

## **Cutler-Hammer**

June 2006 \*

## Characteristic Curves for Magnum DS and Magnum SB Circuit Breakers using Digitrip 1150 and Magnum Circuit Breakers using 1150*i* Tripunits

This envelope contains the following time-current curves:	Curve No.
<b>Long Delay I<sup>2</sup>t</b> , <b>Short Delay Flat</b> and <b>I<sup>2</sup>t</b> response Time-Phase Current Characteristic Curve based on $I_r$ for Magnum, Magnum DS and Magnum SB Circuit Breakers	70C1034
Long Delay I <sup>4</sup> t, Short Delay Flat response Time-Phase Current Characteristic Curve based on Ir for Magnum, Magnum DS and Magnum SB Circuit Breakers	70C1035
IEEE Moderately Inverse, Short Delay Flat Time-Phase Current Characteristic Curve based on $I_r$ for Magnum DS and Magnum SB Circuit Breakers	70C1038
IEEE Very Inverse, Short Delay Flat Time-Phase Current Characteristic Curve based on $I_r$ for Magnum DS and Magnum SB Circuit Breakers	70C1039
IEEE Extremely Inverse, Short Delay Flat Time-Phase Current Characteristic Curve based on $I_r$ for Magnum DS and Magnum SB Circuit Breakers	70C1040
<b>IEC-A Normal Inverse, Short Delay Flat</b> Time-Phase Current Characteristic Curve based on $I_r$ for Magnum Circuit Breakers	70C1031
<b>IEC-B Very Inverse, Short Delay Flat</b> Time-Phase Current Characteristic Curve based on $I_r$ for Magnum Circuit Breakers	70C1032
<b>IEC-C Extremely Inverse, Short Delay Flat</b> Time-Phase Current Characteristic Curve based on $I_r$ for Magnum Circuit Breakers	70C1033
Instantaneous Time-Phase Current Characteristic Curve based on ${\sf I}_n$ for Magnum, Magnum DS and Magnum SB Circuit Breakers	70C1043
Instantaneous Time-Phase Current Characteristic Curve based on ${\sf I}_n$ for Magnum, Magnum MDSX and Magnum SBSE Circuit Breakers	70C1586
Maintenance Mode Trip Time-Phase Current Characteristic Curve based on ${\sf I}_n$ for Magnum DS and Magnum SB Circuit Breakers	70C1498
<b>Ground (Earth) Fault Flat</b> and $I^2t$ – <b>Trip or Alarm Only (LSIA style)</b> Time-Ground Current Characteristic Curve based on I <sub>n</sub> for Magnum, Magnum DS and Magnum SB Circuit Breakers	70C1041

## Definitions

 $\mathbf{I}_{\mathbf{n}}$  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.

 $\mathbf{I}_r$  is the basis for both the Long Delay Time and Short Delay Pick Up protection current settings. The Ampere value of  $\mathbf{I}_r$  is the Long Delay Pickup Setting **x**  $\mathbf{I}_n$ .

\* Various documents within this package may contain updated revisions. Those individual drawings will have a newer date code. Further information may be obtained from:

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