

Industrial Control Transformers

Fuse Protection

Primary Fusing to Meet NEC

Recommended Fuse Sizes for the PRIMARY (use class CC time delay fuses) to Meet NEC

VA	120 Volts			240 Volts			480 Volts			600 Volts		
	Primary Current Amperes	Fuse Rating with Secondary Protection	Fuse Rating without Secondary Protection	Primary Current Amperes	Fuse Rating with Secondary Protection	Fuse Rating without Secondary Protection	Primary Current Amperes	Fuse Rating with Secondary Protection	Fuse Rating without Secondary Protection	Primary Current Amperes	Fuse Rating with Secondary Protection	Fuse Rating without Secondary Protection
25	0.21	1/2	1/2	0.10	1/4	1/4	0.05	1/8	1/8	0.04	1/10	1/10
50	0.41	1	1	0.21	1/2	1/2	0.10	2/10	2/10	0.08	2/10	2/10
75	0.63	1-1/2	1-1/2	0.31	6/10	6/10	0.16	3/10	3/10	0.13	3/10	3/10
100	0.83	2	2	0.42	1	1	0.21	1/2	1/2	0.17	4/10	4/10
150	1.25	3	3	0.63	1-1/2	1-1/2	0.31	6/10	6/10	0.25	6/10	6/10
200	1.67	4	4	0.83	2	2	0.42	1	1	0.33	8/10	8/10
250	2.08	5	3-2/10	1.04	2-1/2	2-1/2	0.52	1-1/2	1-1/4	0.42	1	1
300	2.50	6-1/4	4	1.25	3	3	0.63	2	1-1/2	0.50	1-1/8	1-1/8
350	2.92	7	4-1/2	1.46	3-1/2	3-1/2	0.73	2-1/2	1-8/10	0.58	1-4/10	1-4/10
500	4.17	10	6-1/4	2.08	5	3-2/10	1.04	3	2-1/2	0.83	2	2
750	6.25	15	10	3.13	7-1/2	5	1.56	3-1/2	3-1/2	1.25	3	3
1000	8.33	20	12	4.17	10	6-1/4	2.08	5	3-2/10	1.67	4	4
1500	12.50	N/A	15	6.25	15	10	3.13	7-1/2	5	2.50	6-1/4	4
2000	16.66	N/A	20	8.33	20	12	4.17	10	6 1/4	3.33	8	5

NOTES:

- Recommended fuse sizes per NEC Article 450-3.
- Transformers with primary only, select protection at 125%, if a standard size rating is not available, go to next higher rating.
- Transformers with primary only and current rating is less than 9 A, select protection at no more than 167%.
- Transformers with primary only and current rating is less than 2 A, select protection at no more than 300%.
- Transformers with primary and secondary, select primary protection at not more than 250% and secondary at 125%. If a standard size rating is not available, go to next higher standard rating.

Primary Fusing to Meet CE

Recommended Fuse Sizes for the PRIMARY (use time delay fuses) for CE Applications

CE VA Rating	Primary Voltage							
	120 V	208 V	240 V	277 V	380 V	416 V	480 V	600 V
25	1/2	3/10	2/10	2/10	1/10	1/10	1/10	1/10
50	1	6/10	1/2	4/10	3/10	3/10	2/10	2/10
75	1-1/2	8/10	6/10	6/10	4/10	4/10	3/10	3/10
100	2	1-1/8	1	8/10	6/10	6/10	1/2	4/10
150	3	1-8/10	1-1/2	1-1/4	8/10	8/10	6/10	6/10
160	3-2/10	1-8/10	1-6/10	1-4/10	1	8/10	8/10	6/10
200	4	2-1/4	2	1-8/10	1-1/4	1v1/8	1	8/10
250	3-2/10	3	2-1/2	2	1-6/10	1-1/2	1-1/4	1
300	4	3-1/2	3	2-1/2	1- 8/10	1-8/10	1-1/2	1-1/8
500	6-1/4	4	3-2/10	4-1/2	3-2/10	3	2-1/2	2
630	10	6	5	4-1/2	4-1/2	4-1/2	3-1/2	3
1000	12	8	6-1/4	6	4	4	3-2/10	4
1500	15	12	10	9	6-1/4	6	5	4
2000	20	12	12	12	8	8	6-1/4	5
3000	n/a	30	25	20	15	15	12	12

NOTE: Recommended fuse sizes according to testing, EN 60-742.

Secondary Fusing to Meet NEC and CE

Recommended Fuse Sizes for the SECONDARY to Meet NEC and CE

VA	24 Volts		120 Volts		240 Volts	
	Secondary Current Rating	Fuse Rating	Secondary Current Rating	Fuse Rating	Secondary Current Rating	Fuse Rating
25	1.04	8/10	0.21	3/10	0.10	15/100
50	2.08	3	0.42	6/10	0.21	3/10
75	3.13	5	0.63	1	0.31	1/2
100	4.17	6	0.83	1-1/4	0.42	6/10
150	6.25	10	1.25	2	0.63	1
200	8.33	12	1.67	2-1/2	0.83	1-1/4
250	10.42	15	2.08	3	1.04	1-3/4
300	12.50	20	2.50	4	1.25	2
350	14.58	20	2.92	5	1.46	2-1/2
500	20.83	30	4.17	7	2.08	3
750	n/a	n/a	6.25	10	3.13	5
1000	n/a	n/a	8.33	12	4.17	7
1500	n/a	n/a	12.50	15	6.25	10
2000	n/a	n/a	16.67	20	8.33	12

NOTES:

- Recommended fuse sizes according to NEC Article 450-3.
- Secondary select protection at 125%, if a standard size rating is not available, go to next higher standard size rating.
- Current rating is less than 9 A, select protection at not more than 167%.