Catalog symbols

LCL 300-4000 A, time-delay 600 Vac or less

LCU 601-6000 A, fast-acting 600 Vac or less

Specifications

- UL Class L current limiting fuses
- LCL time-delay
- LCU fast-acting

Ratings

- Volts 600 Vac
- Amps
  - 300-4000 A (LCL)
  - 601-6000 A (LCU)
- Interrupting rating 200 kA RMS Sym.

Agency Information

- UL Listed, Class L, Guide JDDZ, File E162363
- CSA Certified HRC-L per C22.2, No. 248.10

Amp ratings					
LCL					
300*	650	801	1350	1800	3500
400*	700	900	1400	2000	4000
500*	750	1000	1500	2500	—
601	800	1200	1600	3000	—
LCU					
601	800	1350	1800	3000	6000
650	1000	1500	2000	3500	—
700	1200	1600	2500	4000	—

* Not UL Listed. LCL 300-500 amp fuses are physically the same as 800 amp size; Use in 800 amp switch where load current is not fully utilized and a smaller fuse amp size is desired. Also useful in new installations to allow for future upgrades in service.

LCL

Minimum time-delay 5 seconds at 500% rated current allows closer sizing.

Benefits

- "O-ring" construction insures maximum current limiting ability.
- Silver plated micro-peened terminals.
- High strength melamine fuse tubes.

Applications

- LCL: Recommended for AC power distribution system mains and large feeders.
- LCU: Recommended for non-inductive heating and lighting loads. Also suitable for protection of low interrupting rating circuit breakers.

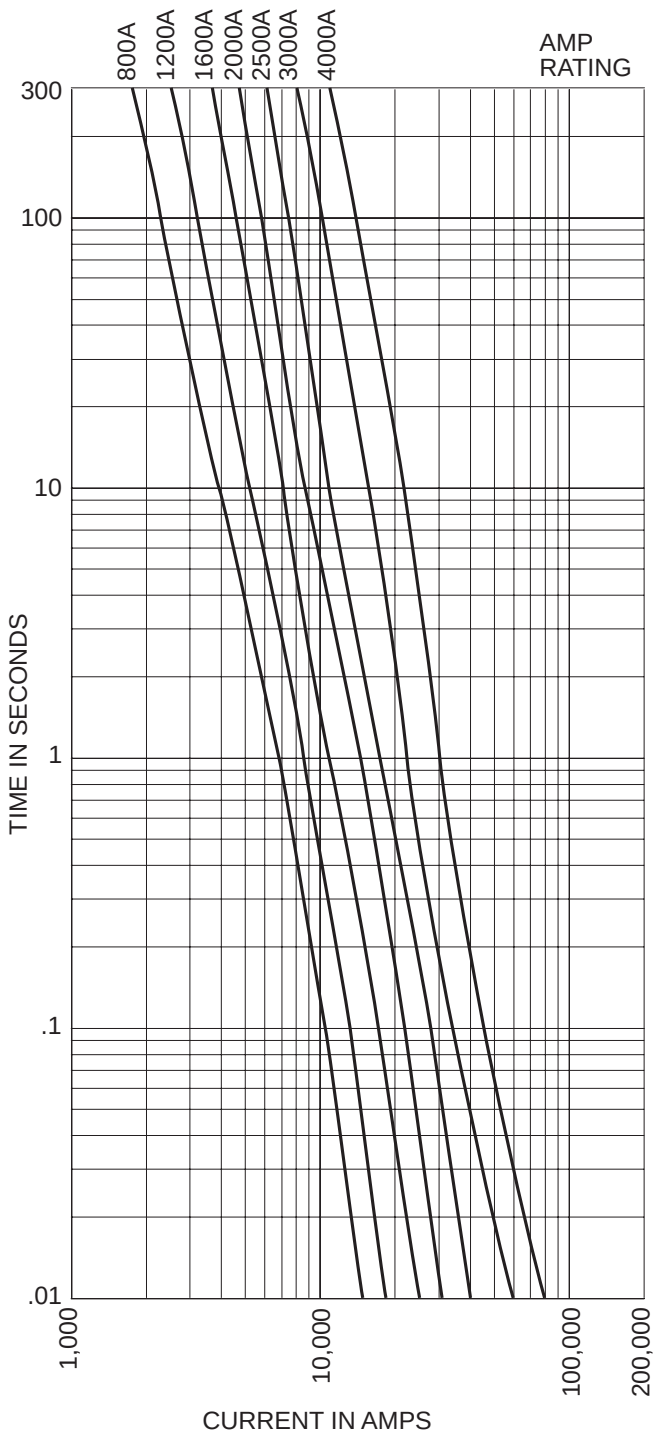
Recommended sizing

LCL: 150% or more of motor full load current.

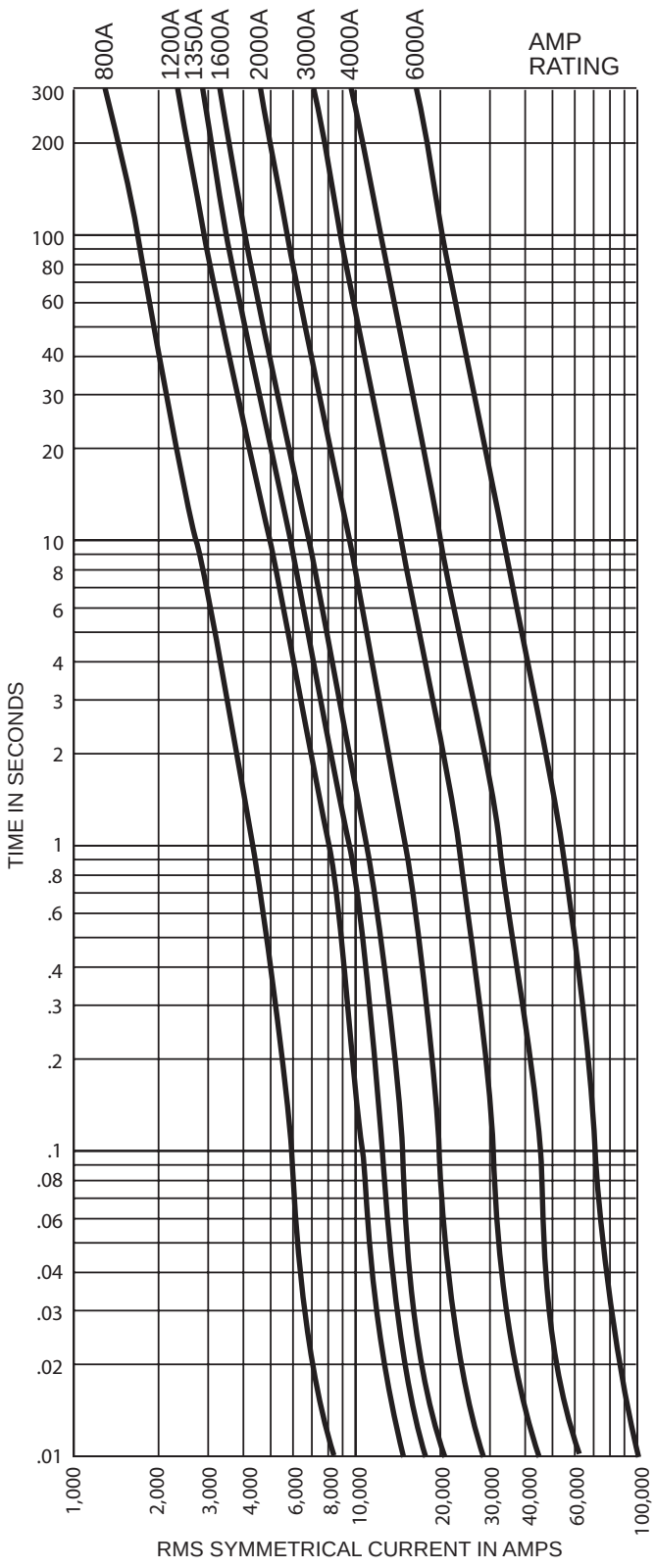
Cross reference		
Edison	Mersen	Littelfuse
LCL	A4BY	KLP-C, KLLU
LCU	None	None

Time-current curves — average melt

LCL

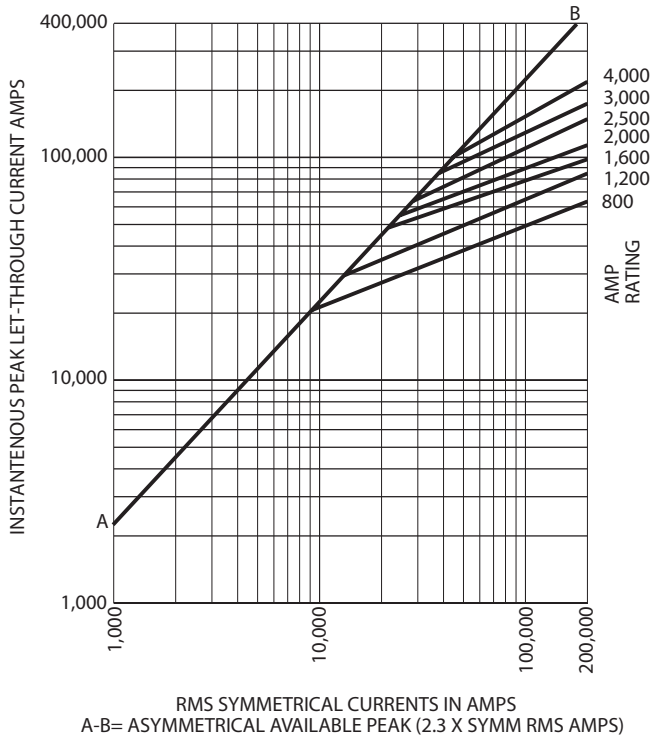


LCU



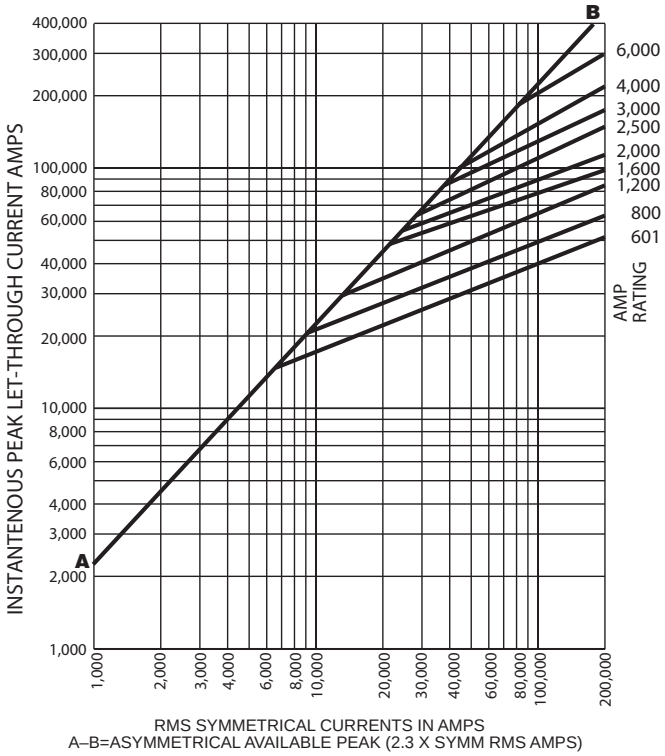
Peak let-through current curves*

LCL



* Curves test data obtained at 15% short-circuit power factor when possible.

LCU



Current limitation tables**

LCL

*Prosp. S.C.C.	Let-through current (apparent RMS Sym.) versus fuse rating					
	800 A	1200 A	1600 A	2000 A	3000 A	4000 A
5,000	5,000	5,000	5,000	5,000	5,000	5,000
10,000	10,000	10,000	10,000	10,000	10,000	10,000
15,000	13,000	15,000	15,000	15,000	15,000	15,000
20,000	14,000	18,000	20,000	20,000	20,000	20,000
25,000	16,000	21,000	25,000	25,000	25,000	25,000
30,000	16,500	22,500	26,000	30,000	30,000	30,000
40,000	18,000	25,500	29,000	34,000	40,000	40,000
50,000	19,000	27,000	32,000	37,000	42,000	45,000
60,000	21,000	29,000	35,000	41,000	45,000	50,000
80,000	24,000	32,000	39,000	45,000	51,000	57,000
100,000	26,000	36,000	41,000	51,000	55,000	64,000
150,000	30,000	40,000	48,000	58,000	66,000	78,000
200,000	34,000	45,000	52,000	65,000	76,000	92,000

* RMS Symmetrical amps short-circuit current.
NOTE: Data derived from current limiting curves.

LCU

*Prosp. S.C.C.	Let-through current (apparent RMS Sym.) versus fuse rating						
	800 A	1200 A	1600 A	2000 A	3000 A	4000 A	6000 A
5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
10,000	9,700	10,000	10,000	10,000	10,000	10,000	10,000
15,000	11,500	13,000	15,000	15,000	15,000	15,000	15,000
20,000	12,500	15,400	18,000	20,000	20,000	20,000	20,000
25,000	14,000	16,000	21,000	25,000	25,000	25,000	25,000
30,000	14,500	17,500	22,000	27,000	30,000	30,000	30,000
35,000	15,000	18,000	24,000	28,000	35,000	35,000	35,000
40,000	15,500	19,000	25,000	29,000	40,000	40,000	40,000
50,000	16,000	21,000	26,000	32,000	44,000	48,000	50,000
60,000	19,000	24,000	28,000	34,000	48,000	51,000	60,000
80,000	20,000	26,000	31,000	36,000	52,000	60,000	80,000
100,000	23,000	29,000	39,000	40,000	57,000	68,000	95,000
150,000	27,000	34,000	40,000	47,000	70,000	79,000	115,000
200,000	29,000	39,000	43,000	50,000	78,000	93,000	141,000

* RMS Symmetrical amps short-circuit current.
NOTE: Data derived from current limiting curves.

** "Apparent Let-Through Amps" values are read from "Peak Let-Through Current Curves" and the peak current value divided by 2.3 Asymmetry Factor.

General application

Edison Class L fuses, Catalog Numbers LCL time-delay or LCU fast acting are recommended for high capacity main, feeder or branch circuits in power distribution systems and for special applications such as system upgrading, install ahead of network protectors, etc. The choice of LCL or LCU depends on the extent of mixed inductive and non-inductive loads diversity. Apply LCL fuses for protection of large individual motor circuits. Size LCL fuses at 150% or more of the motor nameplate current rating by checking starting characteristics against minimum melt Time-Current Curve.

Class L fuses specification

Install Class L Fuses in switches rated 601-6000 amps and in "time-delay" or "fast-acting" types as shown on the plans. Installed and spare "time-delay" fuses shall be Catalog Number LCL and "fast-acting" fuses shall have silver links and be Catalog Number LCU. Fuses shall be Edison fuses or equivalent submitted to the design engineer for approval 10 days prior to the project bid date.

Mounting of "Bolt-On" fuses shall be made by installing stainless steel bolts of correct number, diameter and length*, stainless steel spring washers on each side of the bolt and stainless steel nuts. The nuts shall be tightened to the torque recommended by ASTM Standards for the bolt size used.

* Bolts shall have the largest diameter to fit fuse bolt holes and length to allow full nut thread engagement. Bolts shall be installed in each fuse mounting hole.

Dimensions — in