



# Commercial & Metering Class Current Transformers

The CR Magnetics line of Instrumentation Grade Electrical Current Transformers are available in either Commercial or ANSI Metering Class. The commercial class transformers are lower cost and well-suited for current monitoring applications. The ANSI metering class transformers are higher-cost units intended for power monitoring applications where high accuracy and minimum phase angle error are required. Twelve different window openings and eight different mounting styles along with numerous secondary ratios are available to meet most applications. This short form catalog shows an overview of our most popular 5 amp secondary transformers. Contact factory for different sizes or unique electrical requirements.

## Applications

- Ammeters
- Energy Management
- Watt/VAR/Watthour Transducers,
- Current Sensing Relays, see pages 14 & 16



Internet Resources <http://www.crmagnetics.com/>

- Application Sheet: pdf/ancrct-2.pdf
- Transformer Selection Guides: transformer.html  
cts.html

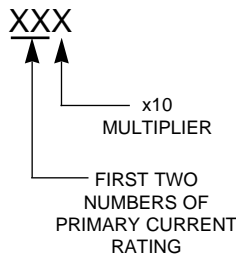
## Part Numbers

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### MOUNTING STYLES

- RL** Round with leads
- SFT** Square with feet & terminals
- SFL** Square with feet & leads
- SHT** Square without feet & with terminals
- SHL** Square without feet & with leads
- RT** Round with terminals
- RBT** Round with bracket & terminals
- RBL** Round with bracket & leads

SERIES	WINDOW DIAMETER
CR1A	0.64 (16.2)
CR2	1.13 (28.7)
CR2DA	1.00 (35.4)
CR5	1.56 (39.6)
CR5A	1.56 (39.6)
CR6A	2.06 (52.3)
CR7	2.50 (63.5)
CR7A	2.50 (63.5)
CR8	3.25 (72.5)
CR56	2.06 (52.3)
CR76	3.00 (76.2)
CR170	4.25 (107.9)



\*Example: 50 AMP primary current rating would read 500, 300 AMP would read 301 and 4000 AMP would read 402.



RL



SFT



SFL



SHT



SHL



RT



RBT



RBL

## Specifications

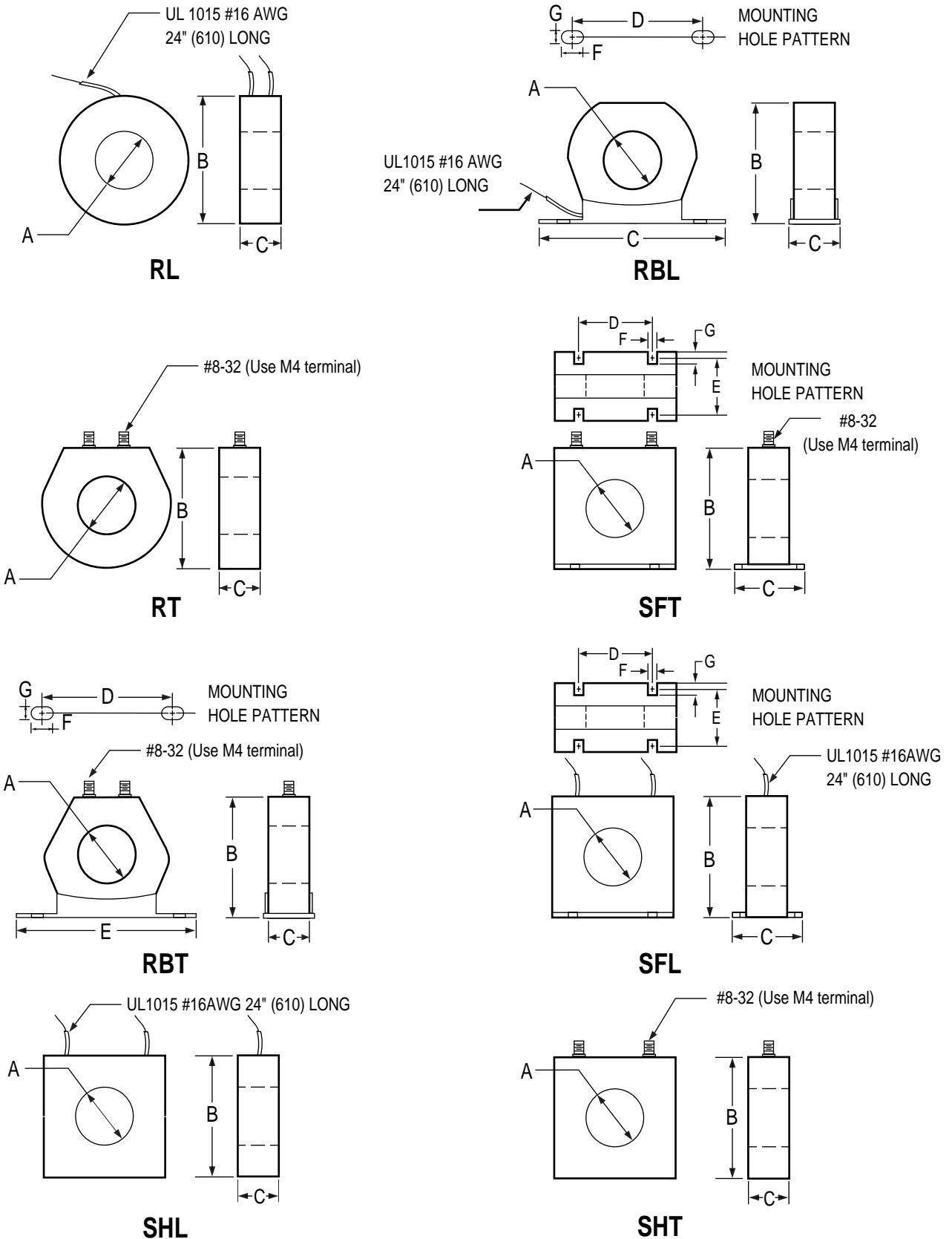
Frequency: 50-400 Hz  
Insulation: .6 kV, BIL 10 kV Full Wave

## Specials

- Ultra low frequency to 20 Hz
- Water Proof
- High volume, low cost styles
- 1.0, 0.2 & 0.1 AAC secondary ratios available

# Commercial & ANSI Metering Class Current Transformers

## Outline Drawings



# Commercial Class Current Transformers

WINDOW OPENING DIMENSION A	SERIES	MOUNTING STYLE	DIMENSIONS						CURRENT RATIO	ACCURACY AT 60 Hz	BURDEN VA AT 60 Hz		
			B	C	D	E	F	G					
1.13 (28.7)	CR2	RL							50:5	±3%	2.0		
		SFT							60:5	±2%	2.0		
		SFL	2.46 (62.5)	1.05 (26.7)						75:5	±2%	2.0	
		SHT	2.68 (68.1)	2.00 (50.8)	1.75 (44.5)	1.60 (40.6)	.27 (6.9)	.31 (7.9)		80:5	±2%	2.0	
		SHL	2.68 (68.1)	2.00 (50.8)	1.75 (44.5)	1.60 (40.6)	.27 (6.9)	.31 (7.9)		100:5	±1%	2.0	
		RT	2.71 (68.8)	0.95 (24.1)						120:5	±1%	2.5	
		RBT *	2.71 (68.8)	0.95 (24.1)						125:5	±1%	2.5	
		RBL *								150:5	±1%	4.0	
										200:5	±1%	4.0	
										250:5	±1%	6.0	
								300:5	±1%	8.0			
1.56 (39.6)	CR5	RL	3.56 (90.4)	1.10 (27.9)					50:5	±2%	1.0		
		SFT	3.78 (96.0)	2.15 (54.6)	2.75 (69.9)	1.77 (45.0)	.21 (5.3)	.31 (7.9)	75:5	±2%	1.5		
		SFL	3.78 (96.0)	2.15 (54.6)	2.75 (69.9)	1.77 (45.0)	.21 (5.3)	.31 (7.9)	100:5	±2%	2.0		
		SHT	3.83 (97.3)	1.09 (27.7)						150:5	±1%	5.0	
		SHL	3.83 (97.3)	1.09 (27.7)						200:5	±1%	5.0	
		RT	3.62 (91.9)	1.13 (28.7)						250:5	±1%	10.0	
		RBT *	3.90 (99.1)	1.25 (31.8)	3.88 (98.6)		.44 (11.2)	.27 (6.9)		300:5	±1%	12.5	
		RBL *	3.70 (94.0)	1.25 (31.8)	3.88 (98.6)		.44 (11.2)	.27 (6.9)		400:5	±1%	12.5	
										500:5	±1%	20.0	
										600:5	±1%	25.0	
										750:5	±1%	25.0	
										800:5	±1%	25.0	
										1000:5	±1%	25.0	
										1200:5	±1%	30.0	
		2.50 (63.5)	CR7	RL	4.70 (919.4)	1.10 (27.4)					100:5	±2%	2.5
SFT	4.85 (123.2)			2.13 (54.1)	3.78 (96.0)	1.75 (44.5)	.25 (6.4)	.31 (7.9)	150:5	±1%	5.0		
SFL	4.85 (123.2)			2.13 (54.1)	3.78 (96.0)	1.75 (44.5)	.25 (6.4)	.31 (7.9)	200:5	±1%	5.0		
SHT	4.70 (119.4)			1.10 (27.9)						250:5	±1%	5.0	
SHL	4.70 (119.4)			1.10 (27.9)						300:5	±1%	12.0	
RT	4.61 (117.1)			1.10 (27.9)						400:5	±1%	15.0	
RBT	4.94 (125.5)			1.25 (31.8)	5.75 (146.1)	6.5 (7.1)	.28 (7.1)	.28 (7.1)		500:5	±1%	25.0	
RBL	4.70 (125.5)			1.25 (31.8)	5.75 (146.1)	6.5 (16.5)	.28 (7.1)	.28 (7.1)		600:5	±1%	30.0	
										750:5	±1%	30.0	
										800:5	±1%	35.0	
										1000:5	±1%	30.0	
										1200:5	±1%	35.0	
										1500:5	±1%	40.0	
										1600:5	±1%	45.0	
2.06 (52.3)	CR56			RL	3.50 (88.9)	1.09 (27.7)					50:5	±3%	0.5
		SFT	3.63 (92.2)	2.15 (54.6)	2.70 (68.6)	1.70 (43.2)	.21 (5.3)	.31 (7.9)	75:5	±1%	0.5		
		SFL	3.63 (92.2)	2.15 (54.6)	2.70 (68.6)	1.70 (43.2)	.21 (5.3)	.31 (7.9)	100:5	±1%	1.0		
		RT	3.62 (91.9)	1.10 (27.9)						150:5	±1%	2.5	
		RBT	3.90 (99.1)	1.25 (31.8)	3.88 (98.6)	4.50 (114.3)	.27 (6.9)	.44 (11.2)		200:5	±1%	4.0	
		RBL	3.70 (94.0)	1.25 (31.8)	3.88 (98.6)	4.50 (114.3)	.27 (6.9)	.44 (11.2)		250:5	±1%	6.0	
										300:5	±1%	7.5	
										400:5	±1%	10.0	
										500:5	±1%	12.5	
										600:5	±1%	15.0	
										750:5	±1%	7.0	
										800:5	±1%	8.0	
										1000:5	±1%	10.0	
										1200:5	±1%	12.5	
		3.00 (76.2)	CR76	RL	4.50 (114.3)	1.09 (27.7)					200:5	±1%	5.0
SFT	4.68 (128.9)			2.08 (52.8)	3.70 (44.0)	1.75 (44.5)	.25 (6.4)	.31 (7.9)	250:5	±1%	5.0		
SFL	4.68 (118.9)			2.08 (52.8)	3.70 (44.0)	1.75 (44.5)	.25 (6.4)	.31 (7.9)	300:5	±1%	6.0		
RT	4.62 (117.3)			1.10 (27.9)						400:5	±1%	10.0	
RBT	4.94 (125.5)			1.25 (31.8)	5.75 (146.1)	6.50 (165.1)	.28 (7.1)	.28 (7.1)		500:5	±1%	10.0	
RBL	4.70 (119.4)			1.25 (31.8)	5.75 (146.1)	6.50 (165.1)	.28 (7.1)	.28 (7.1)		600:5	±1%	10.0	
										750:5	±1%	10.0	
										800:5	±1%	12.5	
										1000:5	±1%	10.0	
										1200:5	±1%	10.0	
										1500:5	±1%	12.5	
										1600:5	±1%	12.5	
										2000:5	±1%	15.0	
.64 (16.3)	CR1A			RL							50:5	±2%	1.0
											60:5	±1%	2.0
									75:5	±1%	2.0		
									80:5	±1%	2.0		
									100:5	±1%	2.5		
									120:5	±1%	3.0		
									125:5	±1%	3.0		
									150:5	±1%	4.0		
									200:5	±1%	5.0		
									250:5	±1%	7.5		

\* RBT and RBL mounting styles in the CR5 series are not available in current ratios of 750:5 thru 1200:5

# ANSI Metering Class Current Transformers

WINDOW OPENING DIMENSION A	SERIES	MOUNTING STYLE	DIMENSIONS					CURRENT RATIO	ANSI METERING CLASS @ 60 Hz						
			B	C	D	E	F		G	B0.1	B0.2	B0.5	B0.9	B1.8	
1.0 (25.4)	CR2DA	RL	2.47 (62.7)	1.75 (44.5)					50:5	4.8	-	-	-	-	
									60:5	2.4	-	-	-	-	
									75:5	2.4	2.4	-	-	-	
									80:5	1.2	2.4	-	-	-	
									100:5	1.2	1.2	-	-	-	
									120:5	1.2	1.2	-	-	-	
									125:5	0.6	1.2	-	-	-	
									150:5	0.6	1.2	2.4	-	-	
									200:5	0.3	0.6	1.2	-	-	
									250:5	0.3	0.6	1.2	-	-	
300:5	0.3	0.3	0.6	1.2	-										
1.56 (39.6)	CR5A	RL SFT SFL SHT SHL	3.56 (90.4)	2.15 (54.6)						100:5	1.2	-	-	-	-
										150:5	1.2	1.2	-	-	-
										200:5	0.6	0.6	-	-	-
										250:5	0.6	0.6	1.2	-	-
										300:5	0.3	0.3	1.2	-	-
										400:5	0.3	0.3	0.6	1.2	-
										500:5	0.3	0.3	0.6	1.2	-
										600:5	0.3	0.3	0.6	0.6	1.2
										750:5	0.3	0.3	0.6	0.6	-
										800:5	0.3	0.3	0.6	0.6	-
1000:5	0.3	0.3	0.3	0.6	-										
1200:5	0.3	0.3	0.3	0.3	0.6										
2.06 (52.3)	CR6A	RL SFT SFL SHT SHL	4.08 (103.6)	2.12 (53.8)						100:5	2.4	-	-	-	-
										150:5	1.2	1.2	-	-	-
										200:5	0.6	1.2	-	-	-
										250:5	0.3	0.6	2.4	-	-
										300:5	0.3	0.6	1.2	2.4	-
										400:5	0.3	0.3	0.6	1.2	-
										500:5	0.3	0.3	0.6	1.2	-
										600:5	0.3	0.3	0.6	0.6	1.2
										750:5	0.3	0.3	0.6	0.6	-
										800:5	0.3	0.3	0.6	0.6	-
1000:5	0.3	0.3	0.3	0.6	-										
1200:5	0.3	0.3	0.3	0.3	0.6										
1500:5	0.3	0.3	0.3	0.3	0.6										
2.50 (63.5)	CR7A	RL SFT SFL SHT SHL	4.70 (119.4)	2.13 (54.1)						100:5	2.4	-	-	-	-
										150:5	1.2	2.4	-	-	-
										200:5	0.6	1.2	-	-	-
										250:5	0.6	1.2	1.2	-	-
										300:5	0.6	0.6	1.2	2.4	-
										400:5	0.3	0.3	0.6	1.2	-
										500:5	0.3	0.3	0.6	1.2	-
										600:5	0.3	0.3	0.6	0.6	1.2
										750:5	0.3	0.3	0.6	0.6	1.2
										800:5	0.3	0.3	0.6	0.6	1.2
1000:5	0.3	0.3	0.3	0.6	1.2										
1200:5	0.3	0.3	0.3	0.3	0.6										
1500:5	0.3	0.3	0.3	0.3	0.6										
1600:5	0.3	0.3	0.3	0.3	0.6										

## ANSI Metering Class Current Transformers

WINDOW OPENING DIMENSION A	SERIES	MOUNTING STYLE	DIMENSIONS						CURRENT RATIO	ANSI METERING CLASS @ 60 Hz				
			B	C	D	E	F	G		B0.1	B0.2	B0.5	B0.9	B1.8
3.25 (82.6)	CR8	RL SHT SHL	5.73 (145.5)	1.15 (29.2)					200:5	1.2	1.2	-	-	-
									250:5	0.6	1.2	2.4	-	-
									300:5	0.6	0.6	1.2	2.4	-
									400:5	0.3	0.6	1.2	1.2	-
									500:5	0.3	0.3	0.6	1.2	2.4
									600:5	0.3	0.3	0.6	1.2	1.2
									750:5	0.3	0.3	0.3	0.6	1.2
									800:5	0.3	0.3	0.3	0.6	1.2
									1000:5	0.3	0.3	0.3	0.6	0.6
									1200:5	0.3	0.3	0.3	0.6	0.6
									1500:5	0.3	0.3	0.3	0.6	0.6
									1600:5	0.3	0.3	0.3	0.6	0.6
									2000:5	0.3	0.3	0.3	0.3	0.3
									2500:5	0.3	0.3	0.3	0.3	-
									3000:5	0.3	0.3	0.3	0.3	-
3200:5	0.3	0.3	0.3	0.3	-									
4000:5	0.3	0.3	0.3	0.3	-									
4.25 (108)	CR170	RL SHT SHL	6.73 (170.9)	1.25 (31.8)					200:5	1.2	1.2	-	-	-
									250:5	1.2	1.2	-	-	-
									300:5	0.6	0.6	1.2	2.4	-
									400:5	0.6	0.6	1.2	1.2	2.4
									500:5	0.3	0.3	0.6	1.2	2.4
									600:5	0.3	0.3	0.6	0.6	1.2
									750:5	0.3	0.3	0.3	0.3	0.6
									800:5	0.3	0.3	0.3	0.3	0.6
									1000:5	0.3	0.3	0.3	0.3	0.6
									1200:5	0.3	0.3	0.3	0.3	0.6
									1500:5	0.3	0.3	0.3	0.6	0.6
									1600:5	0.3	0.3	0.3	0.6	0.6
									2000:5	0.3	0.3	0.3	0.3	0.3
									2500:5	0.3	0.3	0.3	0.3	0.3
									3000:5	0.3	0.3	0.3	0.3	0.3
3500:5	0.3	0.3	0.3	0.3	0.3									
4000:5	0.3	0.3	0.3	0.3	0.3									