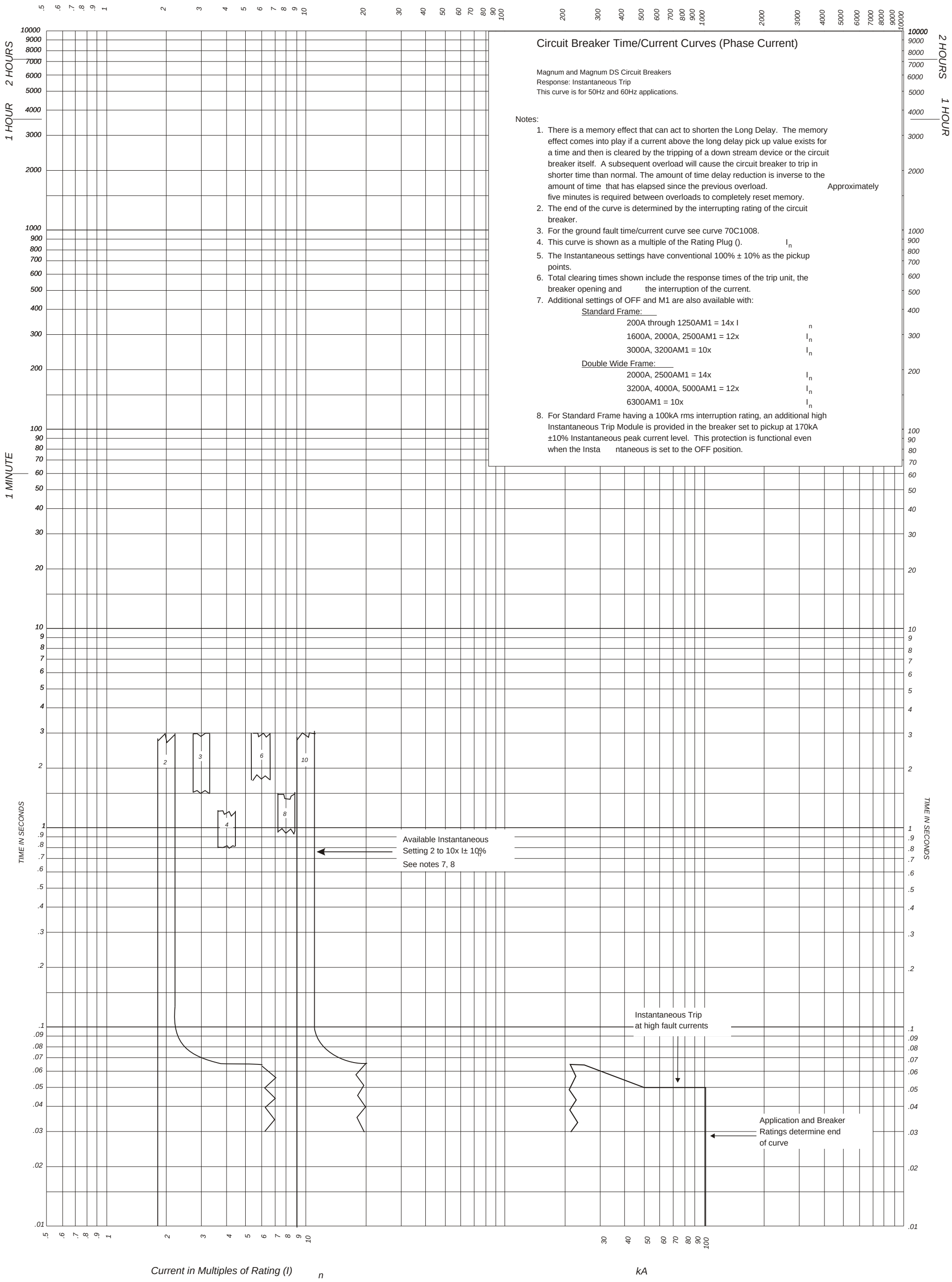
Cutler-Hammer

Digitrip 520 / 520M / 520 / 520M - Instantaneous Curve



Circuit Breaker Time/Current Curves (Phase Current)

Magnum and Magnum DS Circuit Breakers
Response: Instantaneous Trip
This curve is for 50Hz and 60Hz applications.

Notes:

1. There is a memory effect that can act to shorten the Long Delay. The memory effect comes into play if a current above the long delay pick up value exists for a time and then is cleared by the tripping of a down stream 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.
2. The end of the curve is determined by the interrupting rating of the circuit breaker.
3. For the ground fault time/current curve see curve 70C1008.
4. This curve is shown as a multiple of the Rating Plug (). I_n
5. The Instantaneous settings have conventional 100% ± 10% as the pickup points.
6. Total clearing times shown include the response times of the trip unit, the breaker opening and the interruption of the current.
7. Additional settings of OFF and M1 are also available with:

   Standard Frame:
   - 200A through 1250AM1 = 14x I_n
   - 1600A, 2000A, 2500AM1 = 12x I_n
   - 3000A, 3200AM1 = 10x I_n

   Double Wide Frame:
   - 2000A, 2500AM1 = 14x I_n
   - 3200A, 4000A, 5000AM1 = 12x I_n
   - 6300AM1 = 10x I_n
8. For Standard Frame having a 100kA rms interruption rating, an additional high Instantaneous Trip Module is provided in the breaker set to pickup at 170kA ±10% Instantaneous peak current level. This protection is functional even when the Insta ntaneous is set to the OFF position.

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