



## TECHNICAL INFORMATION

TITLE: HAMMOND CT's

CT SIZE	$R_o$	$V_{knee}$	$I_o$ Max	$R_{LA}$	$R_{LB}$	$W_A$	$W_B$ (Meters)
CT50	0.021	0.9	42	0.0047	0.0219	0.56	2.63
CT100	0.025	1.2	48	0.0093	0.0321	1.12	3.87
CT200	0.050	2.1	42	0.010	0.050	1.20	6.02
CT250	0.060	2.6	43	0.014	0.0638	1.69	7.69
CT300	0.070	3.3	47	0.024	0.087	2.90	10.50
CT400	0.090	4.3	48	0.033	0.1148	3.98	13.83
CT500	0.110	5.5	50	0.047	0.1519	5.67	18.30
CT600	0.130	7.3	56	0.078	0.2176	9.40	26.22
CT800	0.170	10.0	58	0.115	0.3062	13.90	36.89
CT1000	0.210	13.0	61	0.161	0.4090	19.40	49.28
CT1200	0.250	15.0	60	0.178	0.4643	21.50	55.94

$R_o$  = CT Resistance

$V_{knee}$  = Max (non-sat) voltage

$I_o$  =  $\frac{V @ Knee}{R_o}$  (Output Current)

$R_{LA}$  = Maximum allowable load resistance to maintain linearity up to 1000% on MPU.  

$$R_{LA} = \frac{V_{knee}}{35} - R_o$$

$R_{LB}$  = Maximum allowable load resistance to maintain linearity up to 600% on MPU.  

$$R_{LB} = \frac{V_{knee}}{21} - R_o$$

$W_A$  = Equivalent length of 14 AWG for linearity up to 1000%.  

$$W_A = \frac{R_{LA}}{.0083}$$

$W_B$  = Equivalent length of 14 AWG for linearity up to 600%.  

$$W_B = \frac{R_{LB}}{.0083}$$

14 AWG = 0.0083  $\Omega$ /Meter

DATE	REV	AUTHOR	DOCUMENT LOCATION	PAGE
2000-May-05	1	MV	<a href="http://www.startco.ca/library/techinfo/section11/11.3.pdf">http://www.startco.ca/library/techinfo/section11/11.3.pdf</a>	1 of 1