Longmont Power & Communications

Transformer fault current charts

When service entrance facilities are within 25 feet of the transformer, contact LPC for 120 volt fault levels.

Single-phase overhead (120/240) worst-case short circuit for sizing secondary interrupting equipments

Transformer kVA	Z%	240 volt short circuit
25	1.3	8,000
37.5	1.3	12,000
50	1.3	16,000
75	1.3	24,000
100	1.3	32,000
167	1.6	43,000
250	1.7	61,000
333	1.5	93,000

Single-phase pad mount (120/240) worst-case short circuit for sizing secondary interrupting equipments

Transfer kVA	Z%	240 volt short circuit
25	1.2	9,000
50	1.2	17,000
75	1.0	31,000
100	1.0	42,000
167	1.4	50,000

Three-phase overhead banked: worst-case short circuit for sizing secondary interrupting equipments.

Bank kVA	Z%	1/Z pu	120/208 v short circuit	120/240 v short circuit	277/480 v short circuit
30	1.3	77	6,000	6,000	3,000
45	1.3	77	10,000	8,000	4,000
75	1.3	77	16,000	14,000	7,000
112.5	1.3	77	24,000	19,000	10,000
150	1.3	77	32,000	28,000	14,000
225	1.3	77	48,000	42,000	21,000
300	1.3	77	64,000	56,000	28,000
500	1.6	63	87,000	75,000	38,000
750	1.7	59	122,000	106,000	53,000
1000	1.5	67	185,000	160,000	80,000

Three-phase pad-mount: worst-case short circuit for sizing secondary interrupting equipments.

Transformer kVA	Z%	120/208 volt short circuit	277/480 v short circuit
75	1.0	21,000	9,000
112.5	1.6	20,000	8,000
150	1.4	30,000	13,000
225	1.6	39,000	17,000
300	1.5	56,000	24,000
500	2.6	53,000	23,000
750	5.75	36,000	16,000
1000	5.62	49,000	21,000
1500	5.62	74,000	32,000
2500	5.62	123,000	54,000