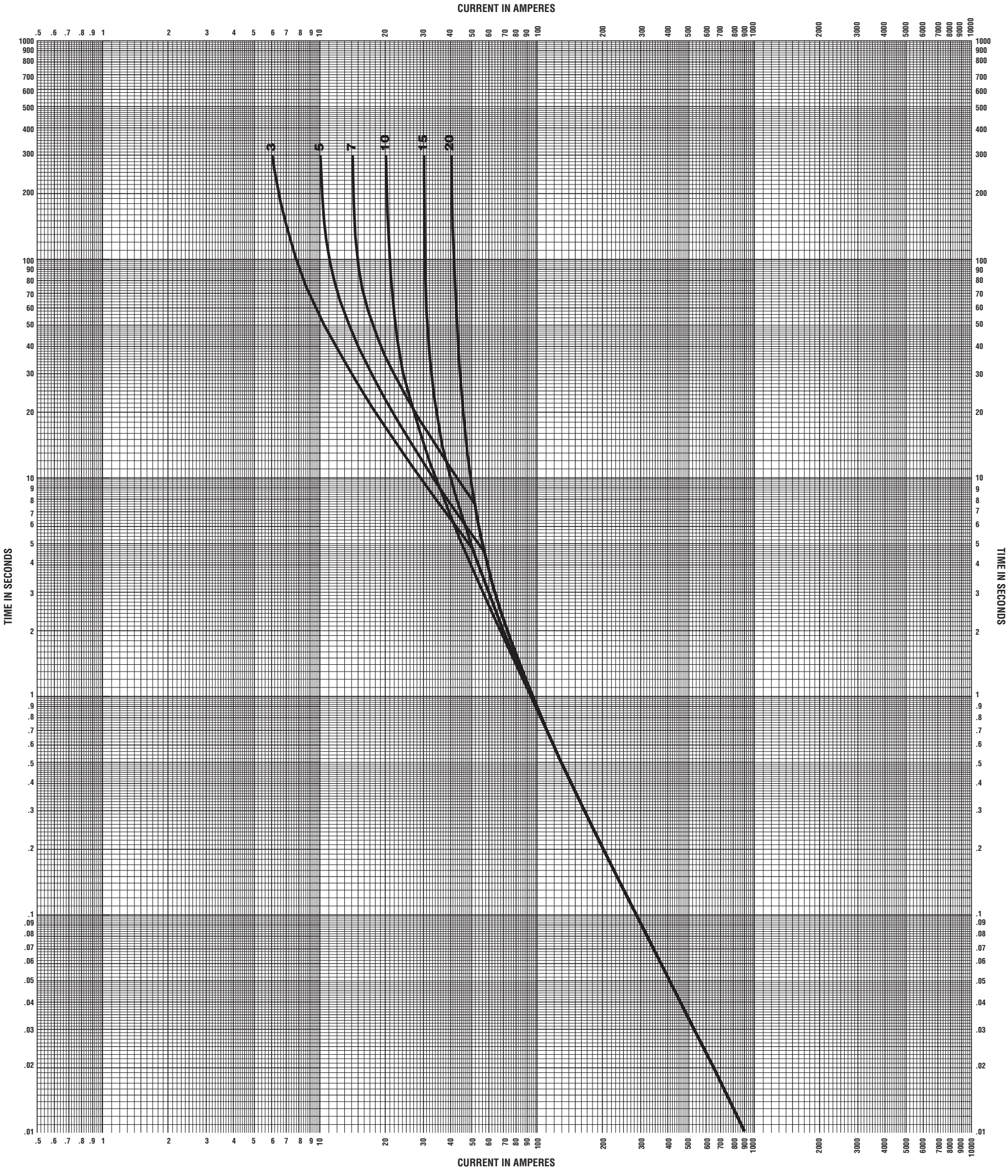

Minimum Melting Time–Current Characteristic Curves

Fault Tamer® Fuse Limiters

BASIS–Though ANSI/IEEE standards do not specifically cover Fault Tamer Fuse Limiters, IEEE Standard C37.41-1994 Section 12, "Time-Current Tests," was used as a guide for the test program. The minimum melting current is not less than 200% of the Fault Tamer Fuse Limiter's ampere rating, and the minimum melting curve is based on tests starting with the fuse limiter at an ambient temperature of 25°C (77°F) and no initial load.

CONSTRUCTION–Fusible elements for fuse cartridges rated 3 through 7 amperes are nickel-chrome, under controlled tension; fusible elements for fuse cartridges rated 10 through 20 amperes are silver-copper eutectic; and fusible elements for backup limiters are copper. All fusible elements feature solderless connection to their terminals.

TOLERANCES–Curves are plotted to minimum test points. Maximum variations within the coordinating range (melting times less than 10 seconds) expressed in current values are plus 10%.

APPLICATION–Fault Tamer Fuse Limiters are ideally suited for protecting single-phase transformers, three-phase banks of single-phase transformers, or three-phase transformers.

As with all high-voltage fuses, Fault Tamer Fuse Limiters should be applied to accommodate transformer overloads, not interrupt them.

Curves are applicable to both 50-Hz and 60-Hz systems.

COORDINATION–Unlike conventional fuse links, the fast-clearing characteristics of Fault Tamer Fuse Limiters provide complete coordination with typically sized upstream lateral fuses up to the available fault current or the interrupting rating of the fuse limiter, whichever is lower.

Moreover, the current-limiting action of a Fault Tamer Fuse Limiter enables coordination with the instantaneous setting of upstream circuit breakers, thereby preventing unnecessary momentary outages to the entire feeder caused by transformer faults.

AVAILABLE FAULT TAMER FUSE LIMITERS

Style	Ampere Ratings
15 and 38 kV	3 through 20

March 8, 2021