250 V and 600 V cable limiters



Product description:

Cable limiters are intended to provide short-circuit protection to electrical systems, typically between the transformer and service entrance. Should a short-circuit occur, the cable limiter removes the affected cable(s) from service and permits the other conductors to continue delivering power.

Cable limiters are often used in utility low voltage networks and large multi-cable per phase service entrances.

Unlike fuses, cable limiters are selected by cable size rather than amp rating, e.g., a "4/0" limiter will carry the current of a 4/0 cable.

Limiters are stable, totally self-contained, static devices with unchanging characteristics that operate without venting ionized gases or explosive action.

Under high short-circuit conditions, limiters cut off fault currents within one-half cycle (0.008 second) and reduce insulation damage from the immense heat that is developed by sustained fault current flow. They confine damage to the point of the short-circuit and stop long-length cable burn-back and striking of multiple arcs. This minimizes or eliminates damage to adjacent conductors.

Features and benefits:

- Cable limiters enhance multi-conductor system reliability by isolating faulted conductors and taking them offline while the balance of the conductors continue delivering power to their circuits. This is why cable limiters are often used in utility low voltage networks and large multi-cable per phase service entrances.
- Cable limiters enhance service entrance conductor short-circuit protection with current-limiting performance that exceed the typical protection offered by utility overcurrent protective devices.
- Cable limiters meet many system requirements with 250 Vac or 600 Vac ratings for conductor sizes from 12 AWG to 1000 kcmil and terminal options available that make them easy to install including:
  - Tube-to-tube (crimp)
  - Tube-to-offset bolt (crimp/bolt-in)
  - Tube-to-center bolt (crimp/bolt-in)
  - Compression rod-to-tube (crimp)
  - Bolt-to-offset bolt (bolt-in)
- Select cable limiters are UL Listed under File E90818 for use on 600 V circuit for protection against faults up to 200 kA.

Powering Business Worldwide

250 V UH Series

Catalog Symbol

- UH__

Applications

- The 250 Vac UH cable limiters are designed specifically for use in residential applications.

Ratings

- Volts: up to 250 Vac
- Interrupting rating: 100 kA, RMS Sym.

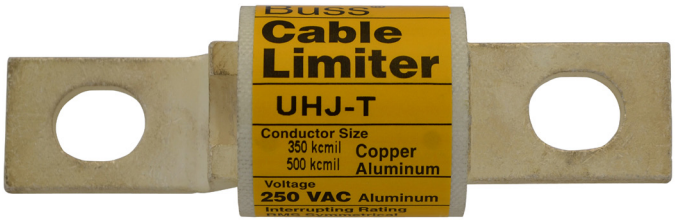
Terminals

- Center bolt-to-offset bolt — copper or aluminum conductors

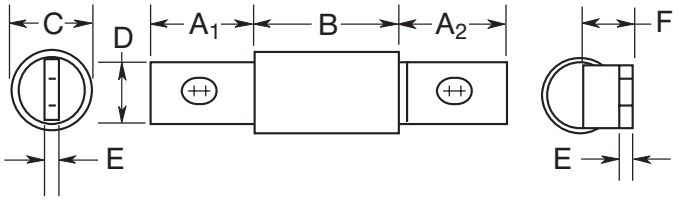
Conductors

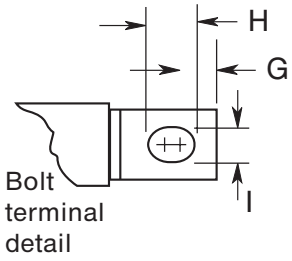
- Copper or aluminum conductors are permitted per the listed cable size. Select the catalog number for the system conductor size in the table below.





Dimensions — in (mm)





Catalog no.	Copper cable size	Aluminum cable size	A_1	A_2	B	C	D	E	F	G	H	I
UHA	2/0 AWG	4/0 AWG	1.06 (27.0)	1.19 (30.2)	1.44 (36.5)	1.00 (25.4)	0.75 (19.0)	0.12 (3.2)	0.56 (14.3)	0.19 (4.8)	0.59 (15.1)	0.41 (10.3)
UHJ-M	3/0 AWG	250 kcmil	1.53 (38.9)	1.75 (44.4)	1.59 (40.5)	1.50 (38.1)	1.00 (25.4)	0.25 (6.3)	0.87 (22.2)	0.34 (8.6)	0.69 (17.5)	0.56 (14.3)
UHJ-T	350 kcmil	500 kcmil	1.53 (38.9)	1.75 (44.4)	1.59 (40.5)	1.50 (38.1)	1.00 (25.4)	0.25 (6.3)	0.87 (22.2)	0.34 (8.6)	0.69 (17.5)	0.56 (14.3)
UHJ-W	600 kcmil	800 kcmil	1.53 (38.9)	1.75 (44.4)	1.59 (40.5)	1.50 (38.1)	1.00 (25.4)	0.25 (6.3)	0.87 (22.2)	0.34 (8.6)	0.69 (17.5)	0.56 (14.3)

600 V K Series

Catalog Symbol

- K__

Applications

The 600 Vac K cable limiters are designed for use on non-residential 277/480, 120/208 and 120/240 volt systems.

Ratings

- Volts: up to 600 Vac
- Interrupting rating: 200 kA, RMS Sym.

Agency information

- UL Listed, File E90818, 600 Vac, 200 kA IR on catalog numbers CDA-W, CDB-W, KCD, KCJ, KCM, KCM-B, KCR, KDD, KDF, KDJ, KDM, KDP, KDR, KDU, KEW, KFM, KFT, KHF, KHJ, KHM, KHR

Available terminals

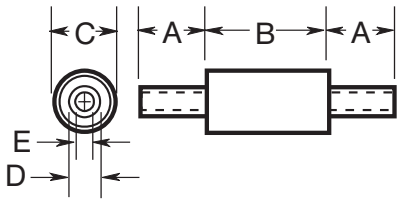
- Tube-to-tube
- Tube-to-offset bolt
- Compression rod-to-tube
- Center bolt-to-offset bolt
- Center bolt-to-tube

Conductors

- Copper or aluminum based upon terminal style and perrmitted conductor material. See catalog number tables for details



Dimensions — in (mm)



Tube-to-tube terminals:

- Copper or aluminum conductor — see catalog number table for details

Catalog number	Copper cable size	Aluminum cable size	A	B	C	D	E
KCY	4 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.31 (7.9)	0.25 (6.4)
KCZ	3 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.34 (8.7)	0.28 (7.1)
KCA	2 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.44 (11.1)	0.31 (7.9)
KCB	1 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.47 (11.9)	0.34 (8.7)
KCC	1/0 AWG	—	1.5 (38.1)	2.625 (66.7)	1.25 (31.8)	0.52 (13.1)	0.39 (9.9)
KCD*, †	2/0 AWG	—	1.63 (41.3)	2.625 (66.7)	1.25 (31.8)	0.44 (14.3)	0.70 (11.1)
KCE	3/0 AWG	—	1.63 (41.3)	3.63 (92.1)	1.44 (36.5)	0.61 (15.5)	0.48 (12.3)
KCF	4/0 AWG	—	1.75 (44.5)	3.63 (92.1)	1.44 (36.5)	0.34 (17.5)	0.55 (14.0)
KCH	250 kcmil	—	1.88 (47.6)	3.63 (92.1)	1.44 (36.5)	0.75 (19.0)	0.59 (15.0)
KCJ*†	350 kcmil	—	2.0 (50.8)	3.63 (92.1)	1.63 (41.3)	0.88 (22.2)	0.70 (17.9)
KCM*, †, ††	500 kcmil	—	2.88 (73.0)	3.08 (78.2)	1.88 (47.6)	1.06 (27.0)	0.83 (21.0)
KCV	600 kcmil	—	3.5 (88.9)	3.08 (78.2)	1.88 (47.6)	1.155 (29.3)	0.92 (23.4)
KCR*, †	750 kcmil	—	3.5 (88.9)	3.75 (95.25)	2.5 (63.5)	1.31 (33.3)	1.06 (27.0)
CDA-W*	—	750 kcmil	4.0 (102)	3.01 (78)	1.88 (47.6)	1.59 (40.5)	1.03 (26.2)
KCS	1000 kcmil	—	5.0 (127.0)	3.75 (95.25)	2.5 (63.5)	1.56 (39.7)	1.22 (31.0)

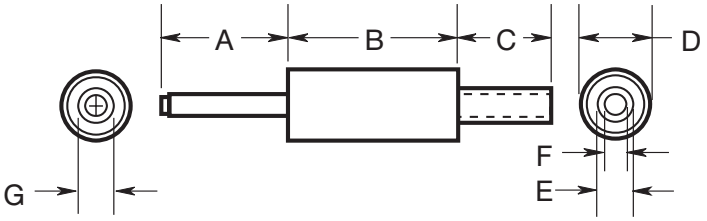
* UL Listed, File E90818, 600 Vac, 200 kA IR.

† Available with shrink tube "–V" suffix.

††Available with molded rubber boot "-B" suffix. Order catalog no. "KCM-B." Boot can be purchased separately, order Part# - BOOT-KCM



Dimensions — in (mm)



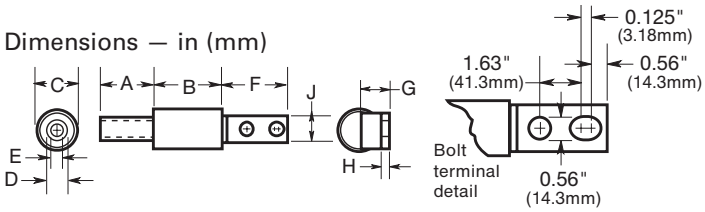
Compression rod-to-tube terminals

- Copper conductor only

Catalog no.	Copper cable size	A	B	C	D	E	F	G
KEX	4/0 AWG	2.5 (63.5)	3.63 (92.1)	1.75 (44.5)	1.44 (36.5)	0.69 (17.5)	0.55 (13.9)	0.5 (12.7)
KFH-A	250 kcmil	2.5 (63.5)	3.63 (92.1)	1.88 (47.6)	1.44 (36.5)	0.75 (19.0)	0.28 (15.1)	0.56 (14.3)
KQO	350 kcmil	2.5 (63.5)	3.63 (92.1)	2.0 (50.8)	1.63 (41.3)	0.88 (22.2)	0.70 (17.8)	0.81 (20.6)
KDT	500 kcmil	2.5 (63.5)	3.08 (78.2)	2.88 (73.0)	1.88 (47.6)	1.06 (27.0)	0.83 (21.0)	0.81 (20.6)



Dimensions — in (mm)



Tube-to-offset bolt terminals:

- Copper or aluminum conductor — see catalog number table for details

Catalog symbol	Copper cable size	Aluminum cable size	A	B	C	D	E	F	G	H	J
KQV	12 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.19 (4.8)	0.125 (3.2)	3.31 (84.1)	0.72 (18.3)	0.19 (4.8)	1.125 (28.6)
KQT	10 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.23 (6.0)	0.14 (3.6)	3.31 (84.1)	0.72 (18.3)	0.19 (4.8)	1.125 (28.6)
KFZ	8 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.23 (6.0)	0.16 (4.0)	3.31 (84.1)	0.72 (18.3)	0.19 (4.8)	1.125 (28.6)
KIG	6 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.31 (7.9)	0.16 (4.0)	3.31 (84.1)	0.72 (18.3)	0.19 (4.8)	1.125 (28.6)
KDY	4 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.31 (7.9)	0.25 (6.4)	3.31 (84.1)	0.72 (18.3)	0.19 (4.8)	1.125 (28.6)
KDA	2 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.44 (11.1)	0.31 (7.9)	3.31 (84.1)	0.72 (18.3)	0.19 (4.8)	1.125 (28.6)
KDB	1 AWG	—	1.25 (31.8)	2.88 (73.0)	1.06 (27.0)	0.47 (11.9)	0.34 (8.7)	3.31 (84.1)	0.72 (18.3)	0.19 (4.8)	1.125 (28.6)
KDC	1/0 AWG	—	1.5 (38.1)	2.625 (66.7)	1.25 (31.8)	0.52 (13.1)	0.39 (9.9)	3.38 (85.7)	0.88 (22.2)	0.25 (6.4)	1.125 (28.6)
KDD*	2/0 AWG	—	1.63 (41.3)	2.625 (66.7)	1.25 (31.8)	0.56 (14.3)	0.44 (11.1)	3.38 (85.7)	0.88 (22.2)	0.25 (6.4)	1.125 (28.6)
KDE	3/0 AWG	—	1.63 (41.3)	3.63 (92.1)	1.44 (36.5)	0.61 (15.5)	0.48 (12.3)	3.38 (85.7)	0.97 (24.6)	0.25 (6.4)	1.125 (28.6)
KDF*	4/0 AWG	—	1.75 (44.5)	3.63 (92.1)	1.44 (36.5)	0.69 (17.5)	0.55 (13.9)	3.38 (85.7)	0.97 (24.6)	0.25 (6.4)	1.125 (28.6)
KDH	250 kcmil	—	1.88 (47.6)	3.63 (92.1)	1.44 (36.5)	0.75 (19.0)	0.59 (15.0)	3.38 (85.7)	0.97 (24.6)	0.25 (6.4)	1.125 (28.6)
KDJ*, †	350 kcmil	—	2.0 (50.8)	3.63 (92.1)	1.63 (41.3)	0.88 (22.2)	0.70 (17.8)	3.38 (85.7)	1.06 (27.0)	0.25 (6.4)	1.125 (28.6)
KDM*,†	500 kcmil	—	2.88 (73.0)	3.08 (78.2)	1.88 (47.6)	1.06 (27.0)	0.83 (21.0)	3.38 (85.7)	1.19 (30.2)	0.25 (6.4)	1.63 (41.3)
KDU*	600 kcmil	—	3.5 (88.9)	3.75 (95.2)	2.5 (63.5)	1.16 (29.4)	0.92 (23.4)	3.5 (88.9)	1.5 (38.1)	0.25 (6.4)	2.0 (50.8)
CDB-W*	—	750 kcmil	4.0 (102)	3.08 (78.1)	1.88 (47.6)	1.6 (40.5)	1.03 (26.2)	3.38 (85.7)	1.19 (30.2)	0.25 (6.4)	1.63 (41.3)
KDR*, ††	750 kcmil	—	3.5 (88.9)	3.75 (95.2)	2.5 (63.5)	1.31 (33.3)	1.06 (27.0)	3.5 (88.9)	1.5 (38.1)	0.25 (6.4)	2.0 (50.8)

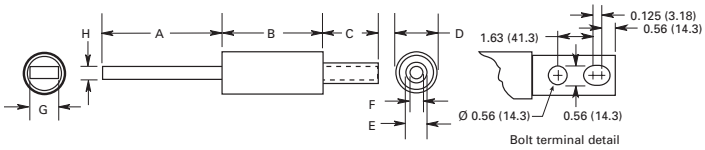
* UL Listed, File E90818, 600 Vac, 200 kA IR.

† Available with molded rubber boot "-B" suffix. Boot can be purchased separately, order Part# - BOOT-KDM

††Available with shrink tube "–V" suffix.



Dimensions — in (mm)



Center bolt-to-tube terminals

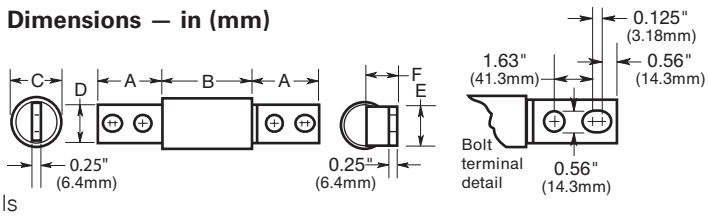
- Copper conductor only

Catalog no.	Copper cable size	A	B	C	D	E	F	G	H
KHF*	4/0 AWG	3.38 (85.8)	3.63 (92.2)	1.75 (44.4)	1.44 (36.7)	0.69 (17.5)	0.48 (12.2)	1.13 (28.7)	0.25 (6.3)
KHJ*	350 kcmil	3.38 (85.8)	3.63 (92.2)	2 (50.8)	1.63 (41.4)	0.88 (22.3)	0.7 (17.8)	1.13 (28.7)	0.25 (6.3)
KHM*	500 kcmil	3.38 (85.8)	3.08 (78.2)	2.88 (73.1)	1.88 (47.7)	1.05 (26.7)	0.83 (21.1)	1.13 (28.7)	0.25 (6.3)
KHR*	750 kcmil	3.5 ((88.9)	3.88 (98.5)	3.5 (88.9)	2.5 (63.5)	1.31 (33.3)	1.06 (26.9)	2.0 (50.8)	0.25 (6.3)

* UL Listed for copper only, File E90818, 600 Vac, 200 kA IR.



Dimensions — in (mm)



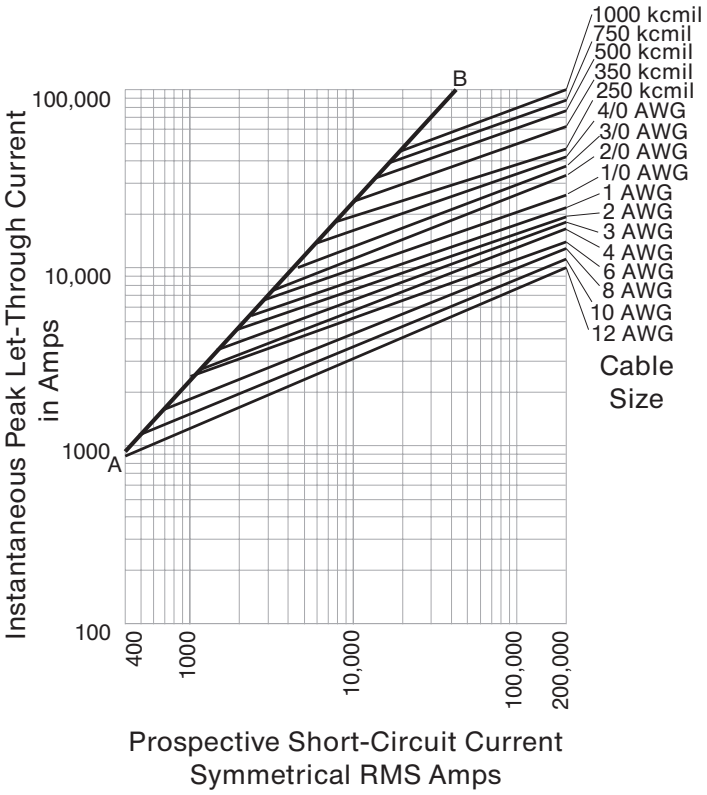
Center bolt-to-offset bolt terminals

- Copper or aluminum conductor — see catalog number table for details

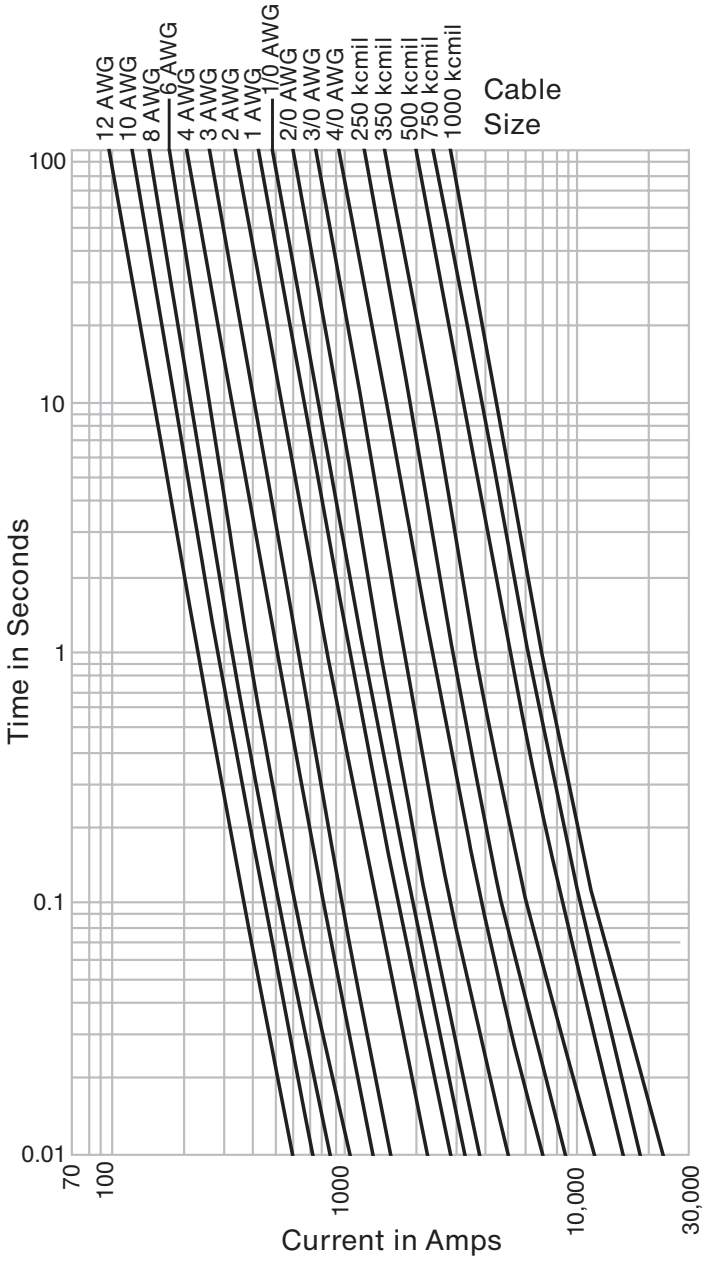
Catalog no.	Copper cable size	Aluminum cable size	A	B	C	D	E	F
KPF	4/0 AWG	4/0 AWG	3.38 (85.7)	3.63 (92.1)	1.44 (36.5)	1.125 (28.6)	1.125 (28.6)	0.97 (24.6)
KFT*	250 kcmil	250 kcmil	3.38 (85.7)	3.63 (92.1)	1.44 (36.5)	1.125 (28.6)	1.125 (28.6)	0.97 (24.6)
KEW*	350 kcmil	350 kcmil	3.38 (85.7)	3.63 (92.1)	1.63 (41.3)	1.125 (28.6)	1.125 (28.6)	1.06 (27.0)
KDP*	500 kcmil	500 kcmil	3.38 (85.7)	3.08 (78.2)	1.88 (47.6)	1.5 (38.1)	1.63 (41.3)	1.19 (30.2)
KFM*	750 kcmil	750 kcmil	3.50 (88.9)	3.75 (95.3)	2.50 (63.5)	2.0 (50.8)	2.00 (50.8)	1.50 (38.1)

* UL Listed for copper only, File E90818, 600 Vac, 200 kA IR.

Peak let-through current



Time-current characteristics - total clear



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