



Your Touchstone Energy® Cooperative 

Transformer Fault Current Data

Table 1 - Single Phase Overhead (120/240) worst-case short circuit for sizing secondary interrupting equipment

Transformer kVA	Minimum Impedance (%Z)	120/240V Short Circuit
10	1.1	3,788 A
15	1.0	6,250 A
25	1.0	10,417 A
50	1.1	18,939 A

Table 2 - Single Phase Pad Mount (120/240) worst-case short circuit for sizing secondary interrupting equipment

Transformer kVA	Minimum Impedance (%Z)	120/240V Short Circuit
25	0.9	11,574 A
50	1.1	18,939 A
100	1.1	37,879 A

Table 3 - Three Phase Overhead Banked: worst-case short circuit for sizing secondary interrupting equipment

Transformer Bank kVA	Minimum Impedance (%Z)	$\frac{1}{Z} pu$	120/208V Short Circuit	277/480V Short Circuit
30	1.1	91	7,570 A	3,280 A
45	1.1	91	11,356 A	4,921 A
75	1.2	83	17,349 A	7,518 A
150	1.1	91	37,852 A	16,402 A

Table 4 - Three Phase Pad Mount worst-case short circuit for sizing secondary interrupting equipment

Transformer kVA	Minimum Impedance (%Z)	120/208V Short Circuit	277/480V Short Circuit
45	1.2	10,409 A	4,511 A
75	0.9	23,132 A	10,024 A
150	1.0	41,637 A	18,043 A
225	1.3	48,043 A	20,819 A
300	1.4	59,482 A	25,775 A
500	1.5	92,527 A	40,095 A
750	5.3		17,021 A
1,000	5.6		21,479 A
1,500	3.6		50,119 A
2,000	5.7		42,205 A