance of molded case circuit breakers.

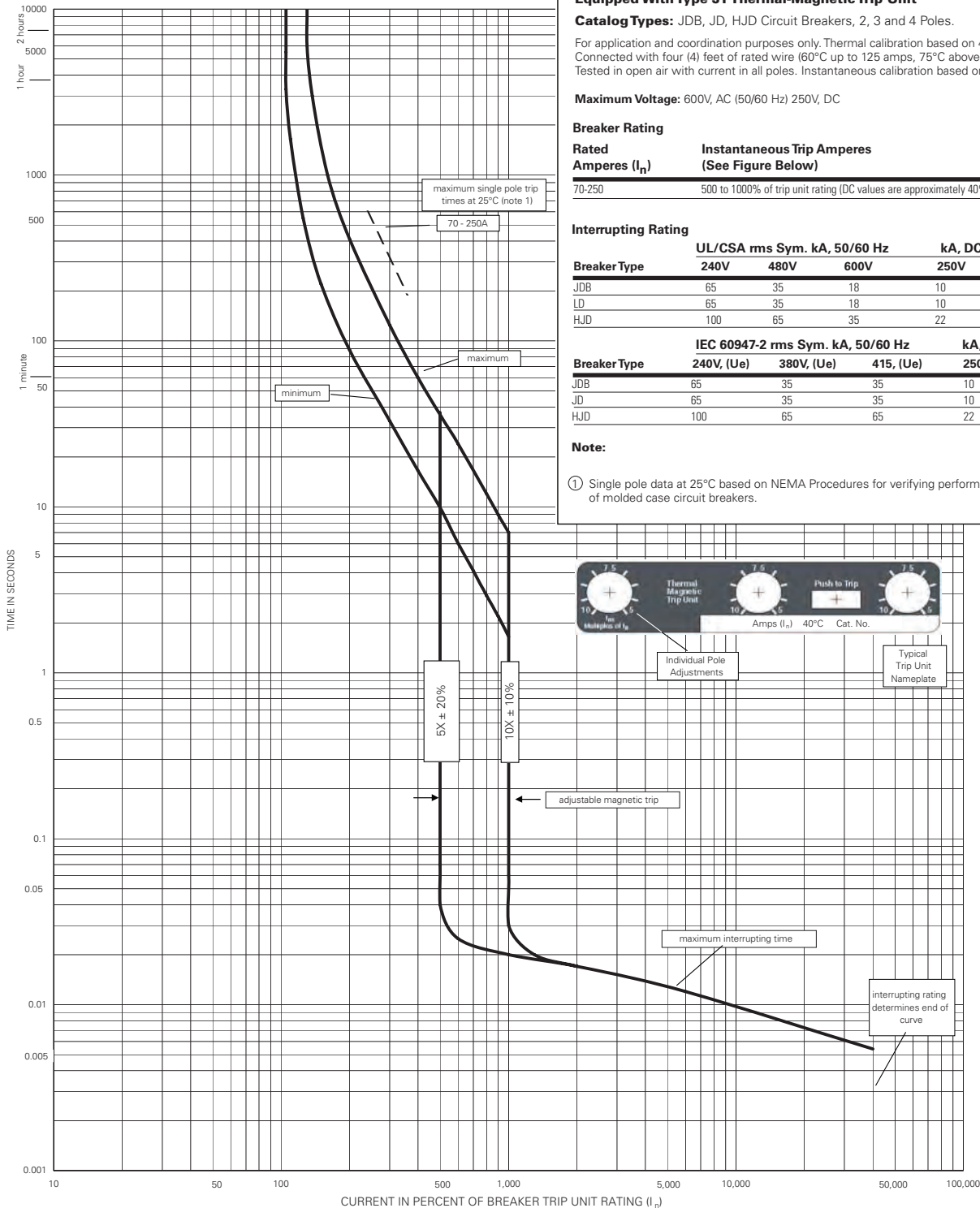


Figure 1. JDB, JD, HJD 2, 3 and 4 Poles - Curve Number SC-4247-87D, June 2006

Series C type JDC equipped with type JT thermal-magnetic trip unit

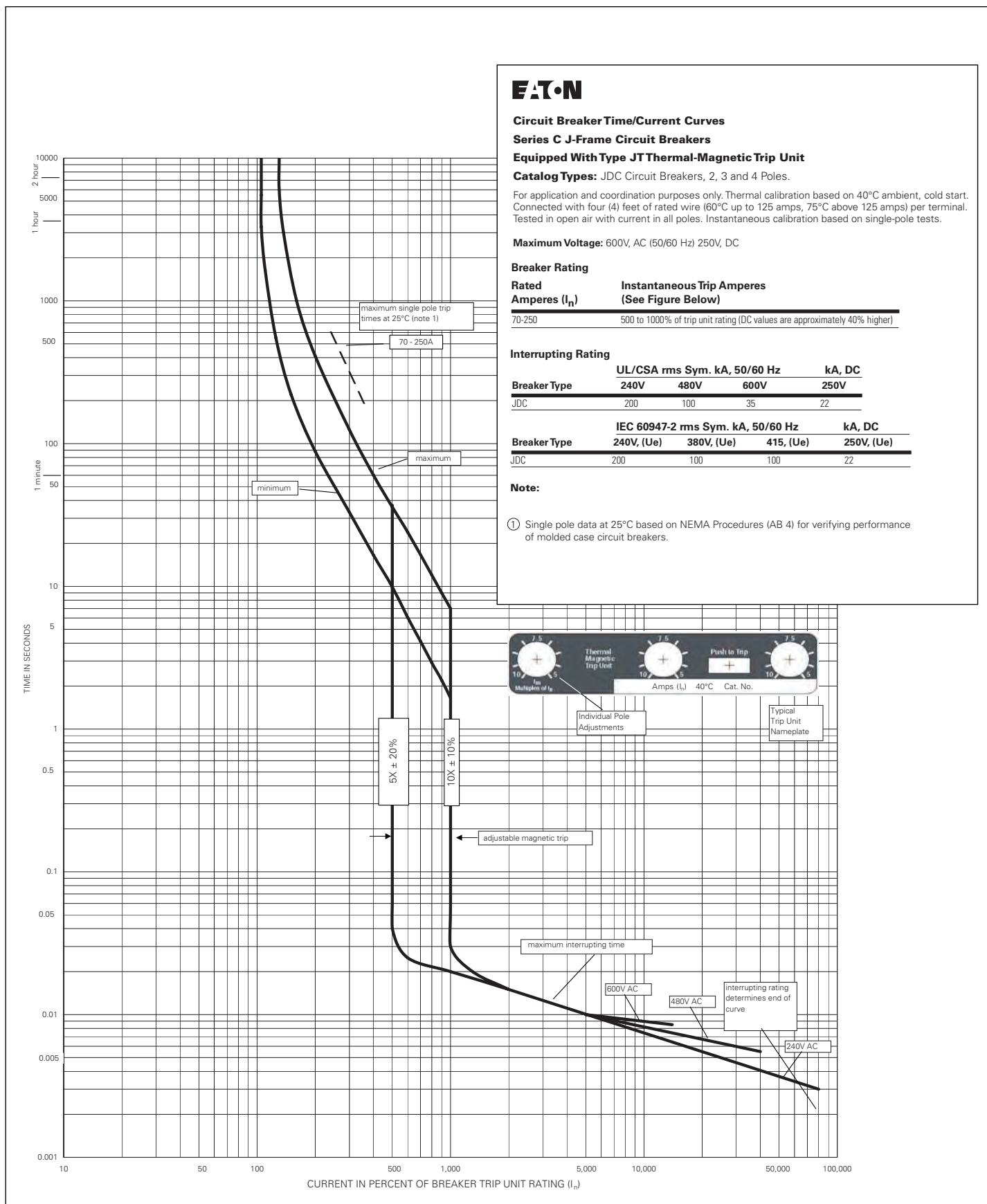


Figure 2. JDC 2, 3 and 4 Poles - Curve Number SC-4248-87C, June 2006

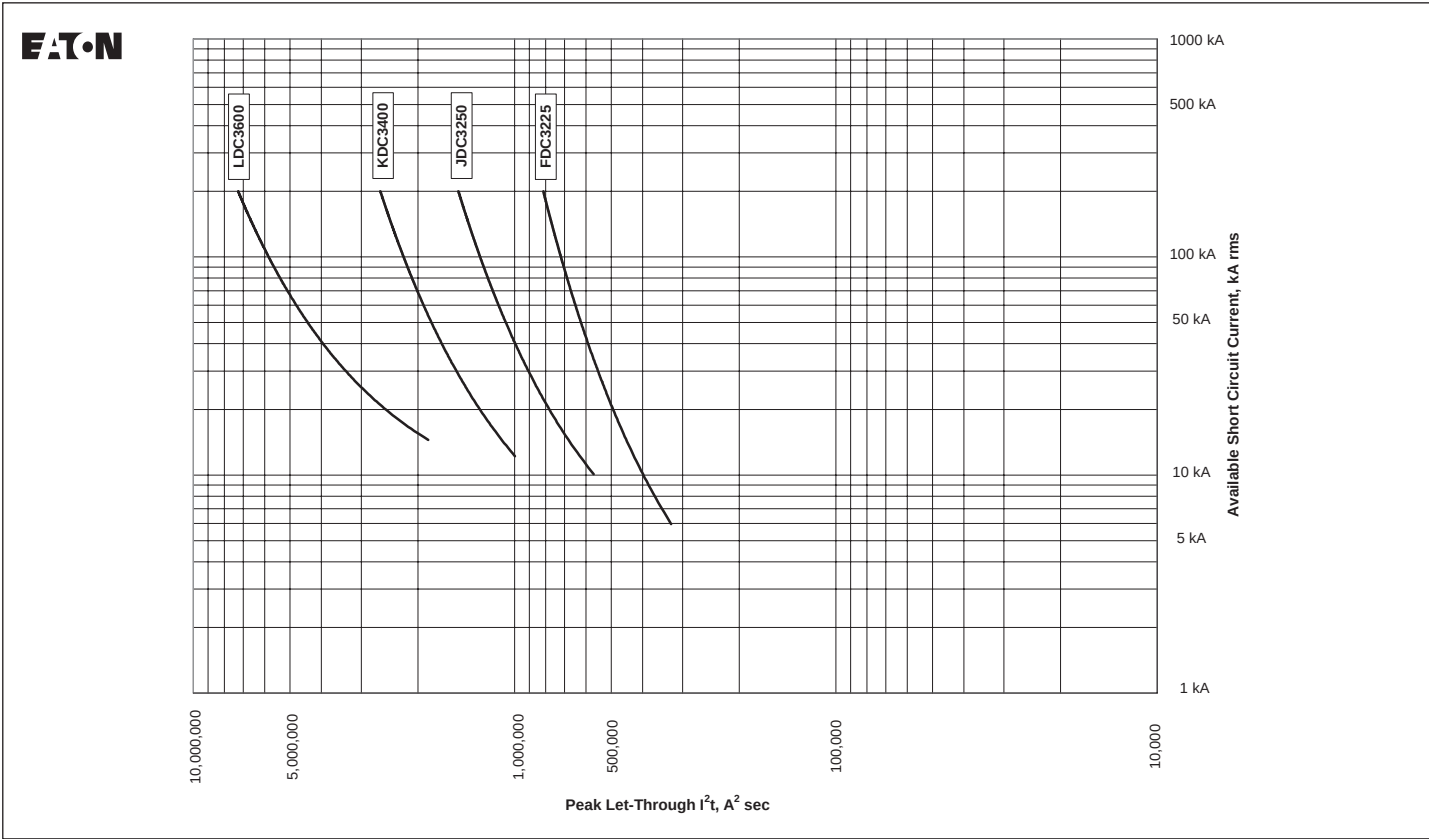


Figure 3. Peak Let-Through I^2t Curve — 240 V - Curve Number AD-29-166A

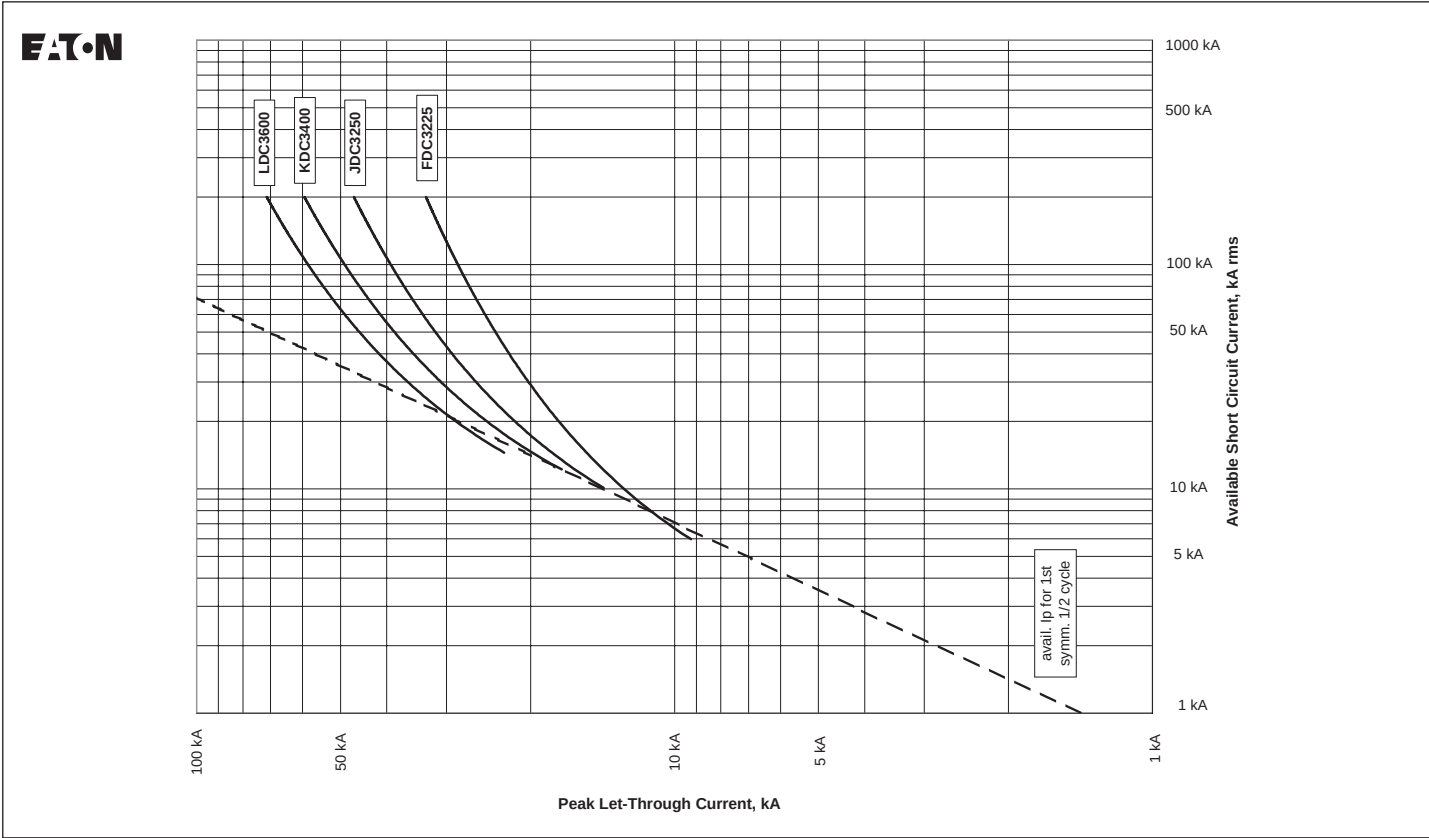


Figure 4. Peak Let-Through Current Curve — 240 V - Curve Number AD-29-166A

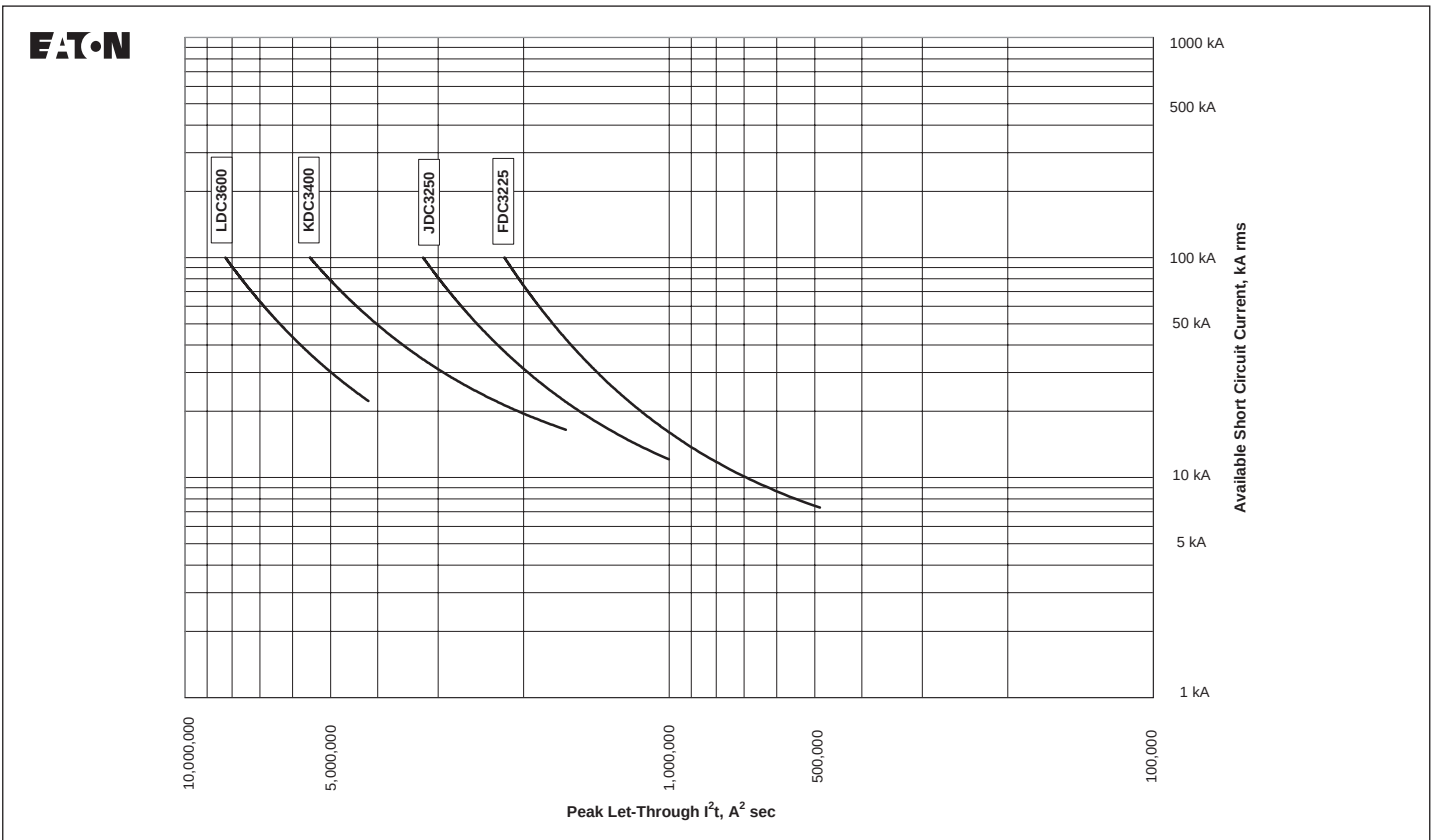


Figure 5. Peak Let-Through I^2t Curve — 480 V - Curve Number AD-29-166B

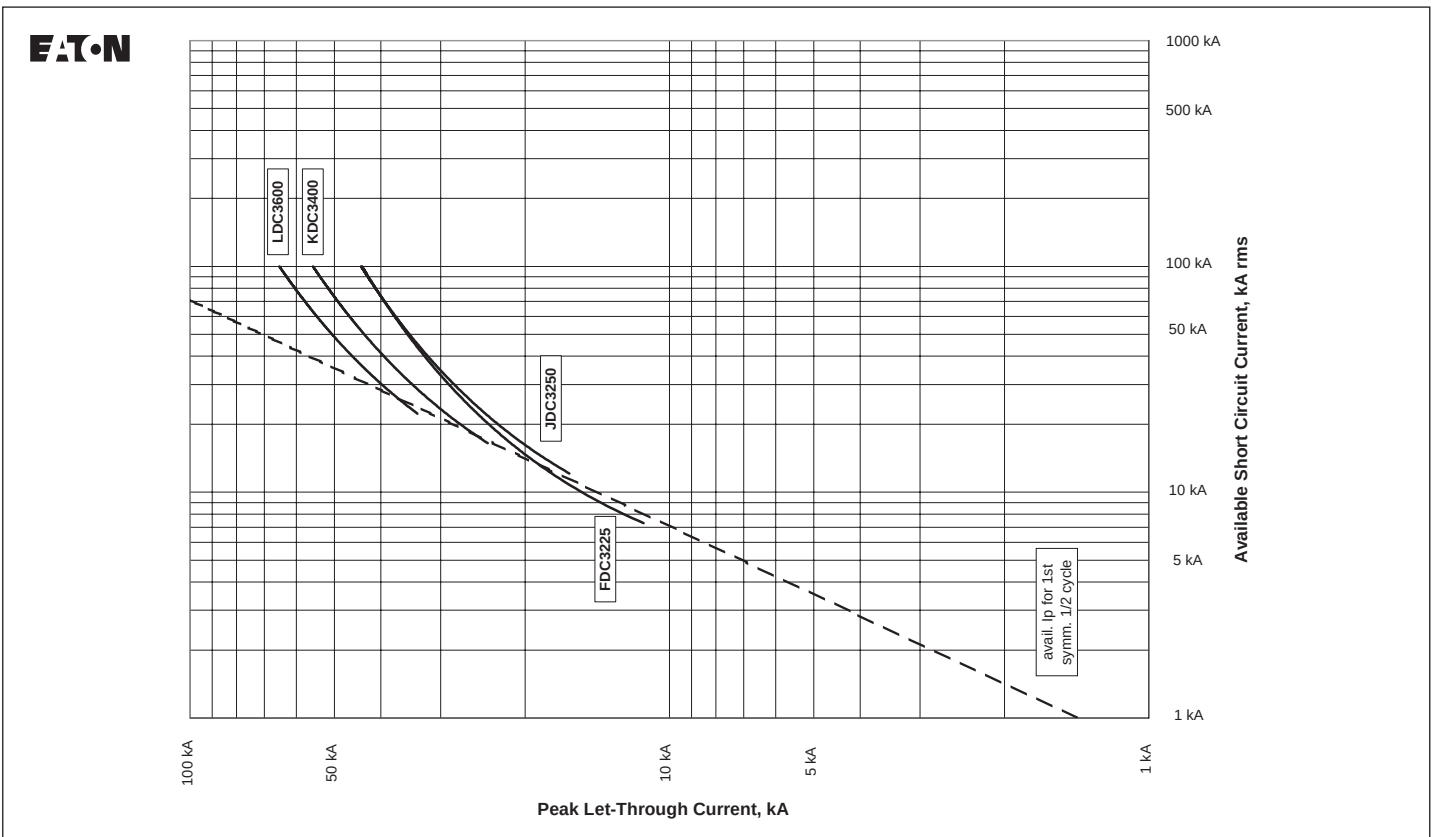


Figure 6. Peak Let-Through Current — 480 V - Curve Number AD-29-166B

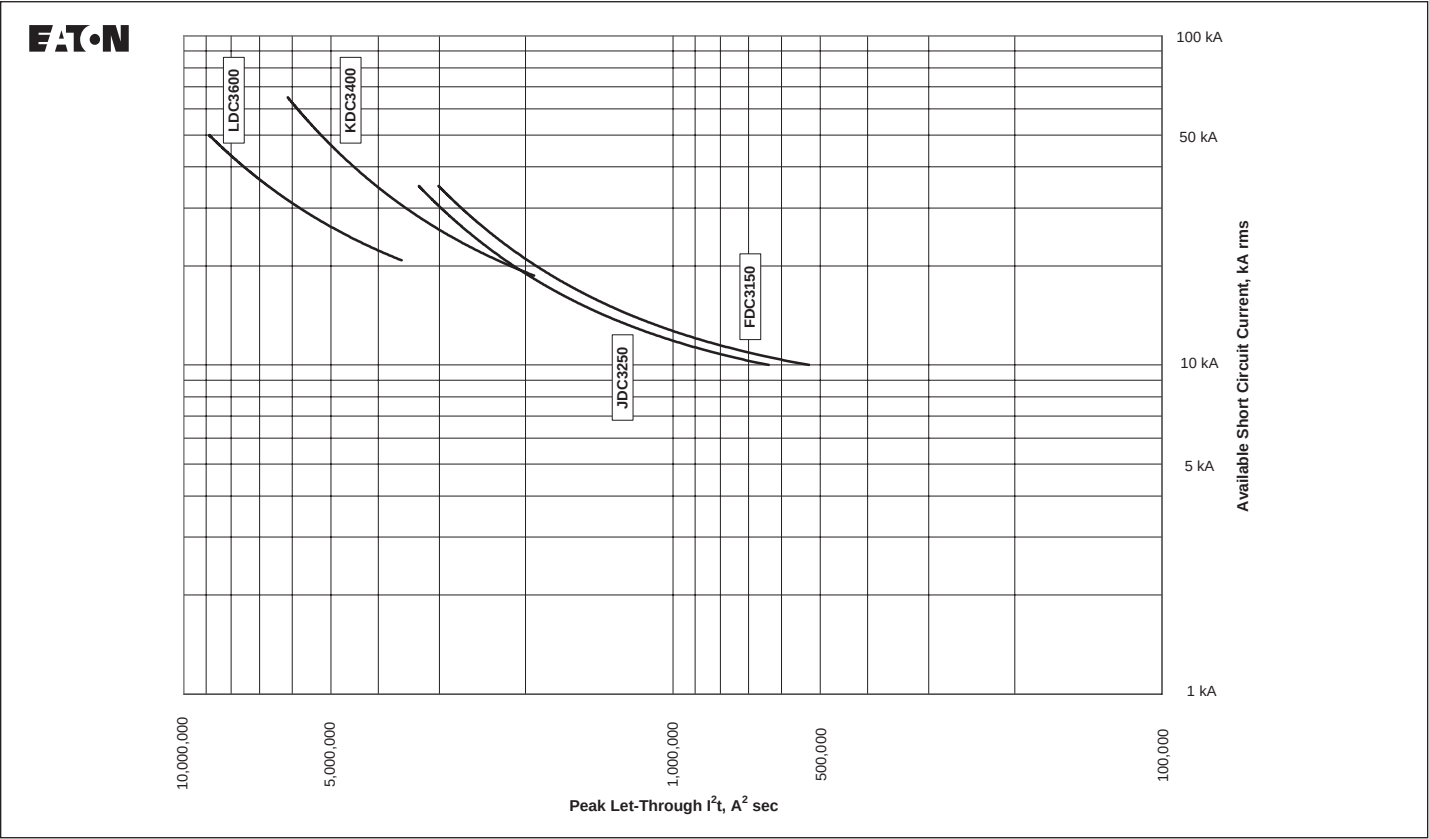


Figure 7. Peak Let-Through I^2t — 600 V - Curve Number AD-29-166C

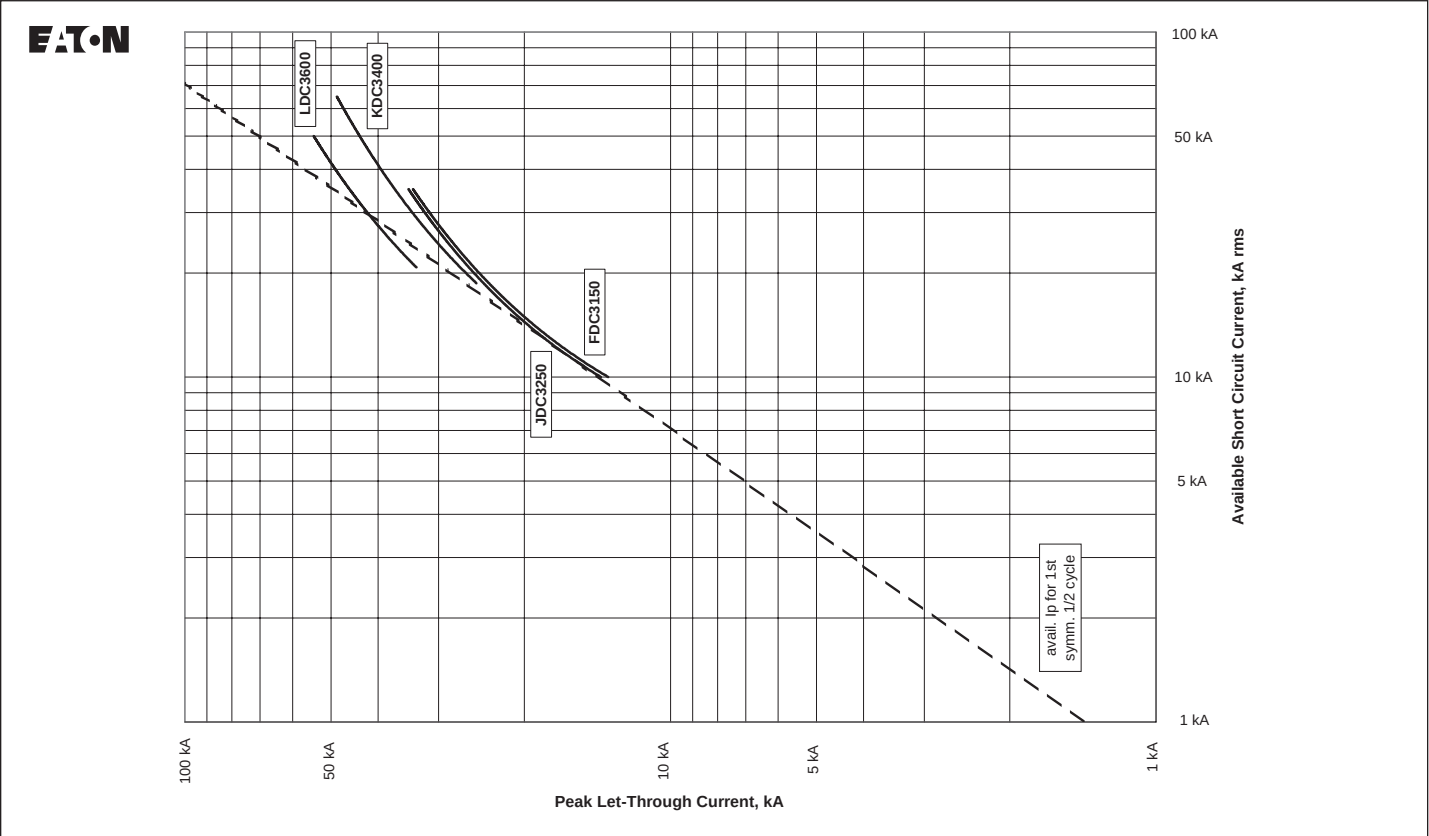


Figure 8. Peak Let-Through Current — 600 V - Curve Number AD-29-166C

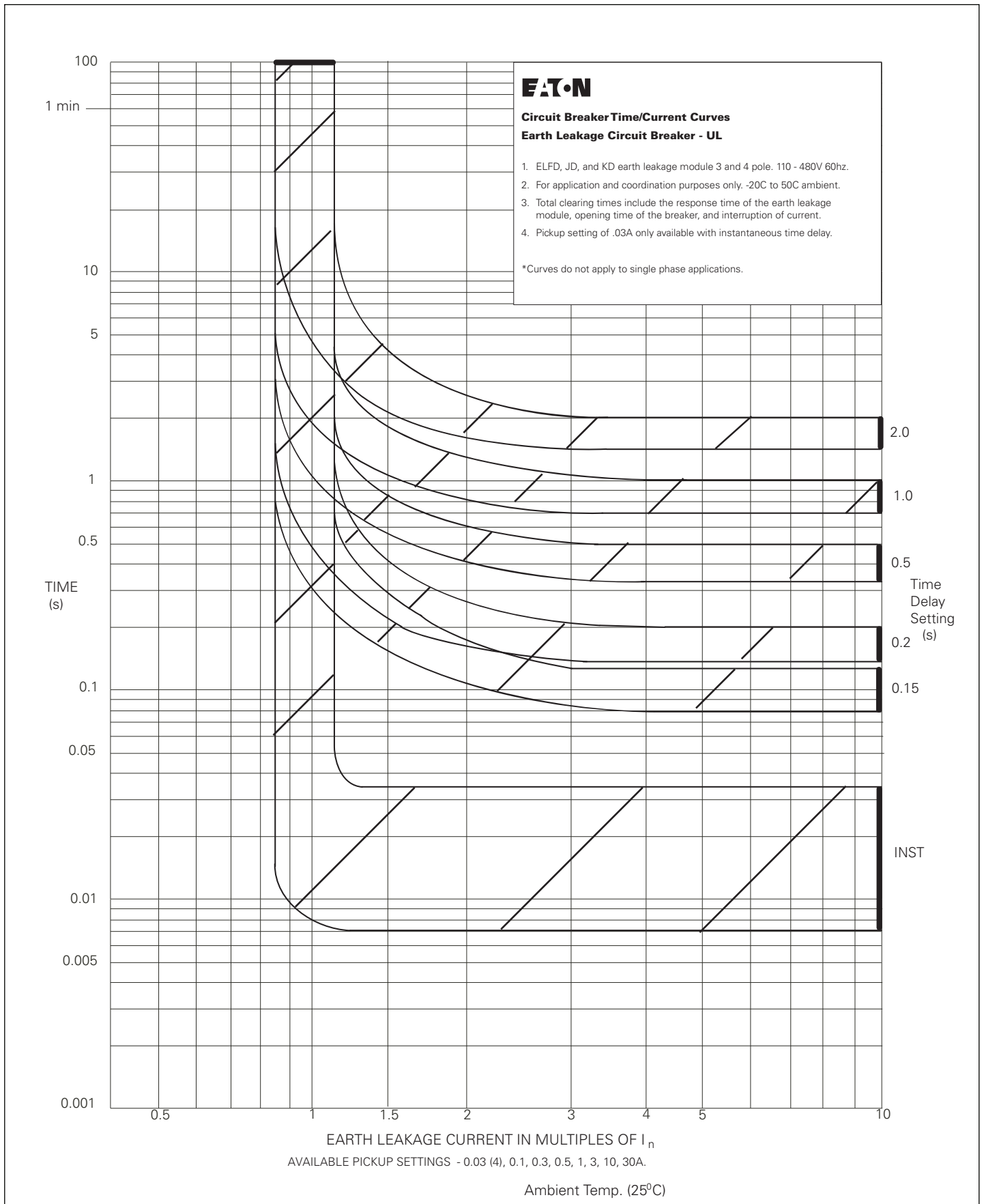


Figure 9. UL Series C K-Frame Circuit breaker Earth Leakage Module, 110-480V - Curve Number TC01212005E, March 2003

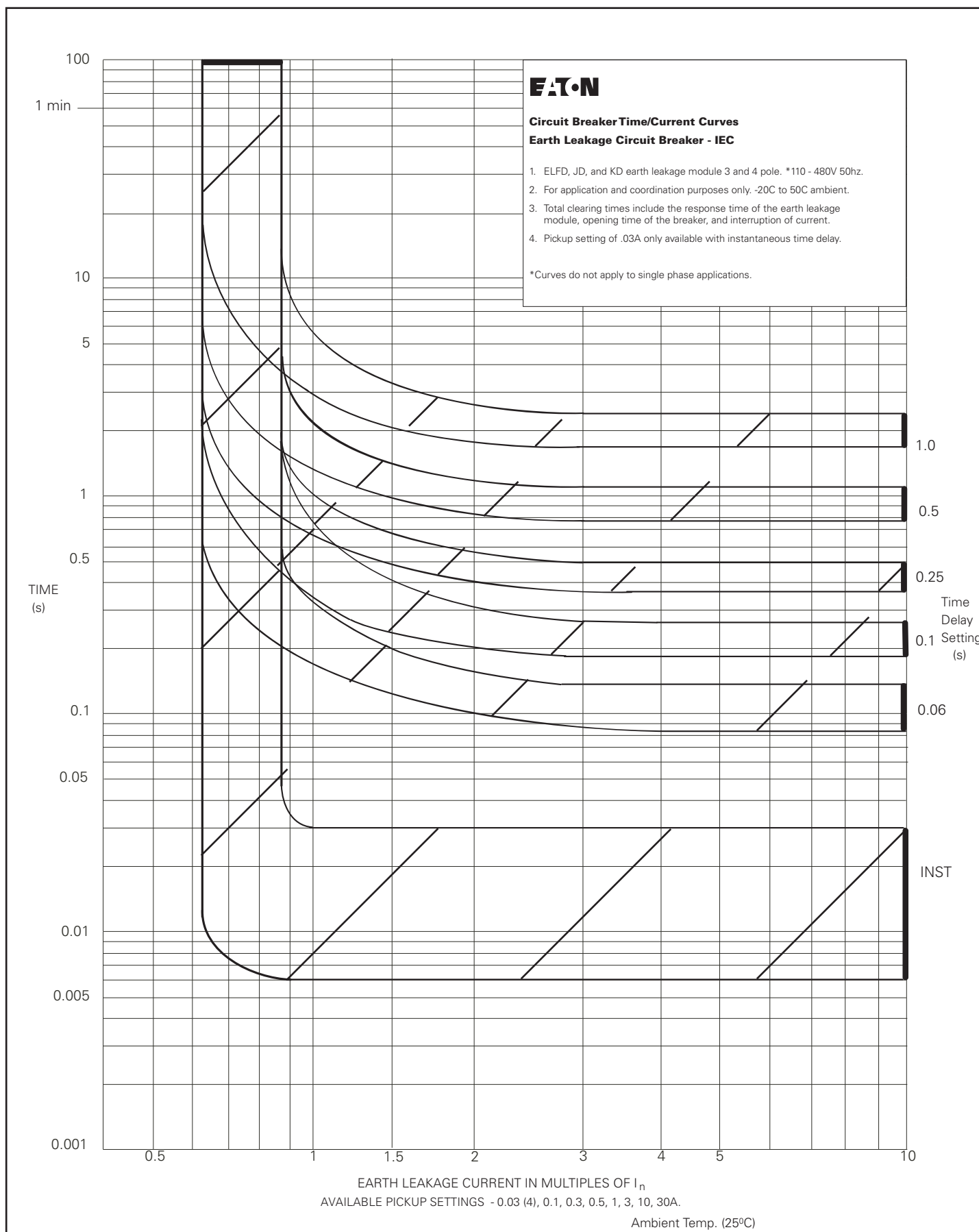


Figure 10. IEC Series C K-Frame Circuit breaker Earth Leakage Module, 110-480V - Curve Number TC01212006E, March 2003

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