

**CONSTRUCTION GUIDELINE**

**CABLE LIMITERS - DISTRIBUTION**

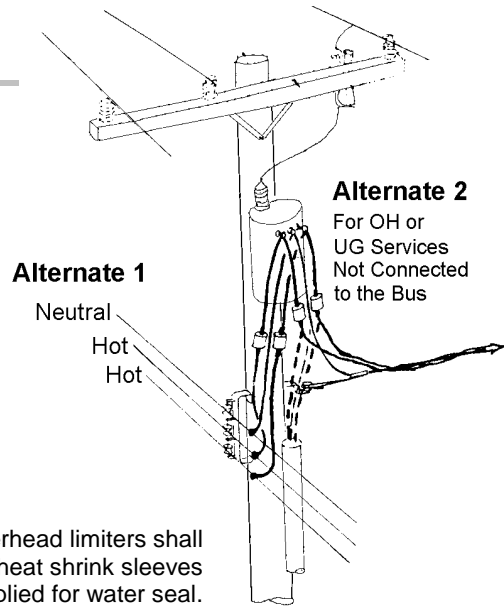
Cable limiters shall be installed when the available fault current exceeds the interrupting rating of the customer's service equipment. Generally, residential, light industrial, and light commercial service equipment is rated at 10,000 amperes.

The following is a guideline based on typical transformer impedances and typical wire sizes. If the installation approaches the limits of these guidelines or the customer has higher rated equipment, fault calculations must be made.

**Note: Cable Limiters will not be installed on new services. New Service panels are rated for the available fault duty.**

**1. Overhead - Alternate Locations for Cable Limiters**

Service Voltage	Transformer Size, KVA	Limiters required if length of run in feet is LESS than:
120/240	50 or less	none required
	75	50
	100	100
	167	250
120/208 or	3 x 25 or less	none required
	3 x 37-1/2	75
138/240	3 x 50	100
3Ø-4W	3 x 75 and above	all locations
277/480 3Ø-4W	3 x 50 or less	none required
	3 x 75 3 x 100 and above	50 all locations



**2. Underground - Alternate Locations for Cable Limiters**

25, 50, and 75 KVA Transformers All Locations

100 and 167 KVA Transformers Wet or Below Ground Locations

100 and 167 KVA Transformers Dry Locations Only (i.e. Apartments)

Alt. 3: Cable limiter on a transformer terminal.

Alt. 4: Cable limiter on a copper cable.

Alt. 5: Cable limiter on a bus duct where space allows.

Alt. 6: Cable limiter on a bus duct terminal.

Alt. 7: Cable limiter on a copper cable using a copper compression connector and tape spades per U11-9/NTP-110.

Alt. 8: Cable limiter on a transformer terminal for dry locations.

Alt. 9: Cable limiter on a transformer terminal for dry locations.

All underground limiters in wet or below ground installations shall have heat shrink sleeves applied for water seal.

Underground limiters in dry locations such as inside apartment house vaults, padmount transformers, etc., shall have heat shrink sleeves or tape applied for electro-mechanical protection except that terminations on the bus duct or the padmount terminals need not be insulated.

STANDARDS COORDINATOR	STANDARDS SUPERVISOR	UNIT DIRECTOR
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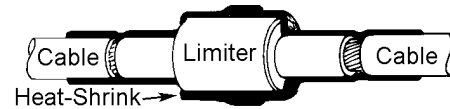
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STANDARD NUMBER: **DU11-4**

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SUPERSEDING: April 20, 2007

EFFECTIVE DATE: November 3, 2014

**3. Limiters, Cable to Cable, Al to Al or Cu to Cu**

Wire Size, Al or Cu	Limiter		Heat-Shrink Tubing				
	Stock No., Al to Al	Stock No., Cu to Cu	Stock No.	Quantity	ID (in)		Length (in)
					Min. Expanded	Max. Recovered	
#4	–	683641	737450	1	1.10	0.37	9
#2	–	683643	737450	1	1.10	0.37	9
#1	–	–	737452	1	1.50	0.50	12
1/0	–	–	–	–	–	–	–
2/0	–	683646	737452	1	1.50	0.50	12
3/0	–	683647	737452	1	1.50	0.50	12
4/0	683615	683648	737452	2	1.50	0.50	12
250	–	683649	737455	2	2.00	0.75	12
350	683616	683650	737455	2	2.00	0.75	12
500	683617	683651	737455	2	2.00	0.75	12
600	–	011159	737456	2	3.00	1.25	12
750	683618	683652	737456	2	3.00	1.25	12

**4. Limiters, Cable to Bus, Al and Cu**

Wire Size, Al or Cu	Limiter		Heat-Shrink Tubing				
	Stock No., Al to Flat	Stock No., Cu to Flat	Stock No.	Quantity	ID (in)		Length (in)
					Min. Expanded	Max. Recovered	
#4	–	683621	737450	1	1.10	0.37	9
#2	–	683622	737450	1	1.10	0.37	9
#1	–	–	737452	2	1.50	0.50	12
1/0	–	–	737452	2	1.50	0.50	12
2/0	–	683623	737452	2	1.50	0.50	12
3/0	–	683624	737452	2	1.50	0.50	12
4/0	683637	683625	737452	2	1.50	0.50	12
250	–	683626	737455	2	2.00	0.75	12
350	683638	683627	737455	2	2.00	0.75	12
500	683639	683629	737455	2	2.00	0.75	12
600	–	011158	737456	2	3.00	1.25	12
750	683659 6836.50	683630	737456	2	3.00	1.25	12