EATON | Cutler-Hammer

October 2006 **A. D. 70C1082**

Characteristic Curves for Magnum DS Circuit Breakers using Digitrip 220, 220P 520, 520M, 520MC Tripunits and Magnum Circuit Breakers using Digitrip 520*i*, 520M*i*, 520MC*i* Tripunits

This envelope contains the following time-current curves:

Curve Description	Curve No.
Digitrip 220 - Long Delay (fixed) and **Instantaneous** response Time-Phase Current Characteristic Curve based on I_n for types Magnum and Magnum DS Circuit Breakers	70C1010
Digitrip 220P - Long Delay (adjustable) based on I_r and **Instantaneous** based on I_n Time-Phase Current Characteristic Curve responses for types Magnum and Magnum DS Circuit Breakers	70C1295 70C1296
Digitrip 520 / 520M / 520MC / 520*i* / 520M*i* / 520MC*i* - Long Delay (I^2t) and **Short Delay Flat** and **(I^2t)** Time-Phase Current Characteristic Curve based on I_r for types Magnum and Magnum DS Circuit Breakers	70C1006
Digitrip 520 / 520M / 520MC / 520*i* / 520M*i* / 520MC*i* - Instantaneous Time-Phase Current Characteristic Curve based on I_n for types Magnum and Magnum DS Circuit Breakers	70C1007
Digitrip 520 / 520M / 520MC / 520*i* / 520M*i* / 520MC*i* - Ground (Earth) Fault Flat and **(I^2t) – Trip or Alarm Only (LSIA style)** Time-Ground Current Characteristic Curve based on I_n for types Magnum and Magnum DS Circuit Breakers	70C1008
Digitrip 520MC - Maintenance Mode Trip Time-Phase Current Characteristic Curve based on I_n for Magnum DS and Magnum SB Circuit Breakers	70C1446

Definitions

I_n is the maximum value of continuous current for which the trip unit can be set.

I_n is the basis (or reference) for both the Instantaneous and the Ground (Earth) protection current settings. The Ampere value of **I_n** is printed on the Rating Plug.

I_r is the basis for both the Long Delay Time and Short Delay Pick Up protection current settings. The Ampere value of **I_r** is the Long Delay Pickup Setting **x I_n**.

Cutler-Hammer
Pittsburgh, Pennsylvania, U.S.A. 15275