



Cutler-Hammer

Application Data
32-870

January 2002
Supersedes Application Data 32-870,
dated February, 2000

Characteristic Curves for Types DS/DSL and DSI I/DSLII Circuit Breakers With Digitrip RMS 510/610/810/910 Trip Units

This Application Data contains the following time-current curves:

Curve Description	Drawing No. (Curve No.)
Typical Instantaneous Time-Phase Current Characteristic Curve based on I_n , for Types DS/DSL and DSI I/DSLII Circuit Breakers	8887C00 (SC-5619)
Typical Long Delay/Short Delay Time-Phase Current Characteristic Curve based on I_r for Types DS/DSL and DSI I/DSLII Circuit Breakers.....	8887C01 (SC-5620)
Typical Ground Fault/Protection Time-Current Characteristic Curve based on I_n for Types DS/DSL and DSI I/DSLII Circuit Breakers	8887C02 (SC-5261)

Refer to Application Data 36-783 for the DSL and DSLII Limiter Time-Current Characteristic Curves.

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 Long Delay pickup, Instantaneous pickup and the Ground pickup protection current settings.

The value of I_n is printed on the Rating Plug.

I_r is the basis for Short Delay (if provided) protection current settings.

The value of I_r is the Long Delay pickup Current Setting $\times I_n$.

Standard Ratings (60Hz)

Breaker Type		Frame Rating Amperes	Interrupting Capacity, RMS Symmetrical Amperes (kA) With Instantaneous Trip		
DS-	DSLII -		240V	480V	600V
206	308	800A	42,000	30,000	30,000
206H	—	800A	50,000	42,000	42,000
—	508	800A	65,000	50,000	42,000
206E	—	800A	65,000	65,000	50,000
—	608	800A	65,000	65,000	50,000
416	516	1600A	65,000	50,000	42,000
416H	616	1600A	65,000	65,000	50,000
420	620	2000A	65,000	65,000	50,000
632	632	3200A	85,000	65,000	65,000
840	840	4000A	130,000	85,000	85,000
850	850	5000A	130,000	85,000	85,000

Types DSL (206, 416, 420, 632 and 840) and DSLII (308, 516, 620, 632 and 840)
200kA, 600V ac Max.

Cutler-Hammer

Pittsburgh, Pennsylvania, U.S.A. 15275



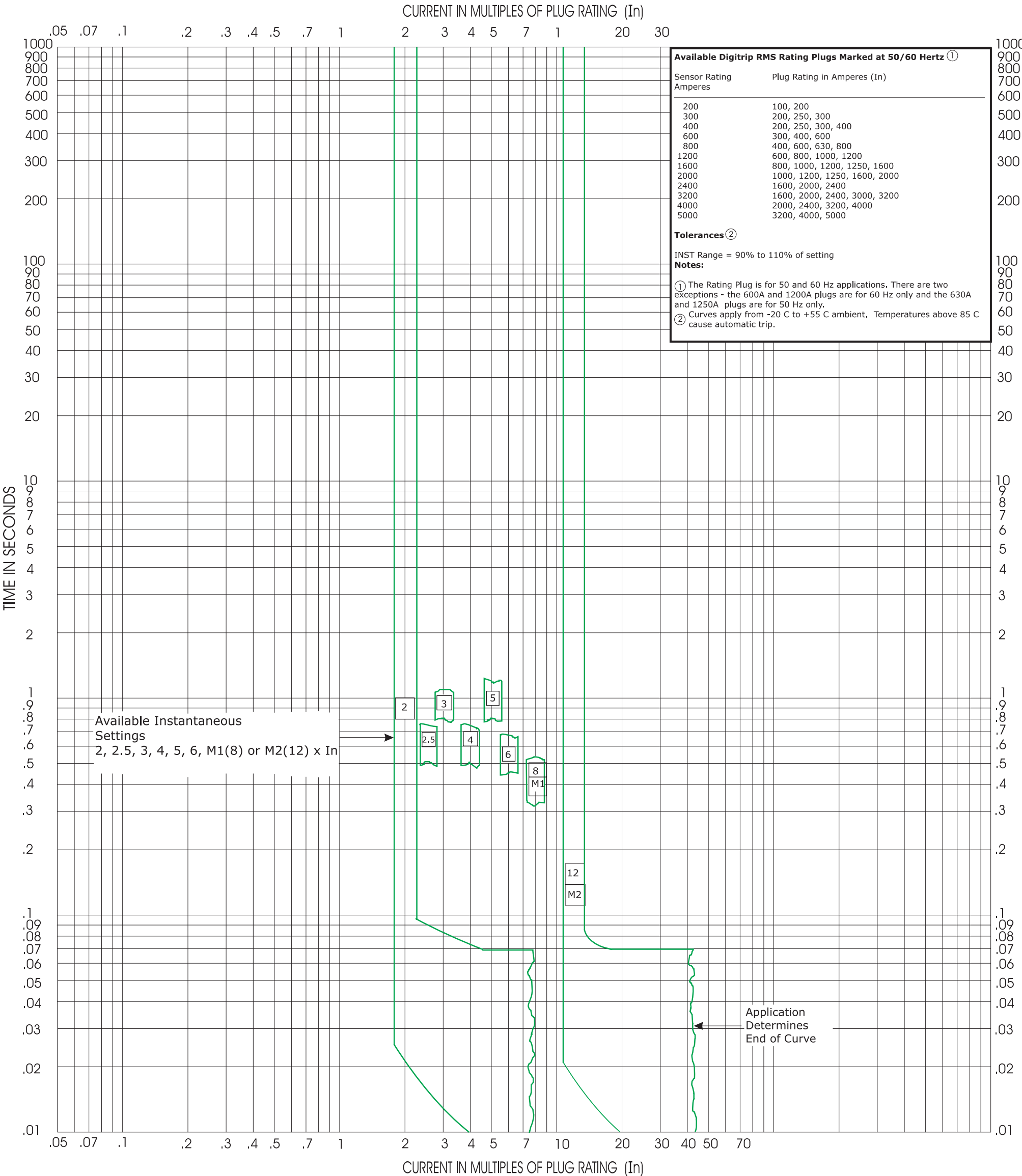
IMPORTANT

TRIP UNITS ARE **NOT AVAILABLE** WITH **ONLY INSTANTANEOUS** PROTECTION. **THIS CURVE MUST BE USED** in conjunction **WITH** Curve No SC-5620 for **LONG DELAY** (and, if applicable, **SHORT DELAY**) **PROTECTION** to obtain the complete time-current characteristic.

Application Data
32-870

Cutler-Hammer

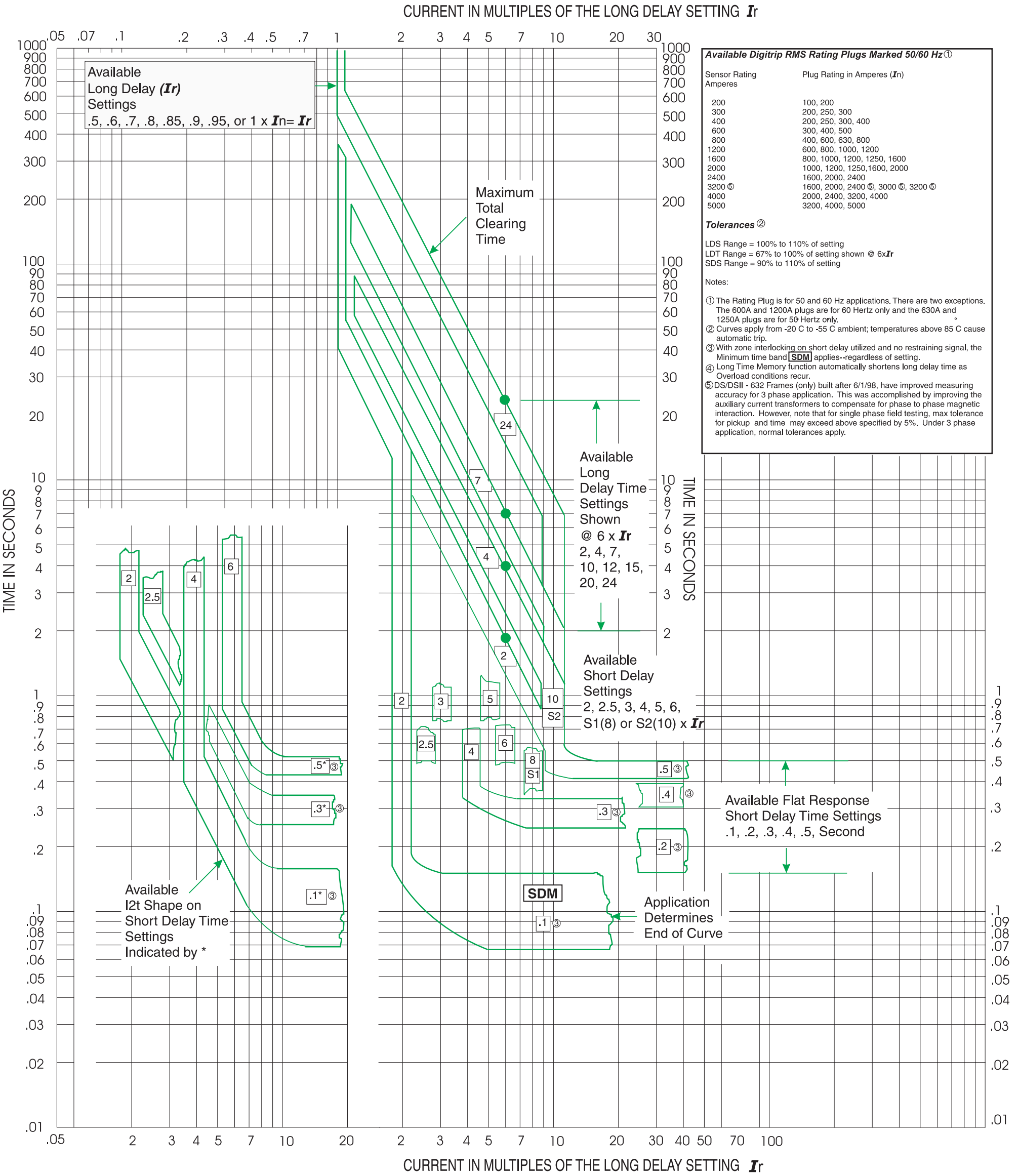
Types **DS/DSL** and **DSII/DSLII** Circuit Breakers
DIGITRIP RMS 510/610/810/910 Trip Units
Typical **Instantaneous** Time-**Phase** Current Characteristic Curve **(I)**



Curve No. SC-5619-02
Dwg. No. 8887C00
January 2002

Cutler-Hammer

Types **DS/DSL** and **DS II/DSL II** Circuit Breakers with
DIGITRIP RMS 510/610/810/910 Trip Units
Typical **Long Delay** and **Short Delay**
Time-Phase Current Characteristic Curve (**LS**)



Cutler-Hammer

Types **DS/DSL** and **DSII/DSLII** Circuit Breakers with
DIGITRIP RMS 510/610/810/910 Trip Units
Typical Time-**Ground** Current Characteristic Curve (**G**)

