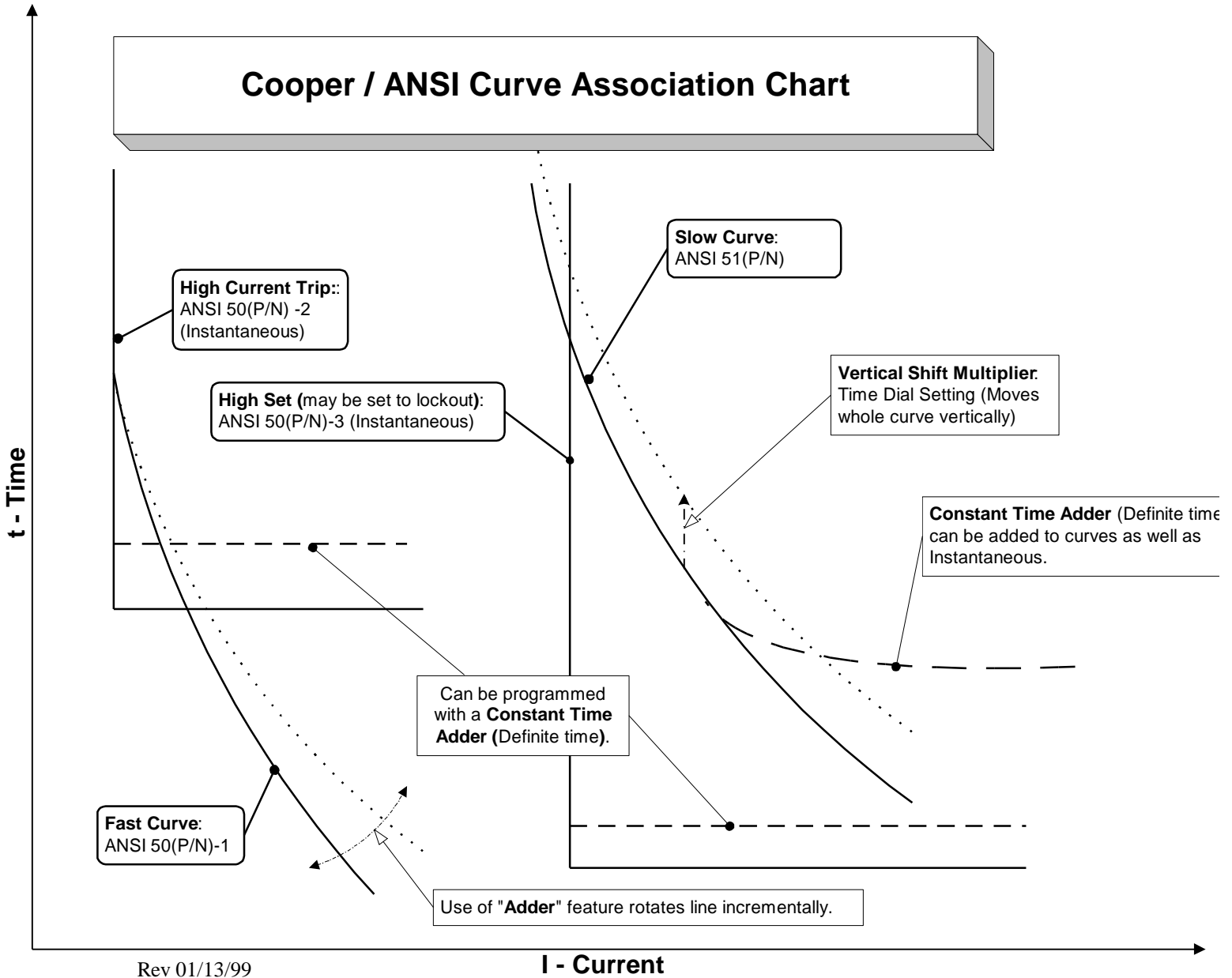


Traditional Recloser Curve Designation: Old Electronic & New Microprocessor-based

Form 4C Timing Group ☉				Form 3A Time-Current Curves	
1	2	3	4	Ground MEA216	Phase MEA217
101	101	101	101		A
102	102	102	102	1	
111	111	111	111	8 *	
135	135	135	135	2	
105	105	105	105		R
117	117	117	117		B
133	133	133	133		C
140	140	140	140	3	
116	116	116	116		D
132	132	132	132		E
104	104	104	104		N
142				13	
162					KP
165				KG	
106	106	106	106	4	
141			141	11	
131			131	9	
114			114	5	
136			136	6	
119			119	14	
138	138		138		W
	164				J
	118				M
	113			8	
	161				T
	152			7	
	163				F
	112			15	
	107				L
		103		17	
		115			P
		121			G
		122			H
		151		18	
		139		16	
		137			V
		134			Z
		120			Y
			200		
			201		
			202		

☉ All curves in groups are interchangeable for phase and ground.

Cooper / ANSI Curve Association Chart



RECLOSER CURVES

Time Overcurrent Curve Equation

$$\text{Trip Time} = ((A / (M^* - C) + B) \times n)$$

* = P

M = Multiples of pickup current

n = Time Dial

Recloser Curves – Constant for Time Overcurrent Characteristics

CURVES	EQUATION COEFFICIENTS			
	A	B	C	P
Cooper A Curve	0.208242	-0.002370	-1.13281	2.30657
Cooper B Curve	4.22886	0.008933	0.319885	1.78220
Cooper C Curve	8.76047	0.029977	0.380004	1.80788
Cooper D Curve	5.23168	0.000462	0.172050	2.17125
Cooper E Curve	10.7656	0.004284	0.249969	2.18261
Cooper K Curve	11.9847	-0.000324	0.688477	2.01174
Cooper N Curve	0.285625	-0.071079	0.464202	0.911551
Cooper R Curve	0.001015	-0.133810	0.998848	0.002227
Cooper W Curve	15.4628	0.056438	0.345703	1.62090
Cooper 2 Curve	11.4161	0.488986	0.239257	1.84911
Cooper 3 Curve	13.5457	0.992904	0.379882	1.76391
Cooper 8 Curve	1.68546	0.158114	0.436523	1.78873
Cooper 8* Curve	1.42302	-0.007846	0.442626	1.42529
Cooper 8t Curve	1.42732	-0.003704	0.366699	1.70112
Cooper 9Curve	2.75978	5.10647	0.614258	1.03530
Cooper 11 Curve	21.6149	10.6768	-0.671850	2.69489