

# Section 6

## Transformers

<b>Miscellaneous</b>	<b>6-1</b>
Class 7400	6-2
<b>General Purpose Dry Type 600 Volts and Below</b>	<b>6-3</b>
Drive Isolation Transformers	6-3
Open Core and Coil Transformers	6-4
<b>Industrial Control</b>	<b>6-5</b>
Type EO Transformers	6-5
Type T and MultiTap™ Transformers	6-5
<b>Instrument 600 Volt Class</b>	<b>6-7</b>
Voltage and Current Transformers	6-7
Toroidal Current Transformers	6-8
Obsolete—January 1, 2023Toroidal Current Transformers (64R, 74R, 66R, 76R)	6-8
Obsolete—January 1, 2023Toroidal Current Transformers (110R, 110R, 120R, 140R)	6-8
Obsolete—January 1, 2023Toroidal Current Transformers (152R, 170R, 180R, 210R)	6-9
Obsolete—January 1, 2023Toroidal Current Transformers (200R, 201R, 202R, 203R)	6-10
Obsolete—January 1, 2023Shorting Terminal Blocks	6-10
Current Transformers: Multi-Ratio, Rectangular, Split-Core	6-10
Obsolete—January 1, 2023Multi-Ratio Current Transformers	6-10
Obsolete—January 1, 2023Rectangular Window Current Transformers	6-11
Obsolete—January 1, 2023Split-Core Current Transformers	6-11
Current Transformers: Bushing, Auxiliary	6-12
Obsolete—January 1, 2023Bushing Current Transformers 50–400 Hz	6-12
Obsolete—January 1, 2023Auxiliary Current Transformers	6-12

Enclosure Dimensions and Accessories [1]

Enclosure Number/Style	Height		Width		Depth		Mounting	Weather-shield	Wall Mounting Bracket	Ceiling Mounting Bracket	Insulation Class °C																																																																																		
	In.	mm	In.	mm	In.	mm																																																																																							
1	A	5.00	127	4.47	114	3.44	87	Wall	[2]	[3]	—																																																																																		
2		5.50	140									8.68	220	6.56	167																																																																														
3		5.00	127													8.62	219	6.50	165																																																																										
4		5.50	140	13.50	343	9.00	229																																																																																						
5		6.19	157																	19.10	485	12.25	311																																																																						
6		6.69	170																					15.00	381	13.50	343																																																																		
7		8.13	270																									25.00	635	13.50	343																																																														
8		8.25	210																													14.75	375	9.75	248																																																										
9		9.56	243																																	14.75	375	9.75	248																																																						
10		10.50	267																																					14.75	375	9.75	248																																																		
11		12.56	319																																									14.75	375	9.75	248																																														
12	C	13.50	343					14.75	375	9.75	248																																																																																		
13	B	14.75	375									14.75	375	9.75	248																																																																														
14	C	14.75	375													14.75	375	9.75	248																																																																										
15	B	20.00	508	14.75	375	9.75	248																																																																																						
16	C	22.00	559																	14.75	375	9.75	248																																																																						
17	D	27.00	686																					20.00	508	16.00	406																					Floor	WS363	WMB361362	CMB363																																										
17	E																											30.00	940	30.00	762																					20.00	508	WS363	WMB363364	CMB364																																					
17	H																															30.00	940	30.00	762																						20.00	508	WS363	WMB363364	CMB364																																
18	D	30.00	940																					30.00	762	20.00	508									WS364	WMB363364	CMB364																																																							
18	E																																						30.00	940	30.00	762	20.00																			508	WS364	WMB363364	CMB364																												
18	H																																											30.00	940	30.00	762																			20.00	508	WS364	WMB363364	CMB364																							
19	D							30.00	940	30.00	762																																																												20.00	508	WS364	WMB363364	CMB364																		
19	E											30.00	940	30.00	762																																																													20.00	508	WS364	WMB363364	CMB364													
20	D															30.00	940	30.00	762																																																														20.00	508	WS364	WMB363364	CMB364								
20	E			30.00	940	30.00	762																																																																															20.00	508	WS364	WMB363364	CMB364			
20	H																			30.00	940	30.00	762																																																																				20.00	508	WS364
21	D																																															30.00	940	30.00	762																																										
21	E																											30.00	940	30.00	762																					20.00	508	WS364	WMB363364	CMB364																																					
21	H																															30.00	940	30.00	762																						20.00	508	WS364	WMB363364	CMB364																																
22	D	43.75	1111																					32.00	813	27.00	686									Floor	WS380	—																																																							
22	E																																						43.75	1111	32.00	813	27.00																			686	Floor	WS380	—																												
23	E																																											43.75	1111	32.00	813																			27.00	686	Floor	WS380	—																							
24	D	48	1219					48	1219	29.5	749													Floor	WS381	—	CMB381																																																																		
24	E											48	1219	48	1219																								29.5	749	Floor	WS381	—																			CMB381																															
24	H															48	1219	48	1219																									29.5	749	Floor	WS381																			—	CMB381																										
25	D	49.5	1257	35	889	28.5	724	Floor	WS382	—	—																																																																																		
25	E											49.5	1257	35	889					28.5	724	Floor	WS382																—	—																																																					
25	H															49.5	1257	35	889																									28.5	724			Floor	WS382	—	—																																										
26	D	57.5	1461	41	1041	32	813																					Floor	WS382	—	—																																																														
26	E											57.5	1461	41	1041					32	813											Floor	WS382	—	—																																																										
26	H															57.5	1461	41	1041																	32	813	Floor						WS382	—							—																																									
28	D	60	1524	56	1422	36	914																																														Floor	WS370A	—	—																																					
28	E											60	1524	56	1422					36	914																																				Floor	WS370A	—	—																																	
28	H															60	1524	56	1422					36	914	Floor	WS370A									—	—																																																								
29	D	68	1727	48	1219	40.5	1029																																		Floor	WS370A	—																		—																																
29	E											68	1727	48	1219					40.5	1029																									Floor	WS370A															—	—																														
29	H							68	1727	48	1219					40.5	1029	Floor	WS370A					—	—																																																																				
30	D	71	1803	56	1422	40.5	1029															Floor	WS370A																—	—																																																					
30	E											71	1803	56	1422					40.5	1029																											Floor	WS370A	—	—																																										
30	H							71	1803	56	1422					40.5	1029											Floor	WS370A	—	—																																																														
31	D	74	1880	56	1422	40.5	1029																									Floor	WS370A	—	—																																																										
31	E											74	1880	56	1422					40.5	1029																	Floor						WS370A	—							—																																									
31	H							74	1880	56	1422					40.5	1029																																				Floor	WS370A	—	—																																					
32	D	91.5	2388	72	1829	54	1372																																																		Floor	WS383	—	—																																	
32	E											91.5	2388	72	1829					54	1372					Floor	WS383									—	—																																																								
32	H							91.5	2388	72	1829					54	1372																								Floor	WS383	—																		—																																
33	F	94	2388	84	2134	54	1372																																							Floor	WS383															—	—																														
33	E											94	2388	84	2134			54	1372	Floor	WS383			—	—																																																																				
33	H							94	2388	84	2134					54	1372					Floor	WS383																—	—																																																					
34	D	40.5	1031	36.5	916	21.75	553																																									Floor	WS383	—	—																																										
34	E											40.5	1031	36.5	916			21.75	553									Floor	WS383	—	—																																																														
34	H							40.5	1031	36.5	916					21.75	553															Floor	WS383	—	—																																																										
35	D	51.5	1310	40.5	1031	26.5	674																															Floor						WS383	—							—																																									
35	E											51.5	1310	40.5	1031			26.5	674																																		Floor	WS383	—	—																																					
35	H							51.5	1310	40.5	1031					26.5	674																																								Floor	WS383	—	—																																	
36	D	66	1679	50.5	1285	32	814																			Floor	WS383									—	—																																																								
36	E											66	1679	50.5	1285			32	814																						Floor	WS383	—																		—																																
36	H							66	1679	50.5	1285					32	814																													Floor	WS383															—	—																														
37	D	90	2290	80	2036	50	1272													Floor	WS383			—	—																																																																				
37	E											90	2290	80	2036			50	1272			Floor	WS383																—	—																																																					
37	H							90	2290	80	2036					50	1272																															Floor	WS383	—	—																																										
38	D	100	2545	100	2545	60	1527																					Floor	WS383	—	—																																																														
38	E											100	2545	100	2545			60	1527													Floor	WS383	—	—																																																										
38	H							100	2545	100	2545					60	1527																					Floor						WS383	—							—																																									
39	D	108	2748	108	2748	64	1628																																														Floor	WS383	—	—																																					
39	E											108	2748	108	2748			64	1628																																						Floor	WS383	—	—																																	
39	H							108	2748	108	2748					64	1628									Floor	WS383									—	—																																																								
40	D	90	2290	72	1832	50	1272																																		Floor	WS383	—																		—																																
40	E											90	2290	72	1832			50	1272																											Floor	WS383															—	—																														
40	H							90	2290	72	1832					50	1272			Floor	WS383			—	—																																																																				
41	D	80	2036	64	1628	44	1120															Floor	WS383																—	—																																																					
41	E											80	2036	64	1628			44	1120																													Floor	WS383	—	—																																										
41	H							80	2036	64	1628					44	1120											Floor	WS383	—	—																																																														
42	D	9.5	24	10	25	7.75	20																									Wall	[6]	[3]	180																																																										
42	E											9.5	24	10	25			7.75	20																			Wall						[6]	[3]							180																																									
42	H							9.5	24	10	25					7.75	20																																				Wall	[6]	[3]	180																																					
43	D	12	30	13.75	35	13.75	35																																																		Wall	[6]	[3]	180																																	
43	E											12	30	13.75	35			13.75	35							Wall	[6]									[3]	180																																																								
43	H							12	30	13.75	35					13.75	35																								Wall	[6]	[3]																		180																																
44	D	24	61	21.5	55	16.38	42																																							Wall	[6]															[3]	180																														
44	E											24	61	21.5	55			16.38	42	Wall	[6]			[3]	180																																																																				
44	H							24	61	21.5	55					16.38	42					Wall	[6]																[3]	180																																																					
45	D	23	58	25.5	65	13.75	35																																									Wall	[6]	[3]	180																																										
45	E											23	58	25.5	65			13.75	35									Wall	[6]	[3]	180																																																														
45	H							23	58	25.5	65					13.75	35															Wall	[6]	[3]	180																																																										
46	D	31.5	80	31.5	80	16.25	41																															Wall						[6]	[3]							180																																									
46	E											31.5	80	31.5	80			16.25	41																																		Wall	[6]	[3]																																						

**Drive Isolation Transformers**

Special design considerations must be made for the requirements of both adjustable frequency and dc motor drive power isolation. Allowance for high surge, harmonic and offset currents are taken into account in the design of Square D™ brand drive isolation transformers. Drive isolation transformers are not shielded isolation transformers, but act to lessen transient generation into the supply power and act as a buffer for SCR current surges.

**Table 6.1: Three-Phase 60 Hz; Class B (IEEE Standard 597-1983); 460 V Delta Primary**

kVA	Catalog No.	Full Capacity Taps	Weight (lbs) [1]	Enclosure [1][2]
<b>460 V Delta Primary, 460Y/265 V Secondary, 150°C Rise</b>				
7.5	7T145HDIT	2-5%1 + 1-	180	17D
11	11T145HDIT		190	
15	15T145HDIT		210	
20	20T145HDIT		250	18D
27	27T145HDIT		295	
34	34T145HDIT		350	
40	40T145HDIT		445	20D
51	51T145HDIT		465	
63	63T145HDIT		550	
75	75T145HDIT		845	22D
93	93T145HDIT	920		
118	118T145HDIT	1025		
145	145T145HDIT	1120	25D	
175	175T145HDIT	1200		
220	220T145HDIT	1500		
275	275T145HDIT	1390	30D	
330	330T145HDIT	2700		
440	440T145HDIT	3800		
550	550T145HDIT			
<b>460 V Delta Primary, 230Y/132 V Secondary, 150°C Rise</b>				
7.5	7T144HDIT	2-5%1 + 1-	180	17D
11	11T144HDIT		190	
15	15T144HDIT		210	
20	20T144HDIT		250	18D
27	27T144HDIT		295	
34	34T144HDIT		350	
40	40T144HDIT		445	20D
51	51T144HDIT		465	
63	63T144HDIT		550	
75	75T144HDIT		845	22D
93	93T144HDIT	920		
118	118T144HDIT	1025		
145	145T144HDIT	1120	25D	
175	175T144HDIT	1200		
220	220T144HDIT	1500		
275	275T144HDIT	1390	30D	
330	330T144HDIT	2700		
440	440T144HDIT	3800		
550	550T144HDIT			

**Table 6.2: Three-Phase 60 Hz; Class B (IEEE Standard 597-1983); 230 V Delta Primary**

kVA	Catalog No.	Full Capacity Taps	Weight (lbs) [1]	Enclosure [1][2]
<b>230 V Delta Primary, 460Y/265 V Secondary, 150°C Rise</b>				
7.5	7T143HDIT	2-5%1 + 1-	180	17D
11	11T143HDIT		190	
15	15T143HDIT		210	
20	20T143HDIT		250	18D
27	27T143HDIT		295	
34	34T143HDIT		350	
40	40T143HDIT		445	20D
51	51T143HDIT		465	
63	63T143HDIT		550	
75	75T143HDIT		845	22D
93	93T143HDIT	920		
118	118T143HDIT	1025		
145	145T143HDIT	1120	25D	
175	175T143HDIT	1200		
220	220T143HDIT	1500		
275	275T143HDIT	1390	30D	
330	330T143HDIT	2700		
440	440T143HDIT	3800		
550	550T143HDIT			
<b>230 V Delta Primary, 230Y/132 V Secondary, 150°C Rise</b>				
7.5	7T142HDIT	2-5%1 + 1-	180	17D
11	11T142HDIT		190	
15	15T142HDIT		210	
20	20T142HDIT		250	18D
27	27T142HDIT		295	
34	34T142HDIT		350	
40	40T142HDIT		445	20D
51	51T142HDIT		465	
63	63T142HDIT		550	
75	75T142HDIT		845	22D
93	93T142HDIT	920		
118	118T142HDIT	1025		
145	145T142HDIT	1120	25D	
175	175T142HDIT	1200		
220	220T142HDIT	1500		
275	275T142HDIT	1390	30D	
330	330T142HDIT	2700		
440	440T142HDIT	3800		
550	550T142HDIT			

**NOTE:** Lugs are furnished by customer.

[1] Not for construction. Contact your nearest Schneider Electric sales office for certified prints.  
 [2] For enclosure styles, see the dimensions table in Digest Section for Transformers.

### Open Core and Coil Transformers Designed for General Applications for 600 V and Below

Units are designed with 220 °C insulation, aluminum windings, top terminations, compact design to save space, and are UL component recognized for:

- Non-energy efficiency (less than 15 kVA)  
Single-phase 5–10 VA  
Three-phase 3–9 VA
- Energy efficiency (meets Table 4-2 of NEMA TP1–2002)  
Single-phase 15–75 kVA  
Three-phase 15–112.5 kVA

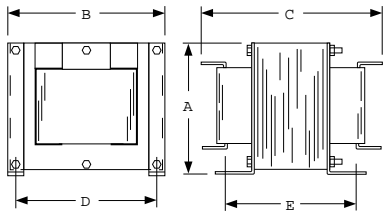


Figure 1

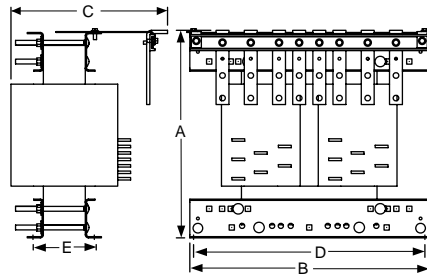


Figure 2

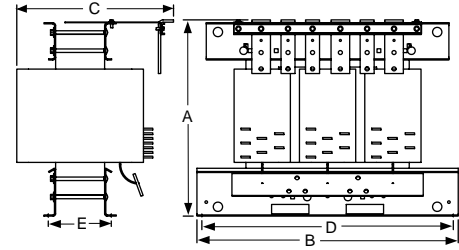


Figure 3

Table 6.3: Single-Phase Open Core and Coil Transformers—240 X 480 V Primary, 120/240 V Secondary, 60 Hz

kVA	Catalog No.	Deg. C Temp. Rise	Full Capacity Taps	Dimensions [3]										Weight (lbs)	Figure						
				A		B		C		D		E[4]									
				in	mm	in	mm	in	mm	in	mm	in	mm								
5	5S1HFOC	115	—	8.00	203	9.00	229	11.00	279	8.00	203	8.00	203	66	1						
7.5	7S1HFOC		14.25					362	8.50			216	80								
10	10S1HFOC		20.50					521	18.5			470	14.00	356		17.0	432	4.25	108	140	
15	EE15S3HOC	150	6–2.5% 2+4–[5]	20.25	514	18.5	470	14.00	356	17.0	432	5.00	127	200	2						
25	EE25S3HOC							18.00	457			5.50	140	255							
37.5	EE37S3HOC							22.00	559			6.50	165	310							
50	EE50S3HOC							22.25	565			28.0	711	22.00		559	27.0	686	8.50	216	460
75	EE75S3HOC																				

[3] Not for construction. Contact your nearest Schneider Electric sales office for certified prints.

[4] Dimensions may vary due to manufacturing process.

[5] When 240 V tap is used, there will be 3–5% taps, 1 above and 2 below.



**Table 6.4: Regulation Chart for Type EO Transformers**

VA (60 Hz)	Secondary Voltage					
	Inrush UL VA at 20% Power Factor			Inrush UL VA at 40% Power Factor		
	95%	90%	85%	95%	90%	85%
25	95	—	146	60	—	119
50	164	213	277	123	168	225
75	387	487	622	284	375	798
100	479	606	770	346	463	613
150	755	1177	1532	567	930	1252
200	1260	1883	2419	910	1462	1950
250	1530	2327	2995	1115	1811	2419
300	2030	2981	3800	1455	2290	3038
350	2920	4586	5981	2180	3637	4903
500	4230	5984	7707	3120	4661	6229
750	7430	11460	14736	5380	8907	11891
1000	10300	16873	21734	7450	13145	17571
1500	19200	30042	39217	14500	23859	32179
2000	27750	45194	60022	21750	36901	50994
3000	31800	82333	108205	26750	66072	89509
5000	86100	148768	202077	72600	126887	175552

**Type EO Transformers**

Type EO units are designed with exceptional voltage regulation. These control transformers are constructed using traditional materials and manufacturing techniques, and are designed for 25–5000 VA with a 55°C temperature rise. When exceptional regulation and very low temperature rise are an absolute necessity, choose Type EO units.

**Table 6.5: Type EO Transformer Dimensions**

VA (60 Hz)	Catalog Number Class 9070	A		B		C		Weight	
		IN	mm	IN	mm	IN	mm	lbs	kg
<b>220x440 V Primary, 110 V Secondary; 230x460 V Primary, 115 V Secondary; or 240x480 V Primary, 120 V Secondary</b>									
25	9070EO17D1	3.31	84	3.00	76	2.50	64	1.9	0.9
50	9070EO1D1							2.2	1.0
75	9070EO18D1	3.78	96	3.38	86	2.81	71	3.5	1.6
100	9070EO2D1							3.8	1.7
150	9070EO3D1	4.44	113	3.75	95	3.13	80	6.0	2.7
200	9070EO19D1	4.81	122	4.50	114	3.75	95	10.5	4.8
250	9070EO15D1	5.19	132					13.2	6.0
300	9070EO4D1	5.56	141					17.2	7.8
500	9070EO51D1	6.56	167	5.25	133	4.38	111	24.5	11.1
750	9070EO61D1	7.94	202					30.5	13.8
1000	9070EO71D1	7.94	202	6.00	152	5.00	127	45.0	20.4
1500	9070EO81D1	8.59	218	7.06	179	6.03	153	56.0	25.4
2000	9070EO91D1	9.22	234					72.0	32.7
3000	9070EO10D1	9.44	239	9.00	229	7.50	191	115.0	52.2
<b>240x480 V Primary, 24 V Secondary</b>									
25	9070EO17D2	3.31	84	3.00	76	2.50	64	1.9	0.9
50	9070EO10D2							2.2	1.0
75	9070EO18D2	3.78	96	3.38	86	2.81	71	3.5	1.6
100	9070EO2D2							3.8	1.7
250	9070EO16D2	6.19	157	4.50	114	3.75	95	13.2	6.0
<b>550 V Primary, 110 V Secondary; 575 V Primary, 115 V Secondary; or 600 V Primary, 120 V Secondary</b>									
200	9070EO19D5	5.56	141	122	4.50	114	3.75	10.5	4.8
300	9070EO04D5			4.50	114	3.75	95	17.2	7.8
500	9070EO51D5	6.56	167	5.25	133	4.38	111	24.5	11.1
750	9070EO61D5	7.94	202					30.5	13.8

**Table 6.6: Regulation Chart for Type T Transformers**

VA (60 Hz)	Secondary Voltage					
	Inrush UL VA at 20% Power Factor			Inrush UL VA at 40% Power Factor		
	95%	90%	85%	95%	90%	85%
50	193	266	339	151	215	282
75	271	396	20	210	318	430
100	339	499	659	266	404	549
150	666	893	1120	529	731	942
200	588	815	1041	459	659	866
250	1416	1910	2388	1057	1494	1936
300	1634	2184	2709	1194	1681	2169
350	1894	2592	3261	1392	2005	621
500	3197	4104	4981	2374	3195	4019
750	3770	5515	7231	2887	4391	5945
1000	6587	9079	11430	4706	6886	9051
1500	19324	23983	28607	15066	19361	23756
2000	31384	38777	6161	24794	31630	38667
3000	26539	39934	52713	19355	30721	42216
5000	53111	85265	116277	39368	66309	93882

**Type T and MultiTap™ Transformers**

Type T transformers are designed with low impedance windings for excellent voltage regulation and can accommodate the high inrush current associated with contactors, starters, solenoids, and relays. As the most popular and complete line of control transformers with unmatched design innovations for top performance, Type Ts are manufactured using the most advanced insulating materials and are the best choice if size and cost are of concern. It is available in the MultiTap version, designed to respond to the increased need for voltage and stock flexibility. It combines multiple primary voltages with one or more secondary voltages, all in a single transformer.

**Selection Guide**

1. Determine the inrush and sealed VA of each coil in the control circuit, and the VA of all other components.
2. Total the sealed VA of all operating coils and the VA of all other loads. (This determines the minimal VA size required for the circuit.)
3. Total the inrush VA of all coils that are starting at the same time, and all loads and coils that are running. (Use the regulation chart to give possible units to be used.)
4. Taking the VA size from step 2, go to the standard VA size in the chart. Make sure the inrush VA from the chart is greater than the total VA from step 3. (If not, go to the next larger VA size and repeat.)

If your supply voltage is stable and fluctuates less than 5%, we recommend you use the 90% secondary voltage column. If your supply voltage is not stable and fluctuates more than 10%, we recommend you use the 95% secondary voltage column. We recommend that you never use the 85% secondary voltage column since magnetic devices lose life expectancy if they are continuously started at 85% of rated voltage.

**Table 6.7: Type T Transformer Selection**

VA		Catalog No.	H	W	D	Weight (lbs)
UL/CSA/NOM	CE		in (mm)	in (mm)	in (mm)	
<b>120 V Primary, 120 V Secondary; 115 V Primary, 115 V Secondary; or 110 V Primary, 110 V Secondary</b>						
50	50	9070T50D24	2.58 (65.5)	3.00 (76.2)	3.09 (78.5)	2.5
75	75	9070T75D24	2.89 (73.4)	3.38 (85.8)	3.34 (84.8)	3.8
100	100	9070T100D24				3.8
150	150	9070T150D24	3.20 (81.3)	3.75 (95.3)	3.59 (91.2)	5.5
200	200	9070T200D24				5.5
250	160	9070T250D24	3.25 (82.6)	3.75 (95.3)	5.25 (133.4)	7.1
300	200	9070T300D24	3.80 (96.5)	4.50 (114.3)	4.70 (119.4)	8.5
350	250	9070T350D24			5.09 (129.3)	10.5
500	300	9070T500D24			5.46 (138.7)	11.9
750	500	9070T750D24			5.66 (143.8)	11.0
1000	630	9070T1000D24	4.43 (112.5)	5.25 (133.4)	6.04 (153.4)	20.6
1500	1000	9070T1500D24	6.16 (156.5)	7.06 (179.3)	5.81 (147.6)	34.0
2000	1500	9070T2000D24			7.04 (178.8)	47.0
3000	2000	9070T3000D24			8.46 (214.9)	9.00 (228.6)

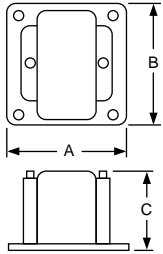
**Table 6.7 Type T Transformer Selection (cont'd.)**

VA		Catalog No.	H	W	D	Weight (lbs)
UL/CSA/NOM	CE		in (mm)	in (mm)	in (mm)	
5000	3000	9070T5000D24			8.73 (221.7)	89.0
<b>120 V x 240 V Primary, 120/240 V Secondary; 115 V x 230 V Primary, 115/230 V Secondary; or 110 V x 220 V Primary, 110/220 V Secondary</b>						
50	50	9070T50D55	2.58 (65.5)	3.00 (76.2)	3.09 (78.5)	2.5
75	75	9070T75D55	2.89 (73.4)	3.38 (85.8)	3.34 (84.8)	3.8
100	100	9070T100D55				
150	150	9070T150D55	3.20 (81.3)	3.75 (95.3)	3.59 (91.2)	5.5
200	200	9070T200D55				
250	160	9070T250D55	3.25 (82.6)	3.75 (95.3)	5.25 (133.4)	7.1
300	200	9070T300D55			4.70 (119.4)	8.5
350	250	9070T350D55	3.80 (96.5)	4.50 (114.3)	5.09 (129.3)	10.5
500	300	9070T500D55			5.46 (138.7)	11.9
750	500	9070T750D55	4.43 (112.5)	5.25 (133.4)	5.66 (143.8)	11.0
1000	630	9070T1000D55			6.04 (153.4)	20.6
1500	1000	9070T1500D55	6.16 (156.5)	7.06 (179.3)	5.81 (147.6)	34.0
2000	1500	9070T2000D55			7.04 (178.8)	47.0
3000	2000	9070T3000D55	8.46 (214.9)	9.00 (228.6)	6.86 (174.2)	60.0
5000	3000	9070T5000D55			8.73 (221.7)	89.0
<b>277 V Primary, 24 V Secondary</b>						
50	50	9070T50D25	2.58 (65.5)	3.00 (76.2)	3.09 (78.5)	2.5
75	75	9070T75D25	2.89 (73.4)	3.38 (85.8)	3.34 (84.8)	3.8
100	100	9070T100D25				
150	150	9070T150D25	3.20 (81.3)	3.75 (95.3)	3.59 (91.2)	5.5
200	200	9070T200D25				
250	160	9070T250D25	3.25 (82.6)	3.75 (95.3)	5.25 (133.4)	7.1
300	200	9070T300D25			4.70 (119.4)	8.5
350	250	9070T350D25	3.80 (96.5)	4.50 (114.3)	5.09 (129.3)	10.5
500	300	9070T500D25			5.46 (138.7)	11.9
750	500	9070T750D25	4.43 (112.5)	5.25 (133.4)	5.66 (143.8)	11.0
1000	630	9070T1000D25			6.04 (153.4)	20.6
<b>600 V Primary, 12/24 V Secondary</b>						
50	50	9070T50D36	2.58 (65.5)	3.00 (76.2)	3.09 (78.5)	2.5
75	75	9070T75D36	2.89 (73.4)	3.38 (85.8)	3.34 (84.8)	3.8
100	100	9070T100D36				
150	150	9070T150D36	3.20 (81.3)	3.75 (95.3)	3.59 (91.2)	5.5
200	200	9070T200D36				
250	160	9070T250D36	3.25 (82.6)	3.75 (95.3)	5.25 (133.4)	7.1
300	200	9070T300D36			4.70 (119.4)	8.5
350	250	9070T350D36	3.80 (96.5)	4.50 (114.3)	5.09 (129.3)	10.5
500	300	9070T500D36			5.46 (138.7)	11.9
750	500	9070T750D36	4.43 (112.5)	5.25 (133.4)	5.66 (143.8)	11.0
1000	630	9070T1000D36			6.04 (153.4)	20.6
<b>480 V Primary, 240 V Secondary; 460 V Primary, 230 V Secondary; or 440 V Primary, 220 V Secondary</b>						
50	50	9070T50D12	2.58 (65.5)	3.00 (76.2)	3.09 (78.5)	2.5
75	75	9070T75D12	2.89 (73.4)	3.38 (85.8)	3.34 (84.8)	3.8
100	100	9070T100D12				
150	150	9070T150D12	3.20 (81.3)	3.75 (95.3)	3.59 (91.2)	5.5
200	200	9070T200D12				
250	160	9070T250D12	3.25 (82.6)	3.75 (95.3)	5.25 (133.4)	7.1
300	200	9070T300D12			4.70 (119.4)	8.5
350	250	9070T350D12	3.80 (96.5)	4.50 (114.3)	5.09 (129.3)	10.5
500	300	9070T500D12			5.46 (138.7)	11.9
750	500	9070T750D12	4.43 (112.5)	5.25 (133.4)	5.66 (143.8)	11.0
1000	630	9070T1000D12			6.04 (153.4)	20.6
1500	1000	9070T1500D12	6.16 (156.5)	7.06 (179.3)	5.81 (147.6)	34.0
2000	1500	9070T2000D12			7.04 (178.8)	47.0
3000	2000	9070T3000D12	8.46 (214.9)	9.00 (228.6)	6.86 (174.2)	60.0
5000	3000	9070T5000D12			8.73 (221.7)	89.0



Model 450R

Model 460R  
Model 470R



**Voltage Transformers: Obsolete—January 1, 2023**

These voltage transformers are designed for line-to-line or line-to-ground connection on the primary voltage indicated. See [Table 6.8 Voltage Transformers, UR/cUR Recognized, 60 Hz, page 6-7](#) to determine the applicable configuration for proper system voltage indication.

- **Model 450R**—designed for switchboard use. This model features high accuracy and burden capacity for excellent performance in metering and indication.
- **Model 460R**—a compact, lightweight design, providing exceptional performance in indicating applications.
- **Model 470R**—a compact, low cost design optimized for maximum accuracy and performance when used with PowerLogic™ circuit monitors.

**Table 6.8: Voltage Transformers, UR/cUR Recognized, 60 Hz**

Model 450R Thermal Rating: 500 VA @ 30 °C; 300 VA @ 55 °C; Accuracy 0.3W, X, M & Y; 1.2 Z	Model 460R Thermal Rating: 150 VA @ 30 °C; 100 VA @ 55 °C; Accuracy 0.6W, 1.2 X	Model 470R Thermal Rating: 150 VA @ 30 °C; 100 VA @ 55 °C; Accuracy 0.3W, 1.2 X	System Voltage	Winding Ratio
Catalog Number	Catalog Number	Catalog Number		
450R069	460R069	470R069	69/120Y	0.58:1
450R120	460R120	470R120	120/208Y	1:1
450R208	460R208	470R208	120/208Y	1.73:1
450R240	460R240	470R240	240/416Y	2:1
450R288	460R288	470R288	288/500Y <sup>[1]</sup>	2.4:1
450R300	460R300	470R300	300/520Y	2.5:1
450R380	460R380	470R380	220/380Y	3.17:1
450R480	460R480	470R480	480/480Y <sup>[2]</sup>	4:1
450R600	460R600	470R600	600/600Y	5:1

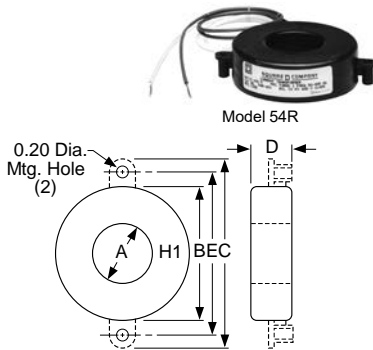
Model	Dimensions (inches)		
	A	B	C
450R	6	7-1/8	5-7/8
460R	4-3/4	4-1/2	3-7/8
470R	4-3/4	4-1/2	3-7/8

**Obsolete—January 1, 2023**

**Current Transformers**

**Table 6.10: General Purpose Compact Units, UR/cUR Recognized**

Window Size (inches)	Catalog Number (without brackets)	Current Rating (Amperes)	VA 60 Hz	VA 400 Hz	Accuracy (At Rated Current)	Rating Factor 30 °C Ambient
1-1/8	2NR500	50:5	1.0	2.0	= 2%	1.0
	2NR600	60:5	1.0	2.0	= 2%	
	2NR750	75:5	1.5	3.0	= 2%	
	2NR800	80:5	1.5	3.0	= 2%	
	2NR101	100:5	2.0	4.0	= 1%	
	2NR121	120:5	2.5	5.0	= 1%	
	2NR1250	125:5	2.5	5.0	= 1%	
	2NR151	150:5	2.5	5.0	= 1%	
	2NR201	200:5	2.5	5.0	= 1%	
	2NR251	250:5	2.5	5.0	= 1%	
	2NR301	300:5	2.5	5.0	= 1%	
	1-9/16	5NR101	100:5	2.0	4.0	
5NR151		150:5	2.5	5.0		
5NR201		200:5	5.0	12.5		
5NR251		250:5	5.0	12.5		
5NR301		300:5	5.0	12.5		
5NR401		400:5	12.5	25.0		
5NR501		500:5	12.5	25.0		
5NR601		600:5	25.0	50.0		
1-9/16	54R101	100:5	2.0	4.0	= 1%	1.0
	54R151	150:5	2.5	5.0		
	54R201	200:5	5.0	12.5		
	54R251	250:5	5.0	12.5		
	54R301	300:5	5.0	12.5		
	54R401	400:5	12.5	25.0		
	54R501	500:5	12.5	25.0		
	54R601	600:5	25.0	50.0		
2-1/4	7RL500	50:5	2.5	5.0	= 1%	1.5
	7RL101	100:5	2.5	5.0		
	7RL151	150:5	2.5	5.0		
	7RL201	200:5	5.0	10.0		
	7RL251	250:5	5.0	10.0		
	7RL301	300:5	5.0	10.0		
	7RL401	400:5	12.5	25.0		
	7RL501	500:5	12.5	25.0		
	7RL601	600:5	12.5	25.0		
	7RL751	750:5	12.5	25.0		
	7RL801	800:5	12.5	25.0		
	7RL102	1000:5	25.0	50.0		
	7RL122	1200:5	25.0	50.0		
	7RL152	1500:5	25.0	50.0		



Model 54R

**Table 6.9: Dimensions for Models 2NR, 5NR, 54R, and 7RL**

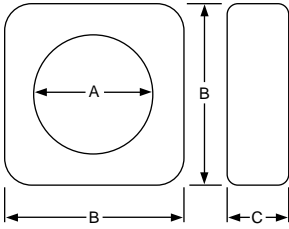
Model	Dimensions (inches)				
	A	B	C	D	E
2NR	1.13	2.38	—	.94	—
5NR	1.56	3.50	—	1.06	—
54R	1.56	3.50	4.56	1.06	4.00
7RL	2.25	4.38	—	1.38	—

[1] For use on 277/480 Wye systems.  
[2] For use on 480 V Delta systems.

Obsolete—January 1, 2023

**Toroidal Current Transformers (64R, 74R, 66R, 76R)**

Table 6.12: Toroidal Current Transformers, UR/cUR Recognized, 25–400 Hz



Models 64R, 66R, 74R, 76R,

Table 6.11: Dimensions for 64R, 66R, 74R, and 76R

Model	Dimensions (inches)		
	A	B	C
64R	1-15/16	4-3/16	1-1/2
66R	1-15/16	4-3/16	31/16
74R	2-11/32	4-11/16	1-5/8
76R	2-11/32	4-11/16	3-1/4

Window Size (inches)	Catalog Number (without brackets) [3]	Current Rating (Amperes)	Relay Class	ANSI Accuracy Classification—60 Hz Metering Class					Rating Factor 30 °C Ambient
				B-0.1	B-0.2	B-0.5	B-0.9	B-1.8	
1-15/16	64R101	100:5	—	1.2	2.4	—	—	—	1.33
	64R151	150:0	—	1.2	1.2	—	—	—	
	64R201	200:5	—	1.2	1.2	2.4	—	—	
	64R251	250:5	—	0.6	0.6	1.2	—	—	
	64R301	300:5	—	0.6	0.6	1.2	2.4	—	
	64R401	400:5	—	0.3	0.6	0.6	1.2	—	
	64R501	500:5	—	0.3	0.3	0.6	0.6	—	
	64R601	600:5	—	0.3	0.3	0.3	0.6	1.2	
64R751	750:5	—	0.3	0.3	0.3	0.6	0.6		
1-15/16	66R101	100:5	—	1.2	2.4	—	—	—	1.33
	66R151	150:0	—	0.6	1.2	2.4	2.4	—	
	66R201	200:5	C10	0.6	0.6	1.2	2.4	—	
	66R251	250:5	C10	0.3	0.6	0.6	1.2	2.4	
	66R301	300:5	C10	0.3	0.3	0.6	1.2	2.4	
	66R401	400:5	C10	0.3	0.3	0.3	0.6	1.2	
	66R501	500:5	C20	0.3	0.3	0.3	0.6	0.6	
	66R601	600:5	C20	0.3	0.3	0.3	0.3	0.6	
66R751	750:5	C20	0.3	0.3	0.3	0.3	0.3		
2-11/32	74R201	200:5	—	1.2	1.2	0.6	—	—	1.33
	74R251	250:5	—	1.2	1.2	0.6	1.2	—	1.33
	74R301	300:5	—	0.6	0.6	1.2	2.4	—	1.33
	74R401	400:5	—	0.3	0.3	0.6	1.2	—	1.33
	74R501	500:5	—	0.3	0.3	0.6	0.6	1.2	1.33
	74R601	600:5	—	0.3	0.3	0.3	0.6	1.2	1.33
	74R751	750:5	—	0.3	0.3	0.6	0.6	1.2	1.33
	74R801	800:5	—	0.3	0.3	0.3	0.6	1.2	1.33
	74R102	1000:5	—	0.3	0.3	0.3	0.3	0.6	1.33
	74R122	1200:5	—	0.3	0.3	0.3	0.3	0.6	1.33
74R152	1500:5	—	0.3	0.3	0.3	0.3	0.6	1.00	
2-11/32	76R201	200:5	C10	0.6	0.6	1.2	2.4	2.4	1.33
	76R251	250:5	C10	0.3	0.6	1.2	1.2	2.4	1.33
	76R301	300:5	C10	0.3	0.3	0.6	1.2	1.2	1.33
	76R401	400:5	C10	0.3	0.3	0.3	0.6	1.2	1.33
	76R501	500:5	C10	0.3	0.3	0.3	0.3	0.6	1.33
	76R601	600:5	C20	0.3	0.3	0.3	0.3	0.6	1.33
	76R751	750:5	C20	0.3	0.3	0.3	0.3	0.6	1.33
	76R801	800:5	C20	0.3	0.3	0.3	0.3	0.3	1.33
	76R102	1000:5	C20	0.3	0.3	0.3	0.3	0.3	1.33
	76R122	1200:5	C20	0.3	0.3	0.3	0.3	0.3	1.33
76R152	1500:5	C20	0.3	0.3	0.3	0.3	0.3	1.00	

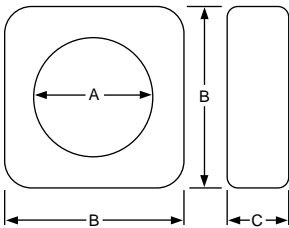
Obsolete—January 1, 2023

**Toroidal Current Transformers (110R, 110R, 120R, 140R)**

Table 6.14: Toroidal Current Transformers, UR/cUR Recognized, 25–400 Hz



Models 100R, 110R, 120R, 140R



100R, 110R, 120R, and 140R

Table 6.13: Dimensions for 100R, 110R, 120R, and 140R

Model	Dimensions (inches)		
	A	B	C
100R	4	7	2-1/8
110R	4	7	2-7/8
120R	5-3/4	8-1/2	2-1/8
140R	8-1/8	11	3

Window Size (inches)	Catalog Number (without brackets) [3]	Current Rating (Amperes)	Relay Class	ANSI Accuracy Classification—60 Hz Metering Class					Rating Factor 30 °C Ambient
				B-0.1	B-0.2	B-0.5	B-0.9	B-1.8	
4	100R201	200:5	C10	0.6	1.2	2.4	—	—	1.33
	100R301	300:5	C10	0.3	0.6	1.2	1.2	2.4	
	100R401	400:5	C20	0.3	0.3	0.6	1.2	1.2	
	100R501	500:5	C20	0.3	0.3	0.6	0.6	1.2	
	100R601	600:5	C20	0.3	0.3	0.3	0.6	0.6	
	100R801	800:5	C20	0.3	0.3	0.3	0.3	0.6	
	100R102	1000:5	C50	0.3	0.3	0.3	0.3	0.3	
	100R122	1200:5	C50	0.3	0.3	0.3	0.3	0.3	
	100R152	1500:5	C50	0.3	0.3	0.3	0.3	0.3	
	100R162	1600:5	C50	0.3	0.3	0.3	0.3	0.3	
100R202	2000:5	C50	0.3	0.3	0.3	0.3	0.3		
4	110R201	200:5	C20	0.6	0.6	1.2	2.4	—	1.33
	110R301	300:5	C20	0.3	0.3	0.6	1.2	2.4	
	110R401	400:5	C20	0.3	0.3	0.3	0.6	1.2	
	110R501	500:5	C50	0.3	0.3	0.3	0.6	0.6	
	110R601	600:5	C50	0.3	0.3	0.3	0.3	0.6	
	110R801	800:5	C50	0.3	0.3	0.3	0.3	0.3	
	110R102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	
	110R122	1200:5	C100	0.3	0.3	0.3	0.3	0.3	
	110R152	1500:5	C100	0.3	0.3	0.3	0.3	0.3	
	110R162	1600:5	C100	0.3	0.3	0.3	0.3	0.3	
110R202	2000:5	C100	0.3	0.3	0.3	0.3	0.3		
5-3/4	120R201	200:5	C10	1.2	2.4	2.4	—	—	1.33
	120R301	300:5	C10	0.6	1.2	2.4	—	—	1.33
	120R401	400:5	C20	0.3	0.6	1.2	2.4	2.4	1.33
	120R501	500:5	C20	0.3	0.3	0.6	1.2	2.4	1.33
	120R601	600:5	C20	0.3	0.3	0.6	0.6	1.2	1.33
	120R801	800:5	C20	0.3	0.3	0.3	0.6	0.6	1.33
	120R102	1000:5	C50	0.3	0.3	0.3	0.3	0.6	1.33
	120R122	1200:5	C50	0.3	0.3	0.3	0.3	0.3	1.33
	120R152	1500:5	C50	0.3	0.3	0.3	0.3	0.3	1.33
	120R162	1600:5	C50	0.3	0.3	0.3	0.3	0.3	1.33
120R202	2000:5	C50	0.3	0.3	0.3	0.3	0.3	1.33	
120R252	120R252	2500:5	C50	0.3	0.3	0.3	0.3	0.3	1.33
	120R302	3000:5	C50	0.3	0.3	0.3	0.3	0.3	1.33
	120R402	4000:5	—	0.3	0.3	0.3	0.3	0.3	1.00

[3] For mounting brackets, refer to Bushing Current Transformers 50–400 Hz, page 6-12

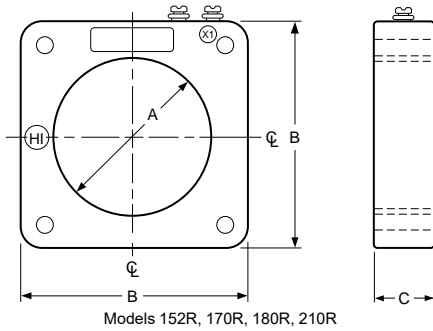
**Table 6.14 Toroidal Current Transformers, UR/cUR Recognized, 25–400 Hz (cont'd.)**

Window Size (inches)	Catalog Number (without brackets) [4]	Current Rating (Amperes)	Relay Class	ANSI Accuracy Classification—60 Hz Metering Class					Rating Factor 30 °C Ambient
				B-0.1	B-0.2	B-0.5	B-0.9	B-1.8	
8-1/8	140R500	50:5	—	For Ground Fault Sensing					1.33
	140R101	100:5	—						
8-1/8	140R401	400:5	C20	0.6	0.6	1.2	1.2	2.4	1.33
	140R501	500:5	C20	0.3	0.3	0.6	1.2	1.2	1.33
	140R601	600:5	C20	0.3	0.3	0.6	0.6	1.2	1.33
	140R801	800:5	C50	0.3	0.3	0.3	0.6	0.6	1.33
	140R102	1000:5	C50	0.3	0.3	0.3	0.3	0.6	1.33
	140R122	1200:5	C100	0.3	0.3	0.3	0.3	0.3	1.33
	140R152	1500:5	C100	0.3	0.3	0.3	0.3	0.3	1.33
	140R202	2000:5	C100	0.3	0.3	0.3	0.3	0.3	1.33
	140R252	2500:5	C100	0.3	0.3	0.3	0.3	0.3	1.33
	140R302	3000:5	C100	0.3	0.3	0.3	0.3	0.3	1.33
	140R402	4000:5	C100	0.3	0.3	0.3	0.3	0.3	1.33
	140R502	5000:5	C100	0.3	0.3	0.3	0.3	0.3	1.00
140R602	6000:5	C100	0.3	0.3	0.3	0.3	0.3	1.00	

**Obsolete—January 1, 2023**

**Toroidal Current Transformers (152R, 170R, 180R, 210R)**

**Table 6.16: Toroidal Current Transformers, UR/cUR Recognized, 25–400 Hz**



**Table 6.15: Dimensions for Models 152R, 170R, 180R, and 210R**

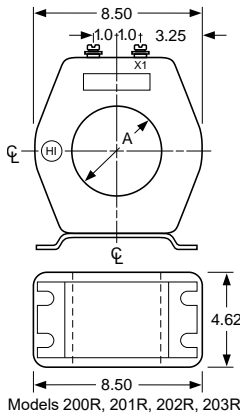
Model	Dimensions (inches)		
	A	B	C
152R	6.88	12.25	4.12
170R	4.25	6.75	1.31
180R	2.50	4.50	2.12
210R	6.25	9.50	2.87

Window Size (inches)	Catalog Number (without brackets) [4]	Current Rating (Amperes)	Relay Class	ANSI Accuracy Classification—60 Hz Metering Class					Rating Factor 30 °C Ambient
				B-0.1	B-0.2	B-0.5	B-0.9	B-1.8	
6-7/8	152R500	50:5	C10	1.2	—	—	—	—	1.33
	152R101	100:5	C20	1.2	2.4	—	—	—	
	152R151	150:5	C50	0.6	1.2	2.4	—	—	
	152R201	200:5	C50	0.6	0.6	1.2	2.4	2.4	
	152R251	250:5	C50	—	0.6	0.6	1.2	2.4	1.33
	152R301	300:5	C100	0.3	0.3	0.6	1.2	1.2	
	152R401	400:5	C100	—	0.3	0.3	0.6	1.2	
	152R501	500:5	C100	—	0.3	0.3	0.3	0.6	
	152R601	600:5	C200	—	—	—	—	—	1.33
	152R801	800:5	C200	0.3	0.3	0.3	0.3	0.3	
	152R102	1000:5	C200	—	—	—	—	—	
	152R122	1200:5	C400	—	—	—	—	—	
152R152	1500:5	—	—	—	—	—	—	1.33	
152R162	1600:5	—	—	—	—	—	—		
152R202	2000:5	C400	0.3	0.3	0.3	0.3	0.3		
152R252	2500:5	—	—	—	—	—	—		
152R302	3000:5	C400	0.3	0.3	0.3	0.3	0.3	1.33	
152R402	4000:5	C800	0.3	0.3	0.3	0.3	0.3		
4-1/4	170R201	200:5	—	1.2	—	2.4	—	—	1.33
	170R251	250:5	—	0.6	0.6	2.4	—	—	
	170R301	300:5	—	0.6	—	1.2	2.4	—	
	170R401	400:5	—	0.6	0.6	—	—	—	
	170R501	500:5	—	0.3	0.6	0.6	1.2	—	1.33
	170R601	600:5	—	0.3	0.3	0.6	1.2	2.4	
	170R751	750:5	C10	—	—	—	—	—	
	170R801	800:5	C10	0.3	0.3	0.6	0.6	1.2	
	170R102	1000:5	—	—	—	0.3	0.3	0.6	1.33
	170R122	1200:5	—	—	—	0.3	0.3	0.6	
	170R152	1500:5	—	—	—	0.3	0.3	0.6	
	170R202	2000:5	—	—	—	0.3	0.3	0.3	
170R252	2500:5	—	—	—	—	—	0.3	0.3	
2-1/2	180R101	100:5	—	2.4	2.4	—	—	—	1.33
	180R151	150:5	—	1.2	2.4	—	—	—	
	180R201	200:5	—	1.2	1.2	2.4	—	—	
	180R251	250:5	—	0.6	1.2	2.4	2.4	—	
	180R301	300:5	—	0.6	0.6	1.2	2.4	—	1.33
	180R401	400:5	—	0.3	0.3	0.6	1.2	2.4	
	180R501	500:5	—	—	—	0.6	0.6	1.2	
	180R601	600:5	—	0.3	0.3	0.3	0.6	1.2	
	180R751	750:5	—	—	—	0.3	0.3	0.6	1.33
	180R801	800:5	—	—	—	0.6	1.2	1.2	
	180R102	1000:5	—	—	—	0.6	0.6	0.6	
	180R122	1200:5	—	0.3	0.3	0.3	0.3	0.6	
180R152	1500:5	—	—	—	0.3	0.3	0.3	0.6	
2-1/2	210R122	1200:5	C100	—	—	—	—	—	1.33
	210R162	1600:5	C100	—	—	—	—	—	1.33
	210R202	2000:5	C100	—	—	—	—	—	1.33
	210R252	2500:5	C200	0.3	0.3	0.3	0.3	0.3	1.33
	210R302	3000:5	C200	—	—	—	—	—	1.0
	210R402	4000:5	C200	—	—	—	—	—	1.0

[4] For mounting brackets, refer to Bushing Current Transformers 50–400 Hz, page 6-12

Obsolete—January 1, 2023  
Toroidal Current Transformers (200R, 201R, 202R, 203R)

Table 6.18: Toroidal Current Transformers, UR/cUR Recognized, 25–400 Hz



Models 200R, 201R, 202R, 203R

Table 6.17: Dimensions for Models 200R, 201R, 202R, and 203R

Model [5]	Dimensions A (Inches)
200R	2.50
201R	3.50
202R	4.50
203R	5.25

Window Size (Inches)	Catalog Number (without brackets) [6]	Current Rating (Amperes)	Relay Class	ANSI Accuracy Classification—60 Hz Metering Class					Rating Factor 30 °C Ambient
				B-0.1	B-0.2	B-0.5	B-0.9	B-1.8	
2-1/2	200R101	100:5	C50	0.6	1.2	1.2	—	—	1.5
	200R151	150:0	C50	0.3	0.6	0.6	1.2	2.4	
	200R201	200:5	C100	0.3	0.3	0.6	1.2	1.2	
	200R251	250:5	C100	0.3	0.3	0.3	0.6	1.2	
	200R301	300:5	C100	0.3	0.3	0.3	0.3	0.3	0.6
	200R401	400:5	C200						
200R501	500:5	C200							
3-1/2	201R101	100:5	C20	1.2	1.2	2.4	2.4	—	1.5
	201R151	150:5	C50	0.3	0.6	1.2	2.4	2.4	
	201R201	200:5	C50	0.3	0.3	0.6	1.2	2.4	
	201R251	250:5	C100	0.3	0.3	0.6	1.2	1.2	0.6
	201R301	300:5	C100						
	201R401	400:5	C100						
201R501	500:5	C200	0.3	0.3	0.3	0.3	0.3	0.6	
201R601	600:5	C200							
201R751	750:5	C200							
201R801	800:5	C200	0.3	0.3	0.3	0.3	0.3	1.5	
4-1/2	202R101	100:5	C20	1.2	2.4	2.4	—	—	1.5
	202R151	150:5	C20	1.2	1.2	2.4	2.4	—	
	202R201	200:5	C50	0.3	0.6	1.2	1.2	2.4	
	202R251	250:5	C50	0.3	0.3	0.6	1.2	1.2	0.6
	202R301	300:5	C50						
	202R401	400:5	C100						
	202R501	500:5	C100	0.3	0.3	0.3	0.3	0.8	1.5
	202R601	600:5	C100						
	202R751	750:5	C200						
	202R801	800:5	C200	0.3	0.3	0.3	0.3	0.3	1.5
202R102	1000:5	C200							
5-1/4	203R101	100:5	C20	1.2	2.4	—	—	—	1.5
	203R151	150:5		0.6	1.2	2.4	2.4	—	
	203R201	200:5		0.3	0.6	1.2	2.4	2.4	
	203R251	250:5	C20	0.3	0.6	1.2	1.2	2.4	1.5
	203R301	300:5	C50						
	203R401	400:5	C50						
	203R501	500:5	C100	0.3	0.3	0.3	0.3	0.6	0.6
	203R601	600:5							
	203R751	750:5							
	203R801	800:5	C100	0.3	0.3	0.3	0.3	0.3	1.5
	203R102	1000:5							
	203R122	1200:5							
203R152	1500:5	C200	0.3	0.3	0.3	0.3	0.3	1.5	
203R162	1600:5								
203R202	2000:5	C200	0.3	0.3	0.3	0.3	0.3	1.33	
203R252	2500:5								
203R302	3000:5								

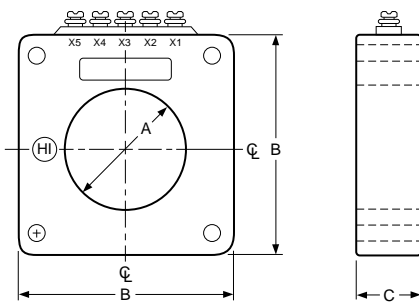
Obsolete—January 1, 2023  
Shorting Terminal Blocks

Table 6.19: Shorting Terminal Blocks

Catalog No.	Description
3090TB4	Shorting terminal block (4-pole)
3090TB6	Shorting terminal block (6-pole)

Obsolete—January 1, 2023  
Multi-Ratio Current Transformers

Table 6.21: Multi-Ratio Transformers, UR/cUR Recognized 60 Hz-Model 312R, 25–400 Hz-Model 151R



Models 151R, 312R

Table 6.20: Dimensions for Models 151R and 312R

Model	Dimensions (Inches)		
	A	B	C
151R	6.88	12.25	4.12
312R	4.50	11.00	2.38

Window Size (Inches)	Catalog Number (without brackets) [6]	Current Rating [7] (Amperes)	Relay Class [8]	ANSI Accuracy Classification – 60 Hz Metering Class					Rating Factor 30 °C Ambient
				B-0.1	B-0.2	B-0.5	B-0.9	B-1.8	
4-1/2	312R601	600:5MR	C100	—	—	—	—	—	1.5
	312R122	1200:5MR	C200	—	—	—	—	—	1.5
	312R202	2000:5MR	C400	—	—	—	—	—	1.5
	312R302	3000:5MR	C400	—	—	—	—	—	1.5
	312R402	4000:5MR	C400	—	—	—	—	—	1.33
6-7/8	151R601	600:5MR	C200	—	—	—	—	—	1.33
	151R122	1200:5MR	C400	—	—	—	—	—	
	151R202	2000:5MR	C400	—	—	—	—	—	
	151R302	3000:5MR	C400	—	—	—	—	—	
	151R402	4000:5MR	C800	—	—	—	—	—	

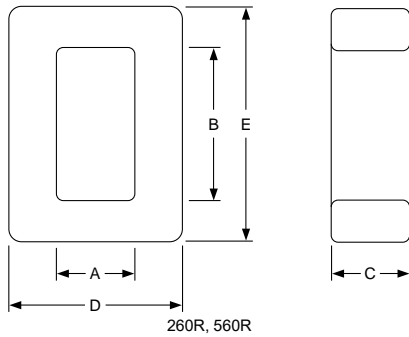
Table 6.22: Multi-Ratio Taps (Models 151R, 312R, 781R, 786R)

Nominal Ratio	Current Ratio [9] (Amperes)
600:5	600/500/450/400/300/250/200/150/100/50:5
1200:5	1200/1000/900/800/600/500/400/300/200/100:5
2000:5	2000/1600/1500/1200/1100/800/500/400/300:5
3000:5	3000/2500/2200/2000/1500/1200/1000/800/500/300:5
4000:5	4000/3500/3000/2500/2000/1500/1000/500

[5] Base is included.  
 [6] For mounting brackets, refer to Bushing Current Transformers 50–400 Hz, page 6-12  
 [7] For multi-ratio (MR) taps, refer to the Multi-Ratio Taps table.  
 [8] Relay class applies to nominal ratio only.  
 [9] Taps in accordance with ANSI C57.13 and NEMA SG-4.

**Obsolete—January 1, 2023  
Rectangular Window Current Transformers**

**Table 6.24: Rectangular Window Transformers, UR/cUR Recognized, 50–400 Hz**



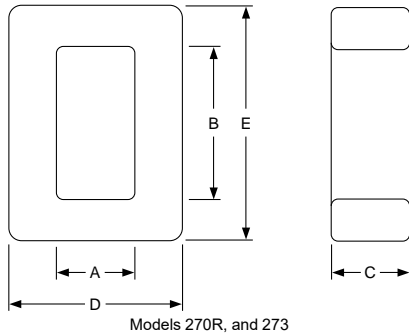
**Table 6.23: Dimensions for Models 260R, and 560R**

Model	Dimensions (inches)				
	A	B	C	D	E
260R	2.13	4.25	2.12	4.88	7.25
560R	3.75	7.45	1.13	5.53	11.19

Window Size (inches)	Catalog Number (without brackets) [10]	Current Rating (Amperes)	ANSI Accuracy Classification—60 Hz Metering Class					Rating Factor 30 °C Ambient
			B-0.1	B-0.2	B-0.5	B-0.9	B-1.8	
2-1/8 x 4-1/4	260R101	100:5	—	2.4	—	—	—	1.33
	260R151	150:5	1.2	2.4	—	—	—	
	260R201	200:5	—	1.2	—	—	—	
	260R301	300:5	0.6	0.6	—	—	—	1.33
	260R401	400:5	0.6	0.6	—	—	—	
	260R601	600:5	0.3	0.3	—	—	—	
	260R801	800:5	0.3	0.3	—	—	—	1.33
	260R122	1200:5	—	—	—	—	—	
	260R162	1600:5	—	—	—	—	—	
	260R202	2000:5	0.3	0.3	—	—	—	1.33
	260R252	2500:5	—	—	—	—	—	
	260R302	3000:5	—	—	—	—	—	
260R402	4000:5	—	—	—	—	—		
3-3/4 x 7-7/16	560R401	400:5	1.2	1.2	2.4	—	—	1.33
	560R501	500:5	0.6	1.2	2.4	—	—	
	560R601	600:5	0.6	0.6	1.2	2.4	2.4	
	560R751	750:5	0.6	0.6	1.2	1.2	2.4	
	560R801	800:5	0.6	0.6	1.2	1.2	2.4	
	560R102	1000:5	0.3	—	0.6	1.2	1.2	1.33
	560R122	1200:5	—	—	0.6	0.6	1.2	
	560R152	1500:5	—	—	0.3	0.6	0.6	
	560R162	1600:5	—	—	0.3	0.6	0.6	1.33
	560R202	2000:5	—	—	0.3	0.6	0.6	
	560R252	2500:5	0.3	—	—	—	—	1.33
	560R302	3000:5	—	—	—	—	—	
560R322	3200:5	—	—	—	—	—		
560R402	4000:5	—	—	—	—	—		
560R502	5000:5	—	—	—	—	—		

**Obsolete—January 1, 2023  
Split-Core Current Transformers**

**Table 6.26: Split-Core Transformers, Model 270R is UR/cUR Recognized, 60 Hz**



**Table 6.25: Dimensions for Models 270R, and 273**

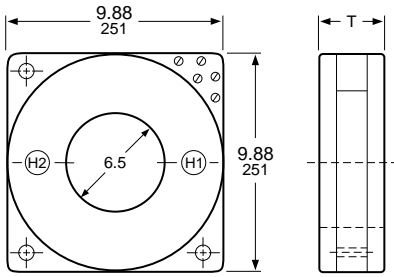
Model	Dimensions (inches)				
	A	B	C	D	E
270R	3.56	8.81	3.00	9.25	13.06
273	3.50	6.25	3.27	9.25	11.28

Window Size (inches)	Catalog Number (without brackets) [10]	Current Rating (Amperes)	ANSI Accuracy Classification — 60 Hz Metering Class					Rating Factor 30 °C Ambient
			B-0.1	B-0.2	B-0.5	B-0.9	B-1.8	
3-9/16 x 8-3/16	270R401	400:5	—	—	—	—	—	1.33
	270R501	500:5	—	—	—	—	—	
	270R601	600:5	—	—	—	—	—	
3-9/16 x 8-3/16	270R801	800:5	—	2.4	—	—	—	1.33
	270R102	1000:5	1.2	1.2	2.4	—	—	
	270R122	1200:5	—	1.2	2.4	—	—	
	270R152	1500:5	—	1.2	2.4	—	—	
	270R162	1600:5	—	1.2	2.4	—	—	
	270R202	2000:5	1.2	—	—	2.4	—	1.33
	270R252	2500:5	—	—	—	2.4	—	1.33
270R302	3000:5	1.2	1.2	1.2	1.2	2.4	1.0	
270R402	4000:5	—	—	—	1.2	1.2	1.0	
270R502	5000:5	—	—	—	1.2	1.2	1.0	
3-1/2 x 6-1/4	273201	200:5	—	—	—	—	—	1.33
	273251	250:5	—	—	—	—	—	
	273301	300:5	2.4	—	—	—	—	
	273401	400:5	2.4	—	—	—	—	
	273501	500:5	2.4	—	—	—	—	
	273601	600:5	2.4	2.4	—	—	—	1.33
	273801	800:5	1.2	2.4	—	—	—	
	273102	1000:5	1.2	1.2	2.4	—	—	
	273122	1200:5	1.2	1.2	2.4	—	—	1.33
	273162	1600:5	1.2	1.2	2.4	—	—	
	273202	2000:5	1.2	—	—	2.4	—	1.33
	273252	2500:5	—	—	—	2.4	—	1.33
273302	3000:5	1.2	1.2	1.2	1.2	2.4	1.00	
273402	4000:5	—	—	—	1.2	1.2	1.00	

[10] For mounting brackets, refer to [Bushings Current Transformers 50–400 Hz](#), page 6-12

Obsolete—January 1, 2023  
 Bushing Current Transformers 50–400 Hz

Table 6.29: Bushing Current Transformers



Models 780 R, 781R, 785R, and 786R

Table 6.27: Dimensions for Models 780R, 781R, 785R, and 786R

Model	T (inches)
780R	3.38
781R	3.38
785R	6.75
786R	6.75

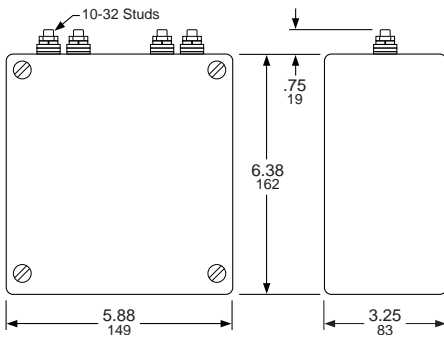
Table 6.28: Mounting Brackets

Model	Bracket
2NR	MB1
5NR	
7RL	MB7
54R	Included
64R	MB10
66R	MB12
74R	MB16
76R	MB18
81X	MB81
100R	MB31
110R	MB32
120R	MB31
140R	MB32
151R	MB30
152R	
170R	MB9
180R	
200R	Included
201R	
202R	
203R	
210R	MB32
260R	Not Available
270R	
273	

Window Size (inches)	Catalog Number	Current Rating [11] (Amperes)	Relay Class	ANSI Accuracy Classification—60 Hz Metering Class					Rating Factor 30°C Ambient					
				B-0.1	B-0.2	B-0.5	B-0.9	B-1.8						
6-1/2	780R500	50:5	—	—	—	—	—	—	2.0					
	780R750	75:5	C10	1.2	—	—	—	—						
	780R101	100:5		2.4	2.4	—	—	—						
	780R151	150:5	C20	0.6	1.2	—	—	—						
	780R201	200:5				2.4	—	—						
	780R251	250:5				2.4	—	—						
	780R301	300:5	C50	0.6	1.2	—	2.4	1.2						
	780R401	400:5				—	—			—				
	780R501	500:5	C100	0.3	0.3	0.3	0.3	0.6						
	780R601	600:5												
	780R751	750:5												
	780R801	800:5												
	780R102	1000:5												
	780R122	1200:5												
	780R152	1500:5	C200	0.3	0.3	0.3	0.3	1.5						
	780R162	1600:5												
	780R202	2000:5												
	780R252	2500:5												
780R302	3000:5	C100	0.6	1.2	0.6	0.6	2.0							
780R402	4000:5													
781R601	600:5 MR	C100	0.6	0.6	1.2	0.6	1.5							
781R122	1200:5 MR													
781R202	2000:5 MR	C200	0.3	0.3	0.3	0.3	2.0							
781R302	3000:5 MR													
781R402	4000:5 MR	6-1/2	C200	0.3	0.3	0.3	0.3	1.5						
785R500	50:5													
785R750	75:5								C20	1.2	1.2	2.4	—	—
785R101	100:5													
785R151	150:5								C50	0.6	0.6	1.2	2.4	—
785R201	200:5													
785R251	250:5													
785R301	300:5								C100	0.6	0.6	1.2	0.6	1.2
785R401	400:5													
785R501	500:5								C200	0.3	0.3	0.3	0.3	0.6
785R601	600:5													
785R751	750:5													
785R801	800:5													
785R102	1000:5													
785R122	1200:5													
785R152	1500:5								C400	0.3	0.3	0.3	0.3	1.5
785R162	1600:5													
785R202	2000:5													
785R252	2500:5													
785R302	3000:5	C200	0.6	1.2	0.6	0.6	2.0							
785R402	4000:5													
786R601	600:5 MR	C200	0.6	0.6	1.2	0.6	1.5							
786R122	1200:5 MR													
786R202	2000:5 MR	C400	0.3	0.3	0.3	0.3	1.5							
786R302	3000:5 MR													
786R402	4000:5 MR													
786R402	4000:5 MR													

Obsolete—January 1, 2023  
 Auxiliary Current Transformers

Table 6.30: Auxiliary Current Transformers



Model 81X

Catalog Number (without brackets)	Ratio
81X05000100	5:1
81X05000200	5:2
81X05000250	5:2.5
81X05000500	5:5
81X07500500	7.5:5
81X10000500	10:5
81X12500500	12.5:5
81X15000500	15:5

NOTE: Model 81X Accuracy 0.3B0.1, B0.2, B0.5@60 Hz, RF=1.5@30 °C

[11] For multi-ratio (MR) taps, refer to Table 6.22 Multi-Ratio Taps (Models 151R, 312R, 781R, 786R), page 6-10