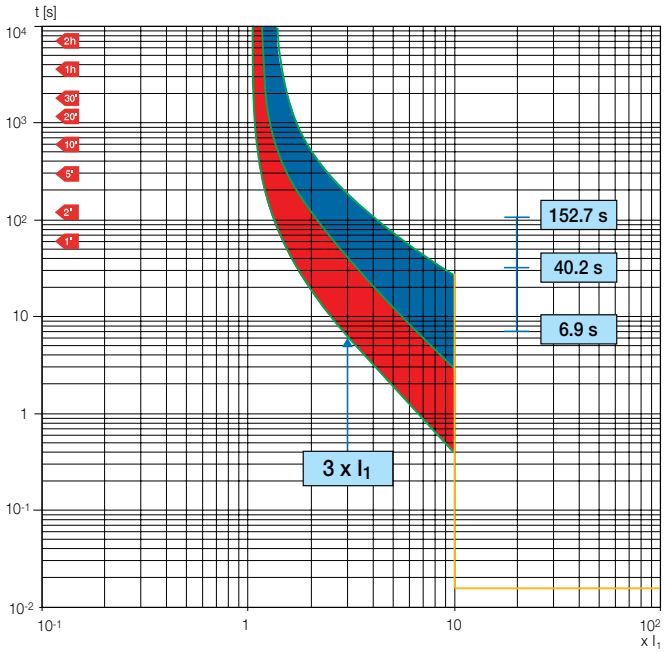
Example of curve reading

4

Example 1 – XT3N 225

Trip curves for distribution (thermal magnetic trip unit)

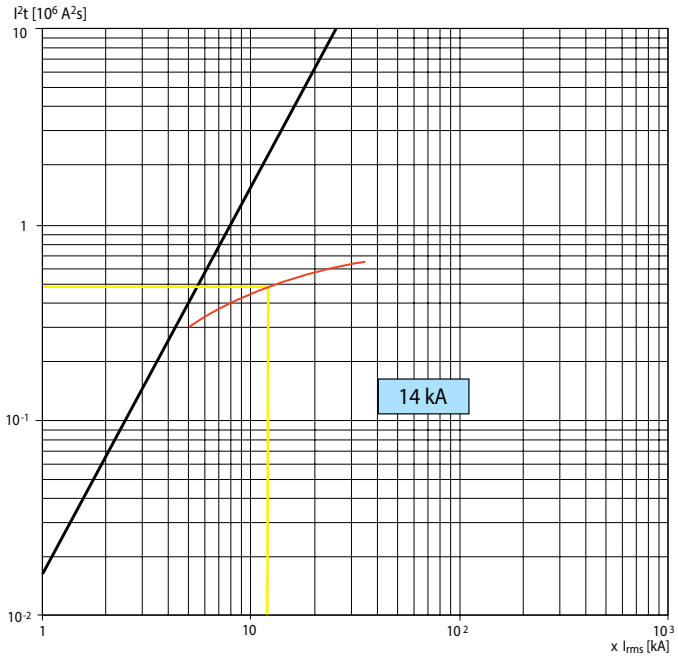
Let us consider an XT3N TMF In = 225A circuit-breaker.
According to the conditions the overload is found in; i.e., with the circuit-breaker at thermal regime or not, thermal protection tripping varies considerably.
For example, for an overload current 3xI1, the trip time is between 152,7s and 40,2s for cold tripping and between 40,2s and 6,9s for hot tripping.
For fault current values higher than 225A. Tthe circuit-breaker trips with the instantaneous magnetic protection I3.



Example 2 – XT2H 125

Specific let-through energy curves

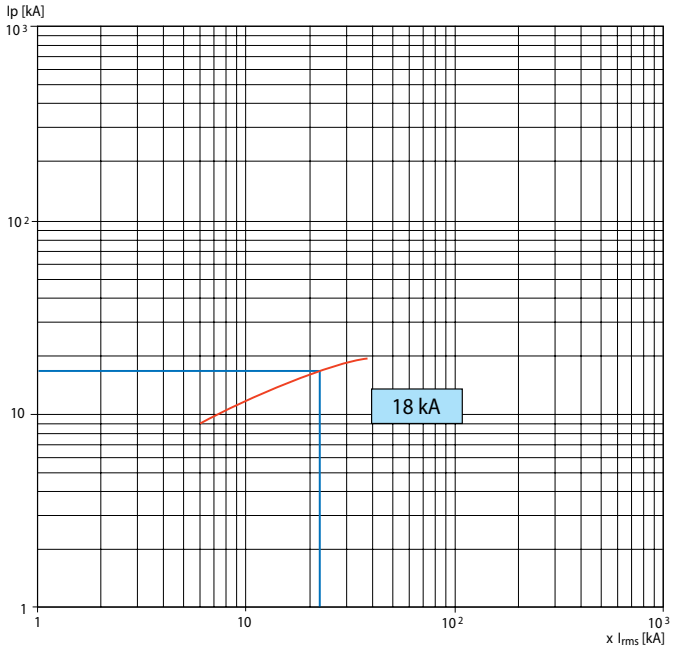
This figure figure shows a sample graph of the specific let-through energy of the XT2H 125 circuit-breaker at a voltage of 220/230V.
The prospective symmetrical short-circuit current is indicated on the abscissas, whereas the values of the specific let-through energy expressed in A^2s are shown on the ordinates.
The circuit-breaker lets through a value of I^2t equal to 0, 42 · 10^6 · A^2s relative to a short-circuit current of 14kA.



Example 3 – XT2L 125

Limitation curves

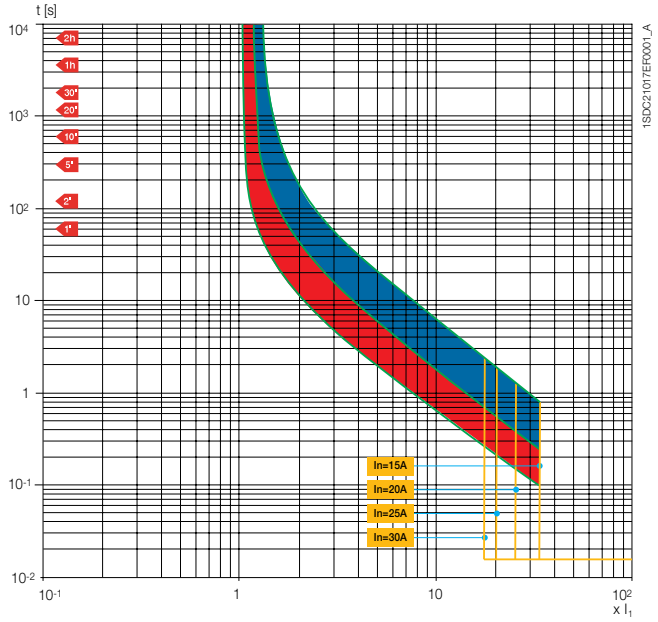
The figure at right gives the trend of the Limitation curves of the XT2L 125 In = 125A circuit-breaker.
The effective value of the prospective symmetrical short-circuit current is given on the abscissas of the diagram, whereas the peak value corresponding to the prospective short-circuit current is indicated on the ordinates.
For a value current of 22kA, the XT2L 125 circuit breaker with a thermal magnetic trip unit In = 125A limits the peak prospective short-current current to 18kA at a voltage of 600V.



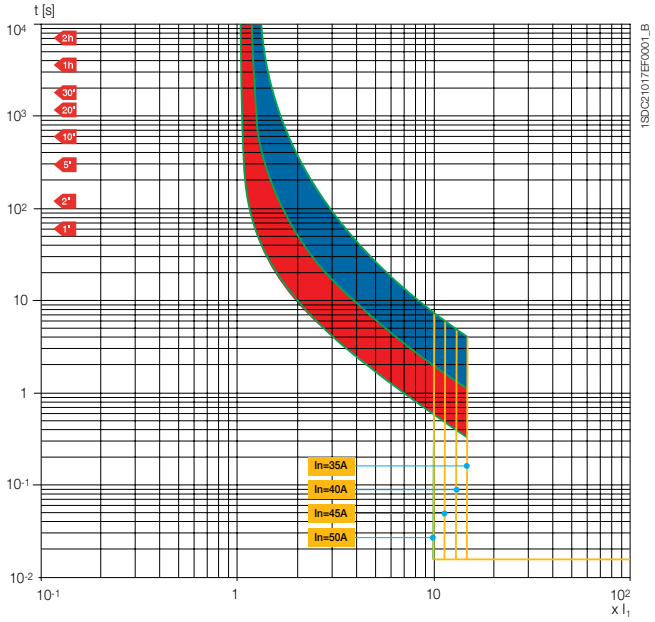
4

Trip curves with thermal magnetic trip unit
Trip curves for distribution

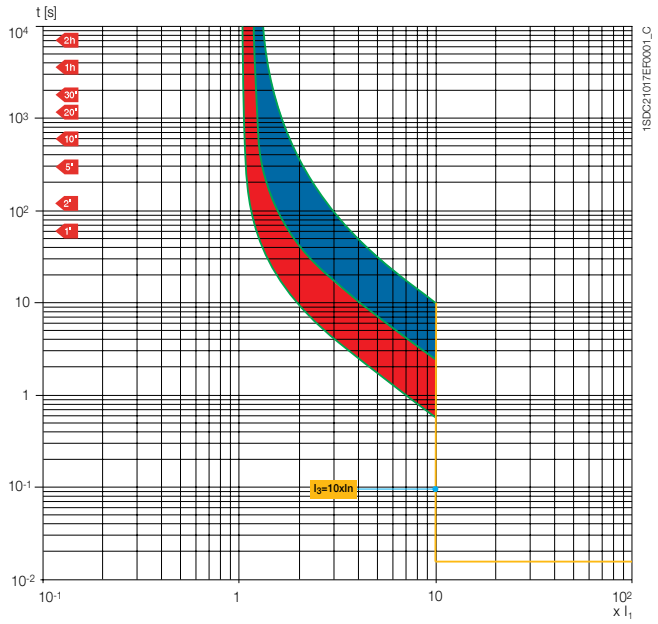
XT1 125 TMF In=15..30A



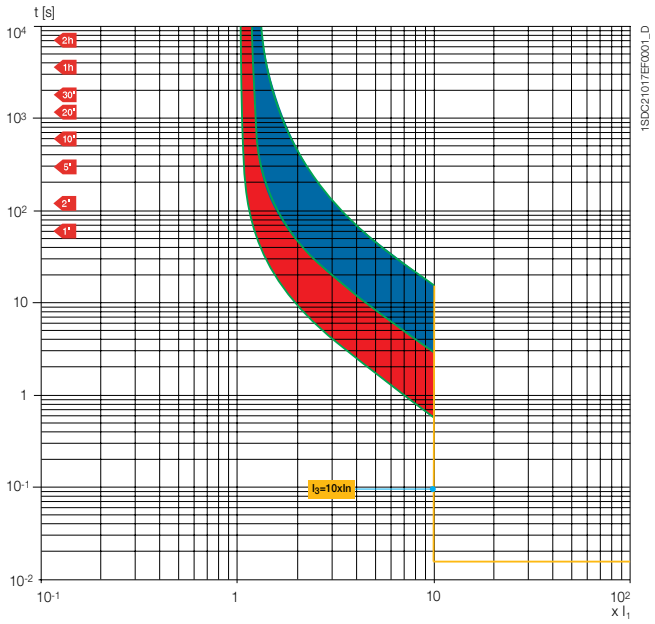
XT1 125 TMF In=35...50A



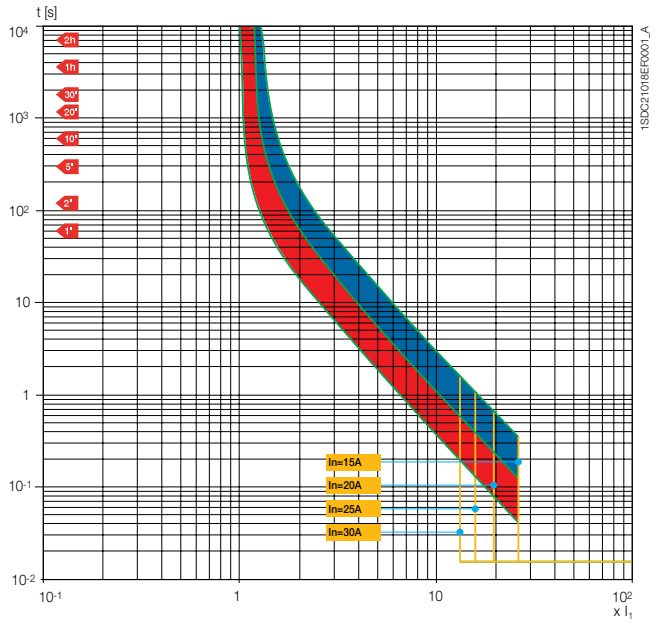
XT1 125 TMF In=60...100A



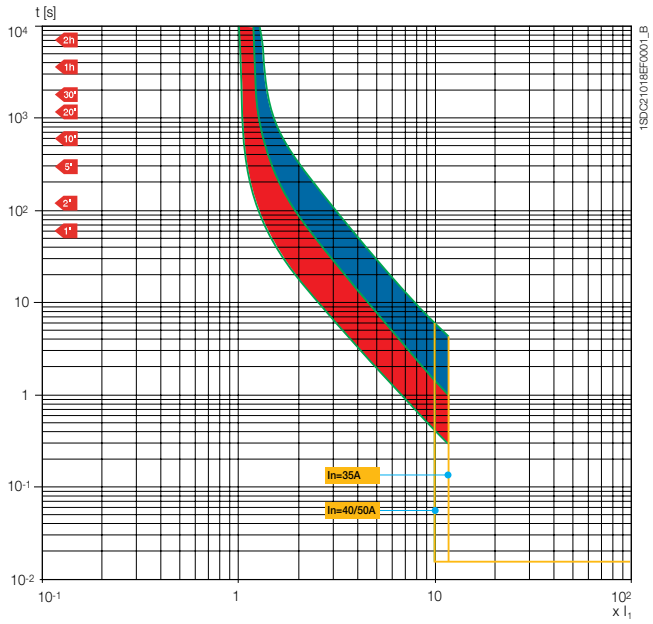
XT1 125 TMF In=125A



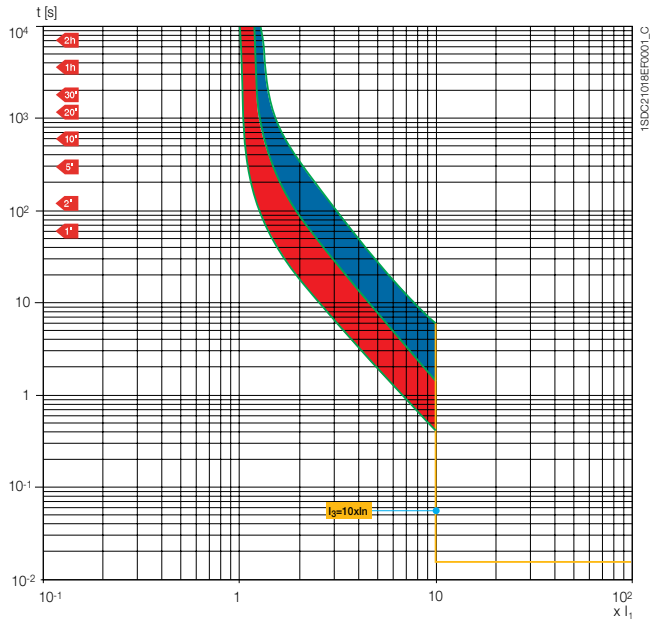
XT2 125 TMF In=15...30A



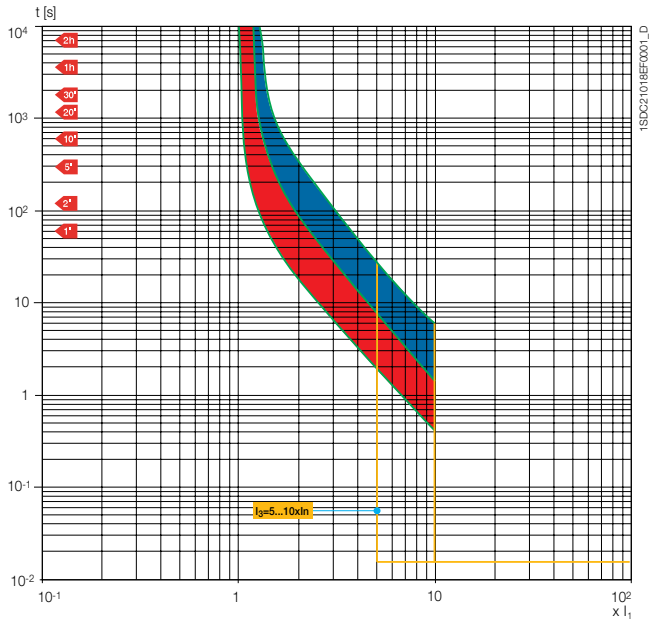
XT2 125 TMF In=35...50A



XT2 125 TMF In=60...70A

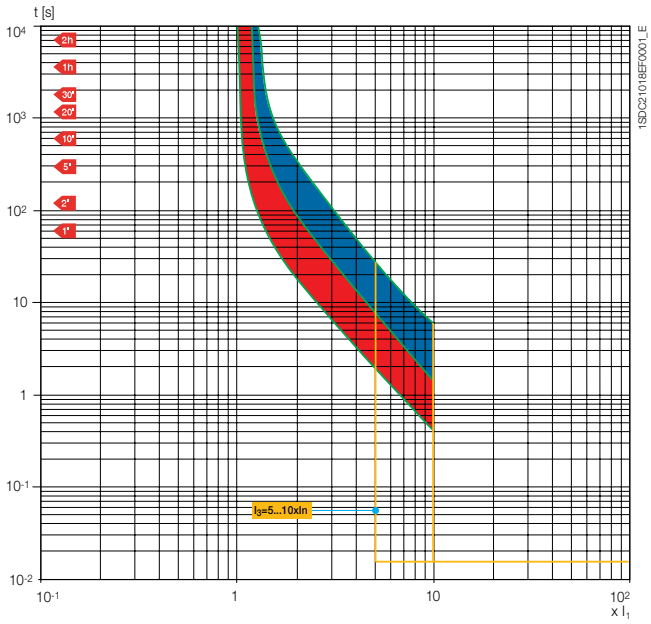


XT2 125 TMA In=80...100A

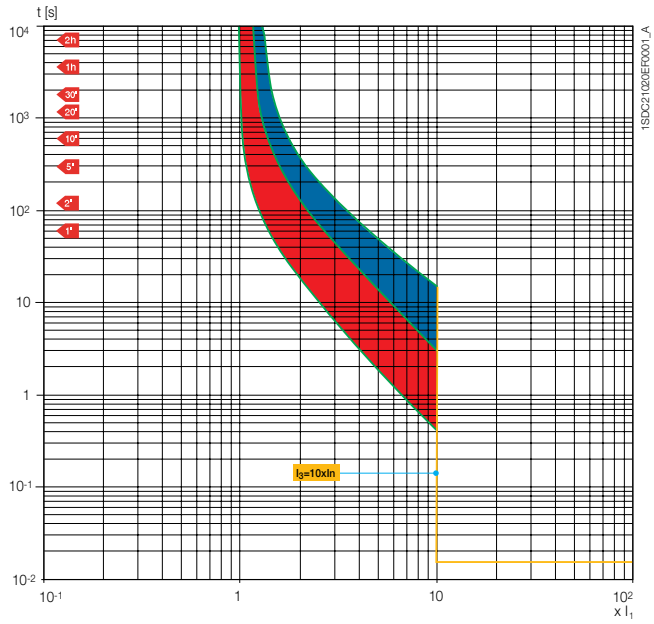


Trip curves with thermal magnetic trip unit
Trip curves for distribution

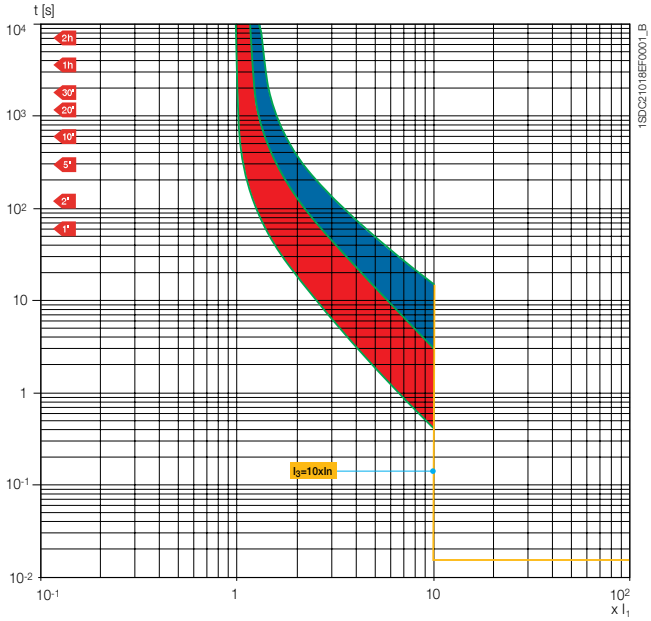
XT2 125 TMA In=110...125A



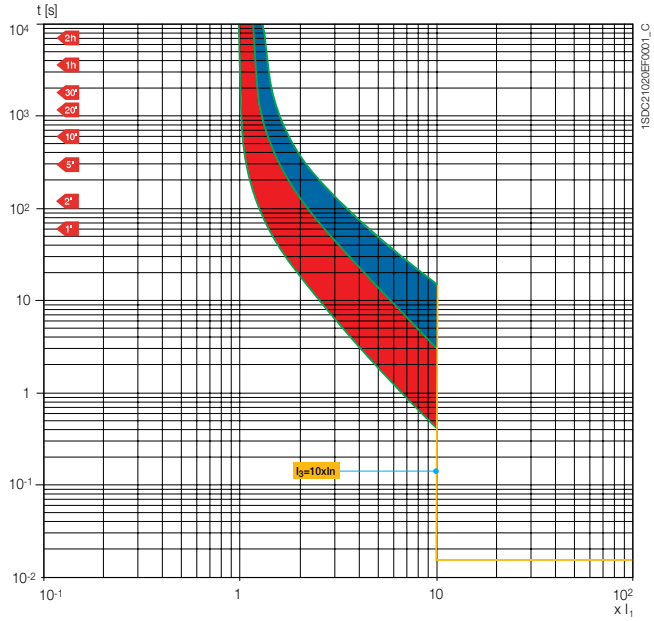
XT3 225 TMF In=60..100A



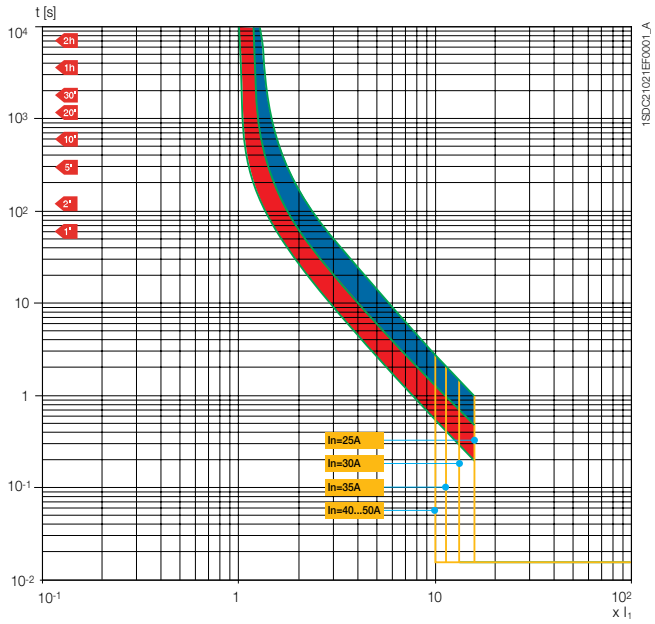
XT3 250 TMF In=110..150A



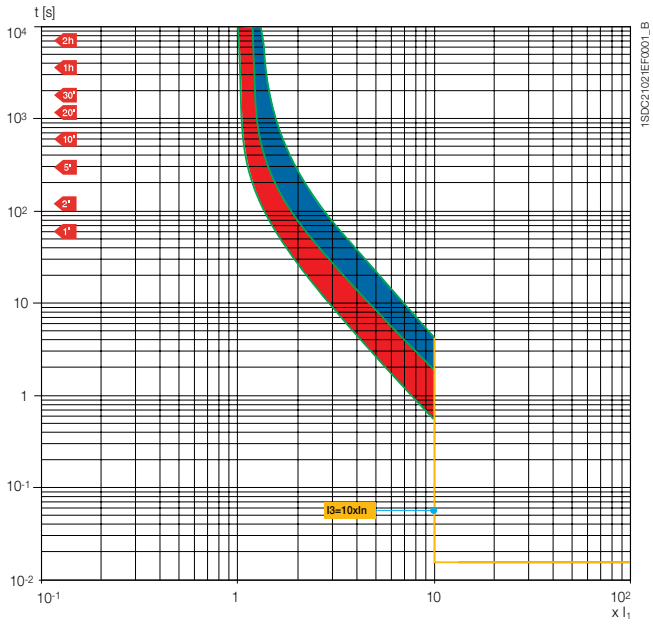
XT3 250 TMF In=160..225A



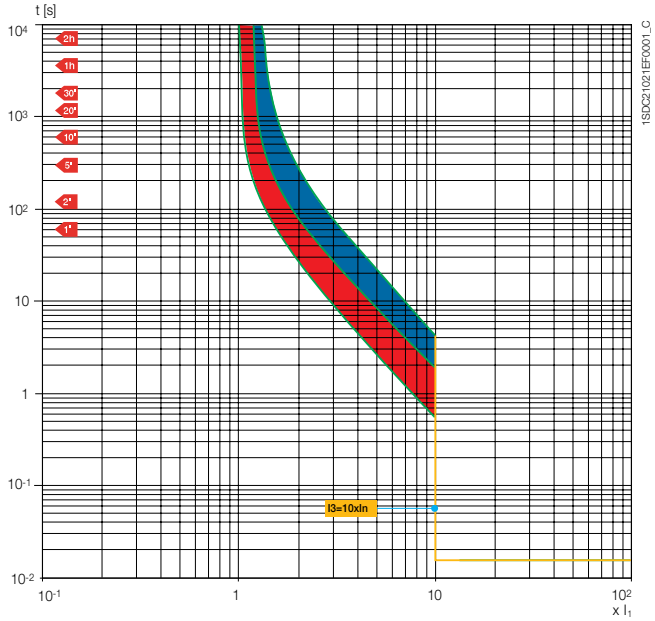
XT4 250 TMF In=25...50A



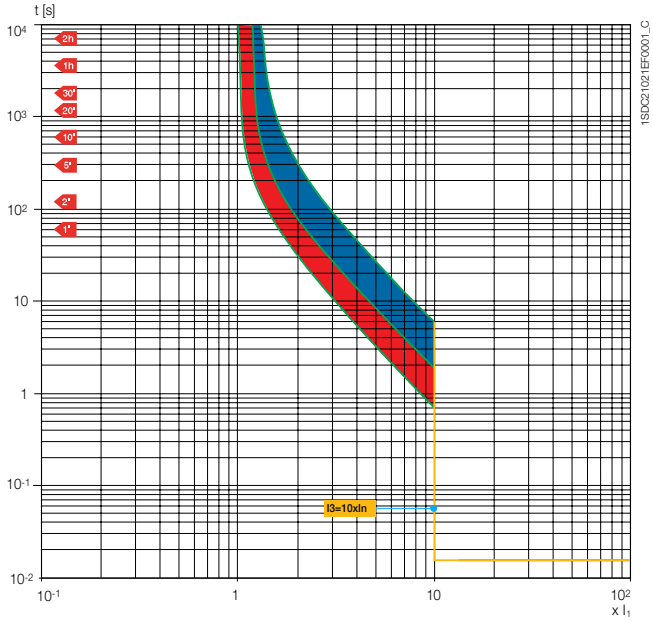
XT4 250 TMF In=60...70A



XT4 250 TMF In=80...100A

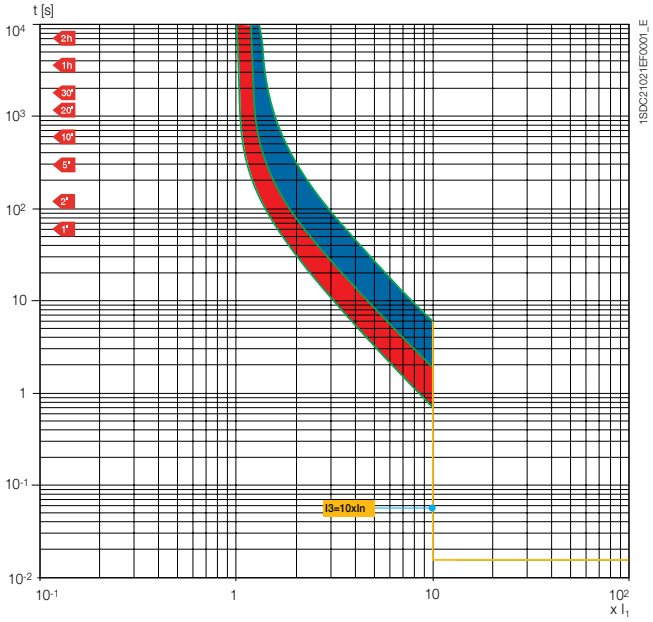


XT4 250 TMF In=110...150A

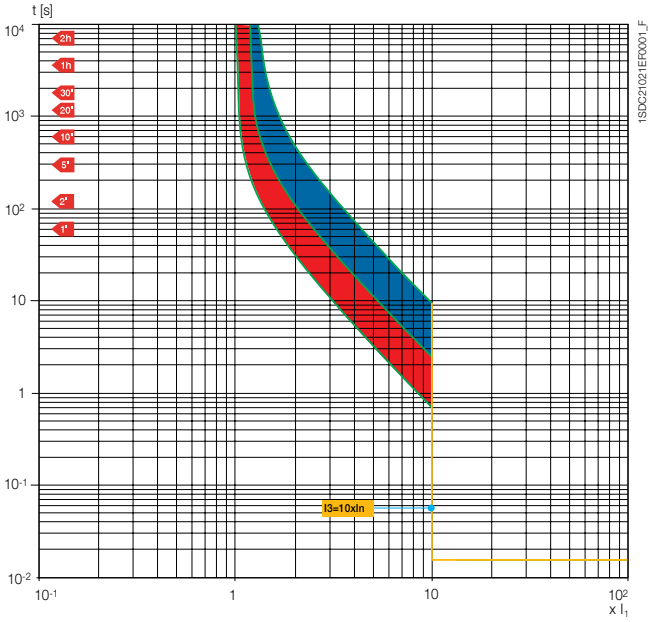


Trip curves with thermal magnetic trip unit
Trip curves for distribution

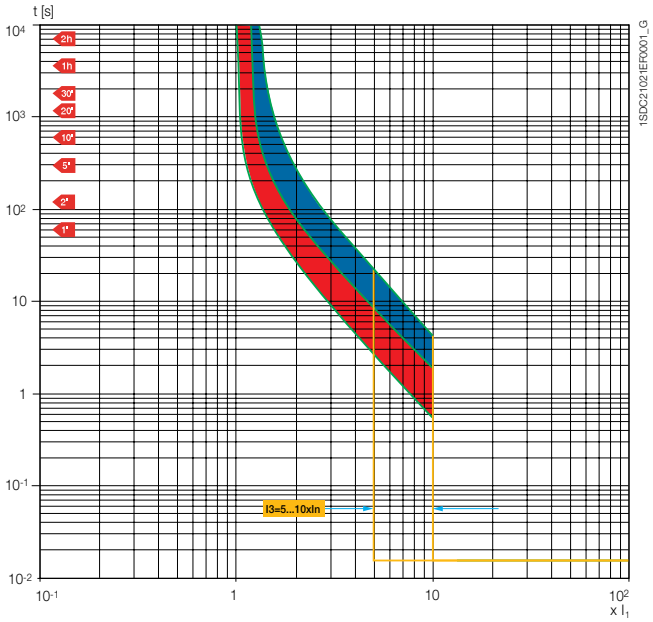
XT4 250 TMF In=160...225A



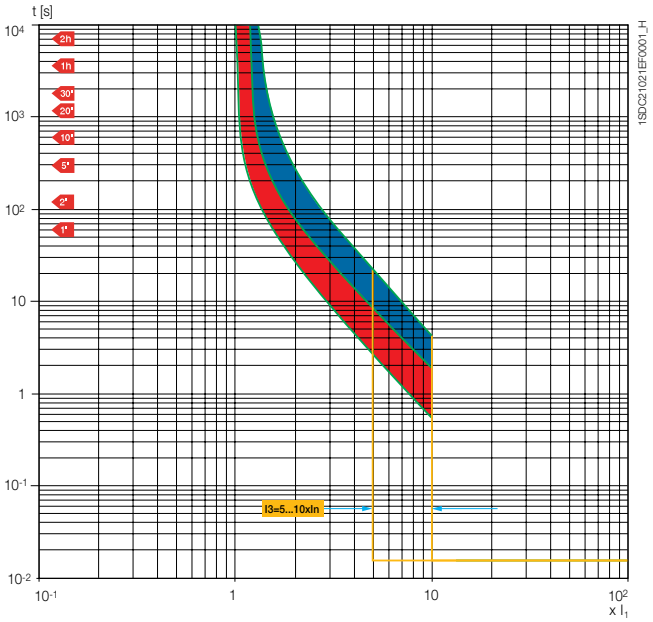
XT4 250 TMF In=250A



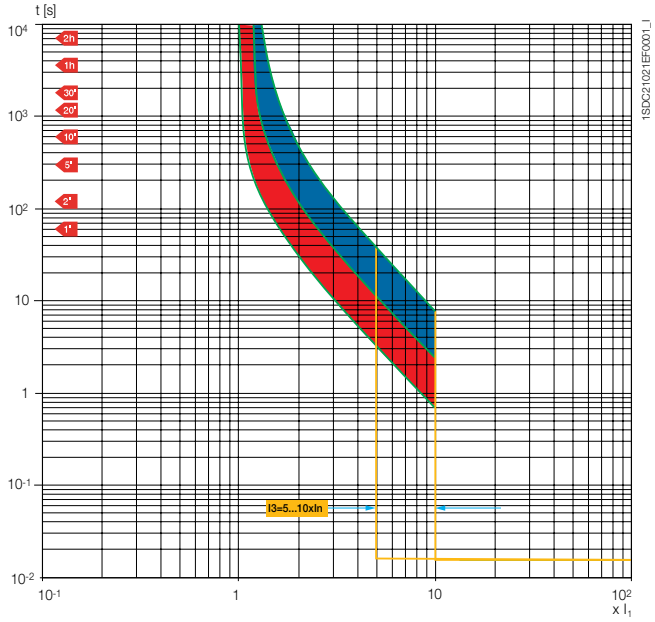
XT4 250 TMA In=80...100A



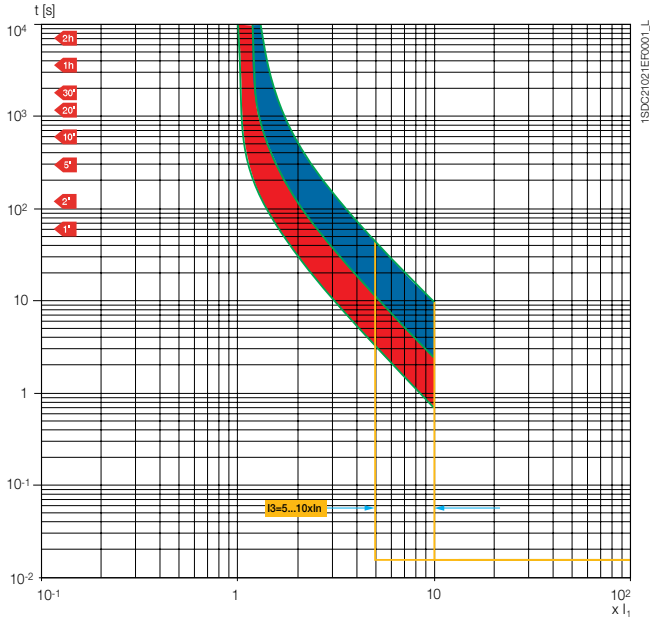
XT4 250 TMA In=110...150A



XT4 250 TMA In=160...225A



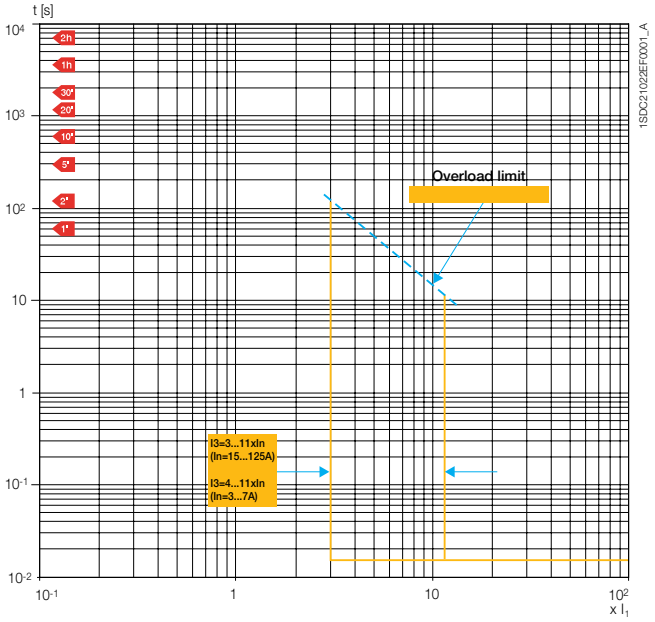
XT4 250 TMA In=250A



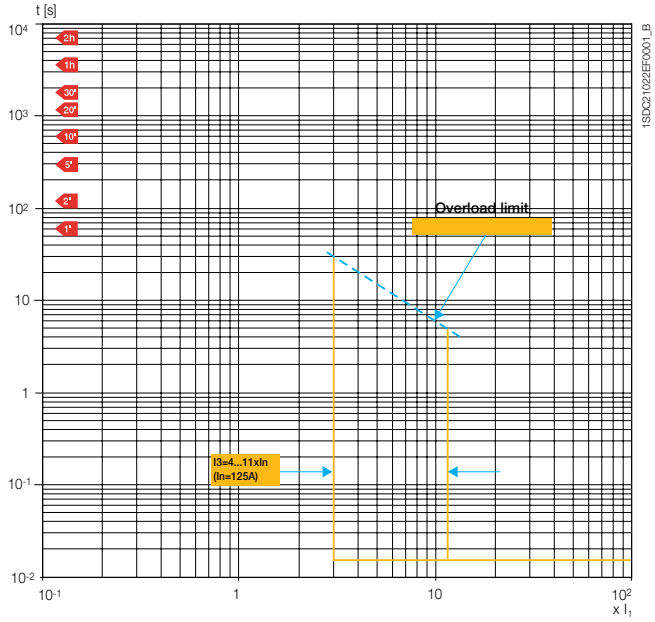
4

Trip curves with thermal magnetic trip unit
Trip curves for distribution

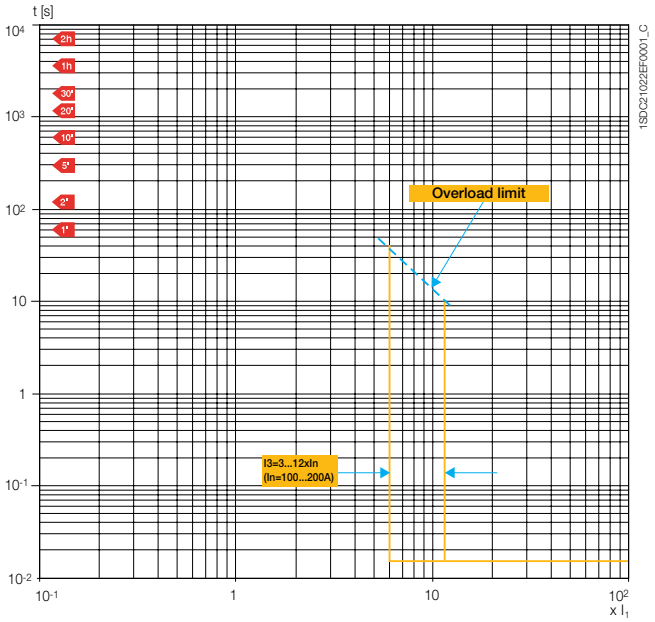
XT1 125 MA In=3...125A



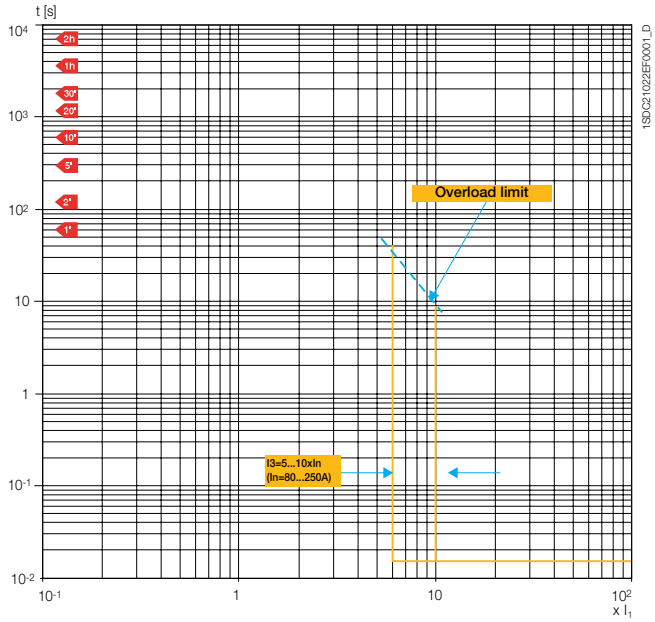
XT2 125 MA In=125A



XT3 225 MA In=100...200A

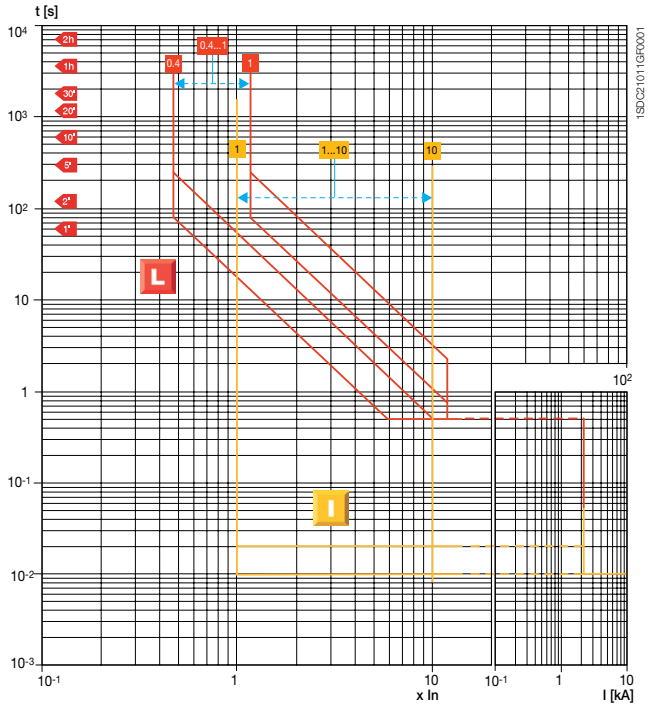


XT4 250 MA 80...250A

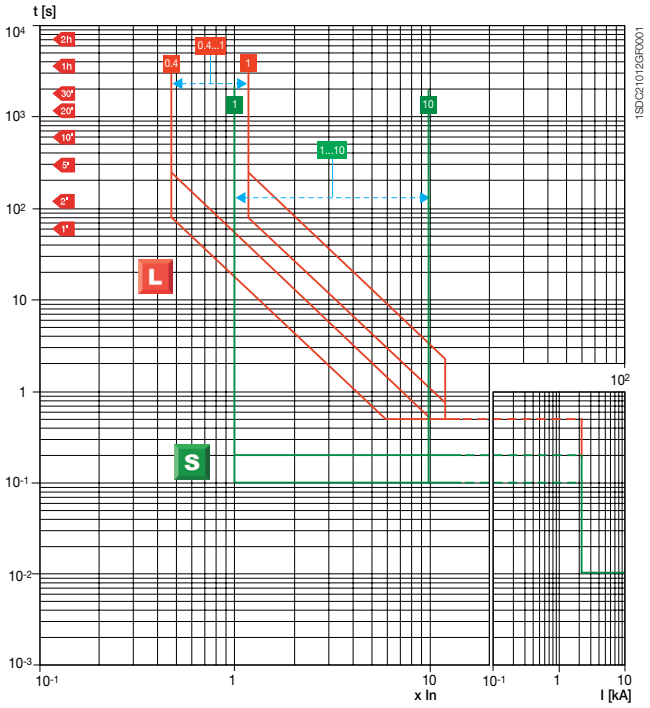


Trip curves with electronic trip unit
Trip curves for distribution

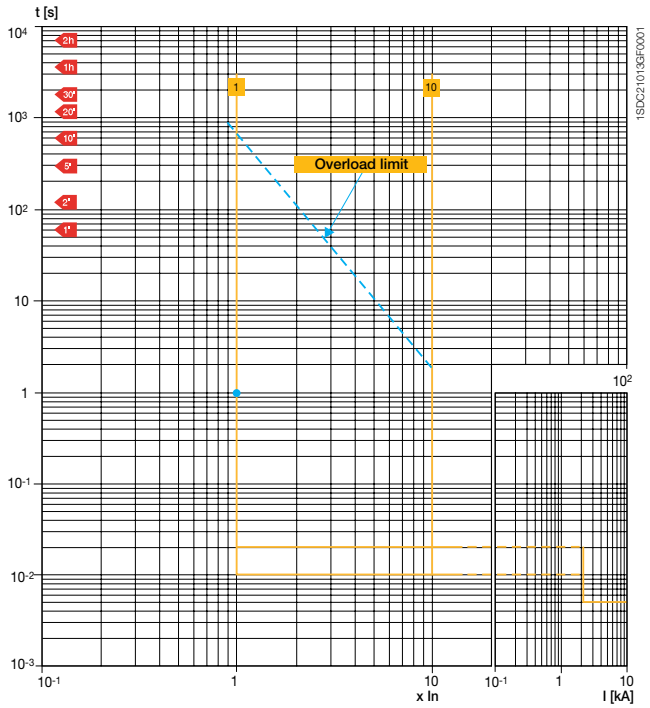
XT2 Ekip LS/I
L-I functions



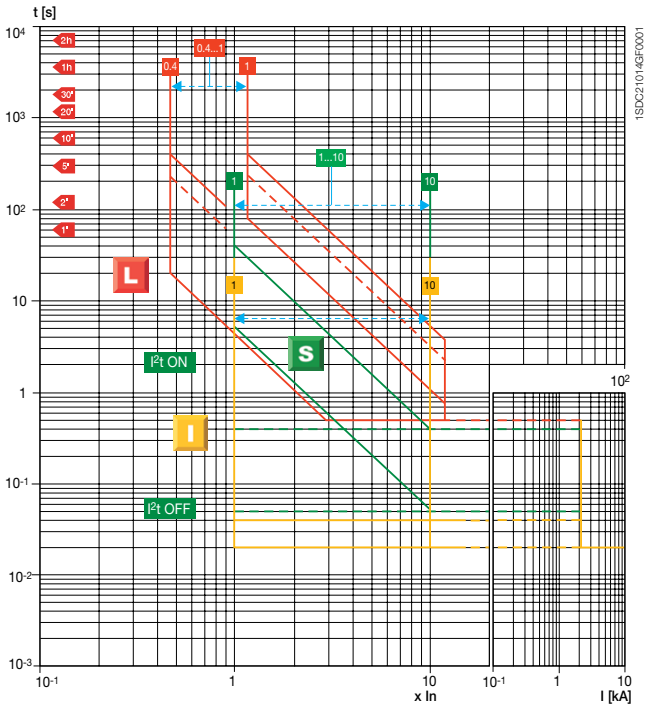
XT2 Ekip LS/I
L-S functions



XT2 Ekip I
I function

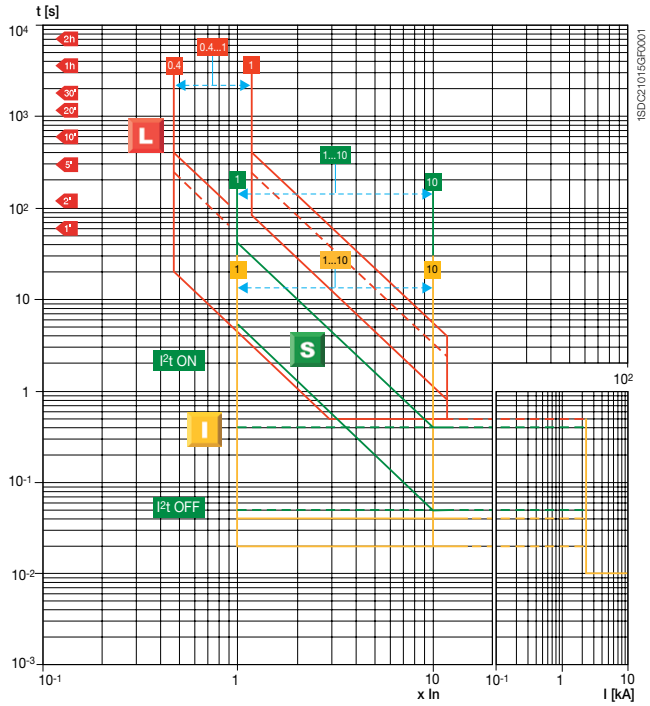


XT2 Ekip LSI
L-S-I functions

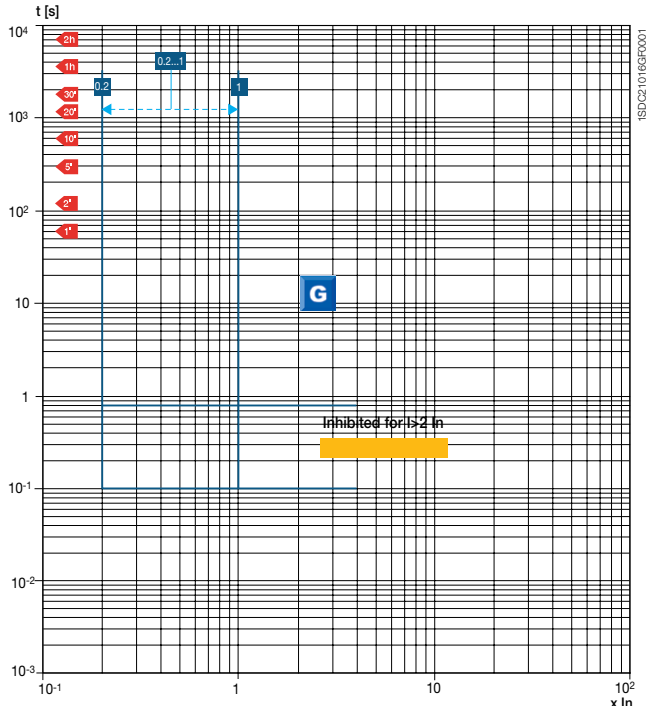


Trip curves with electronic trip unit
Trip curves for distribution

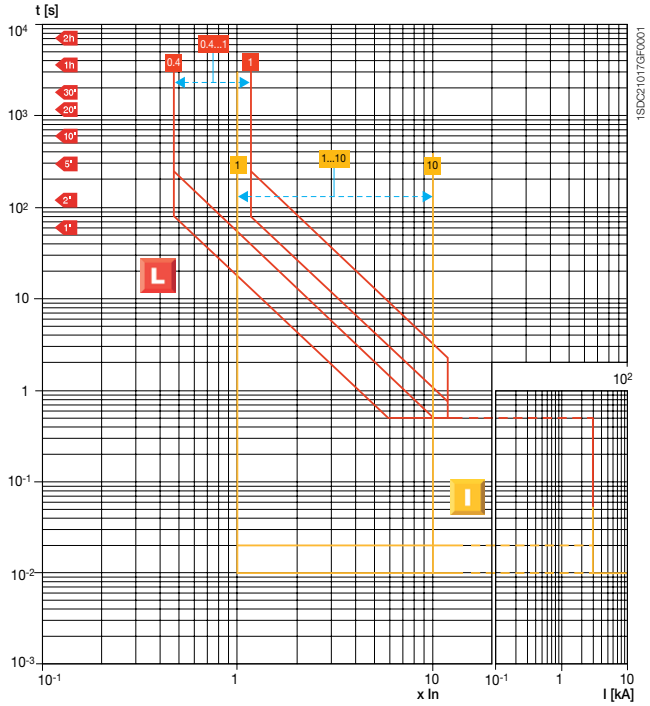
XT2 Ekip LSIG
L-S-I functions



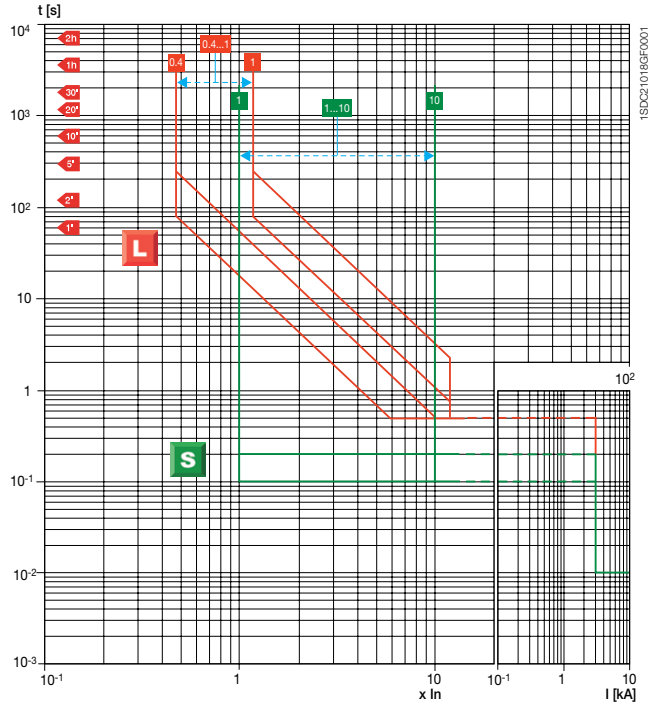
XT2 Ekip LSIG
G function



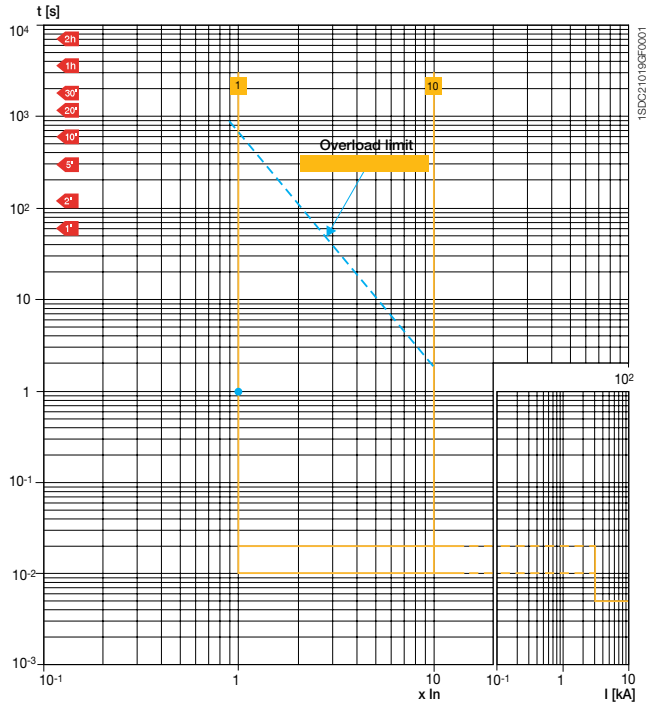
XT4 Ekip LS/I
L-I functions



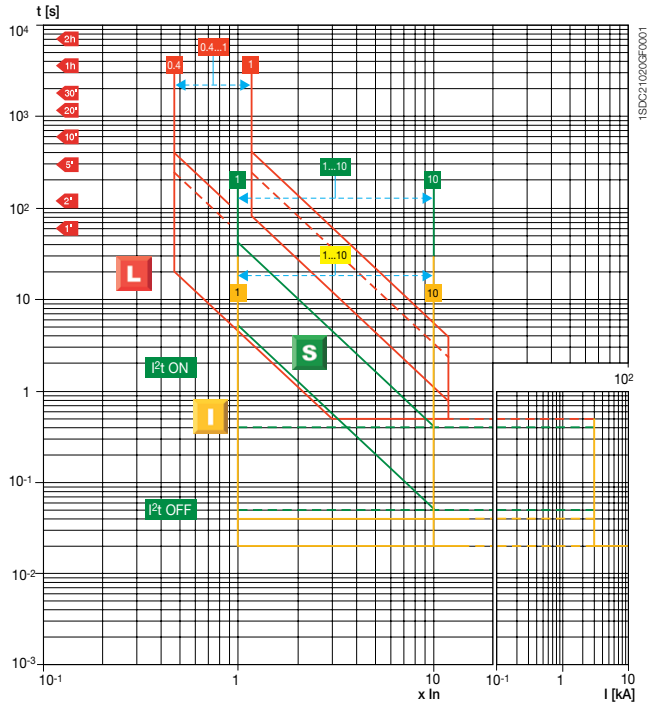
XT4 Ekip LS/I L-S
functions



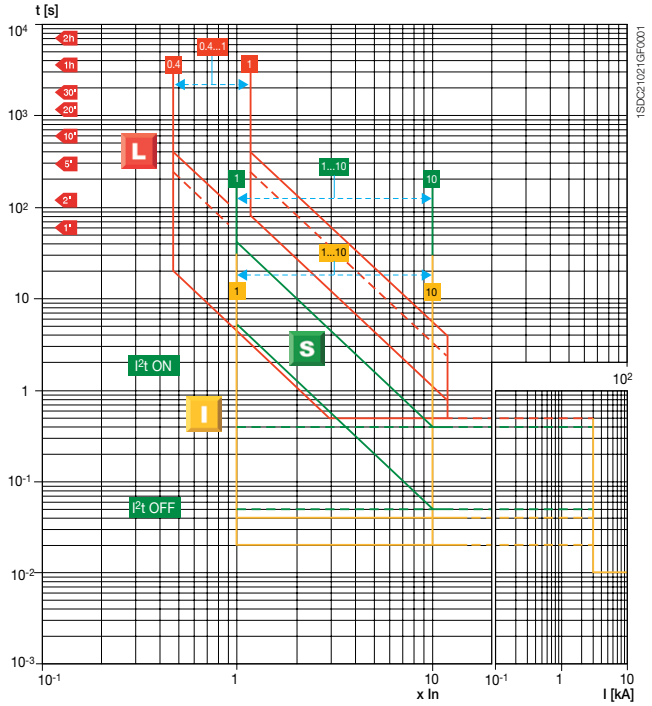
XT4 Ekip I
I function



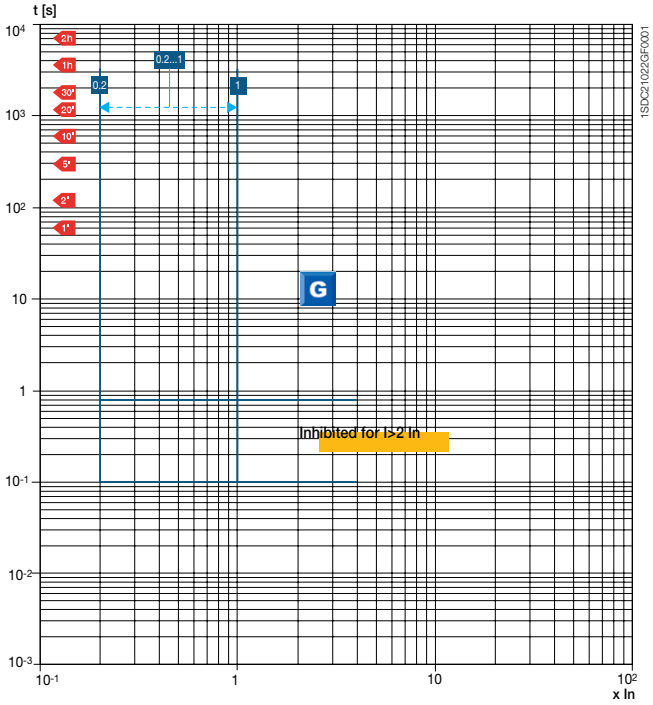
XT4 Ekip LSI
L-S-I functions



XT4 Ekip LSIG, Ekip E-LSIG
L-S-I functions



XT4 Ekip LSIG, Ekip E-LSIG
G function

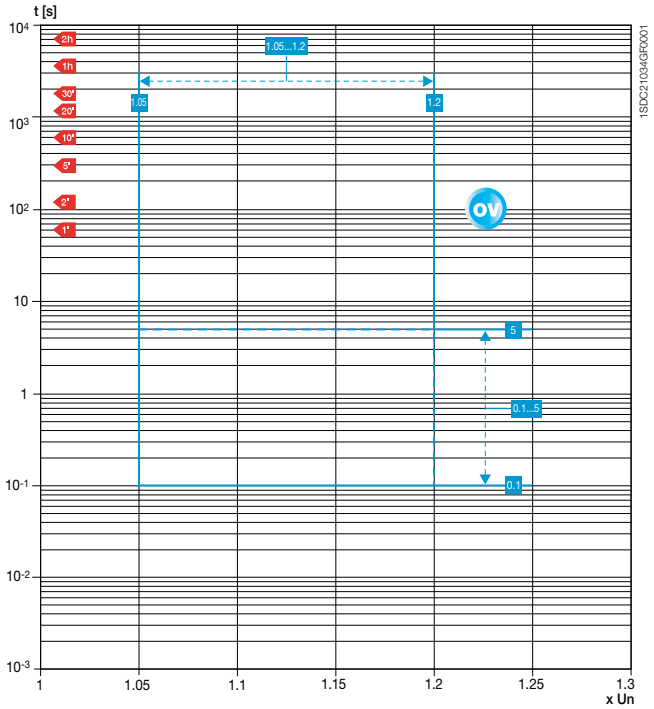


4

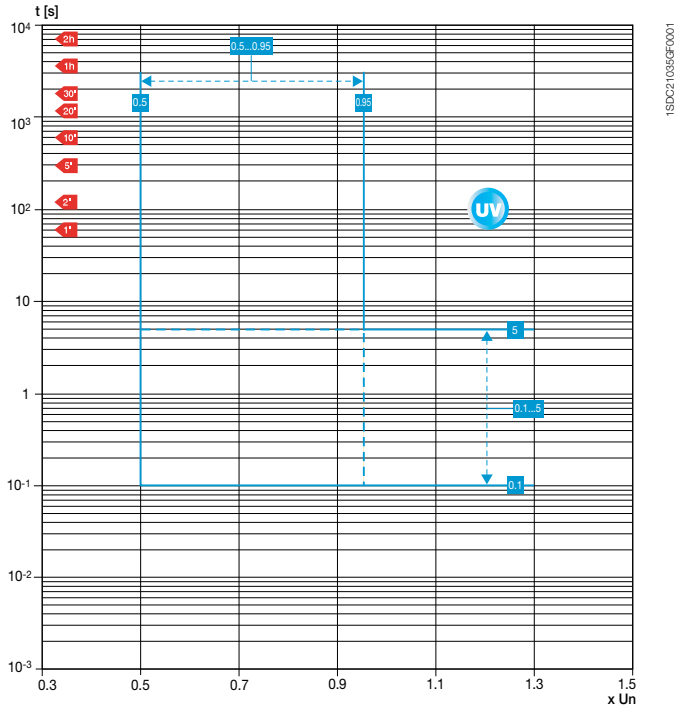
Trip curves with electronic trip unit
Trip curves for distribution

4

XT4 Ekip E-LSIG
OV protection

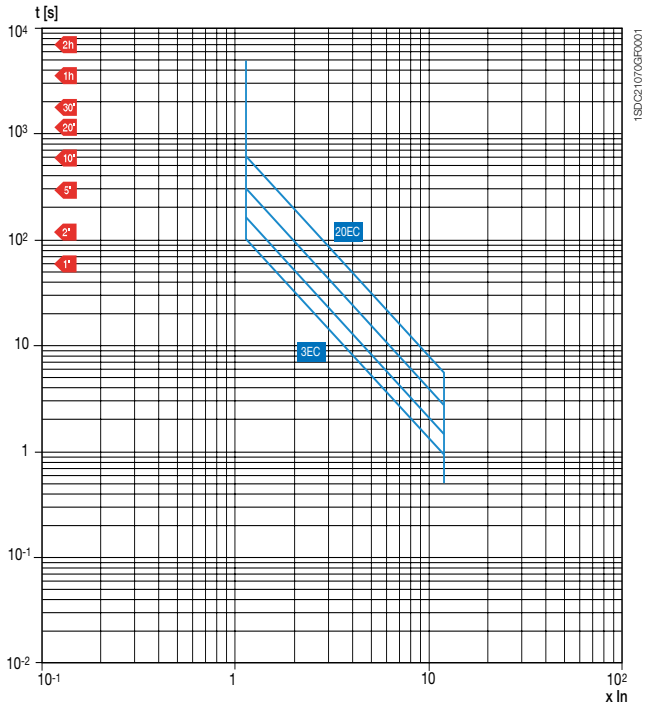


XT4 Ekip E-LSIG
UV protection

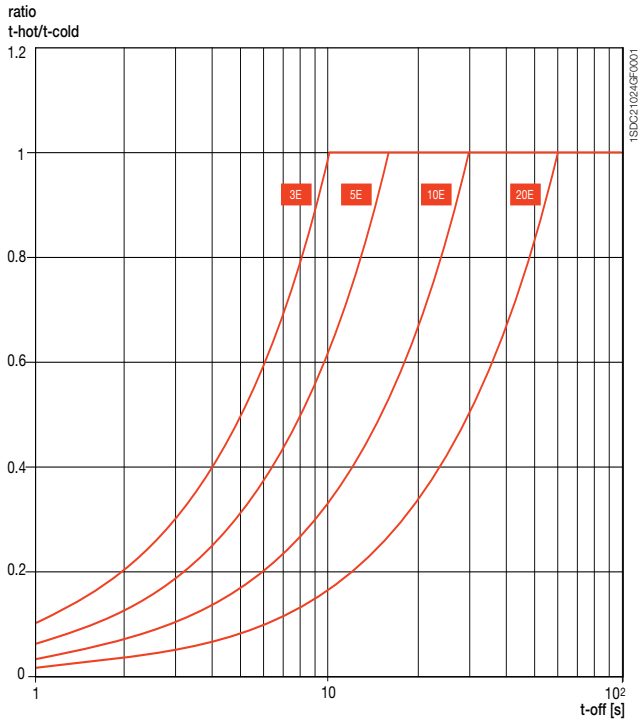


Trip curves with electronic trip unit
Trip curves for motor protection

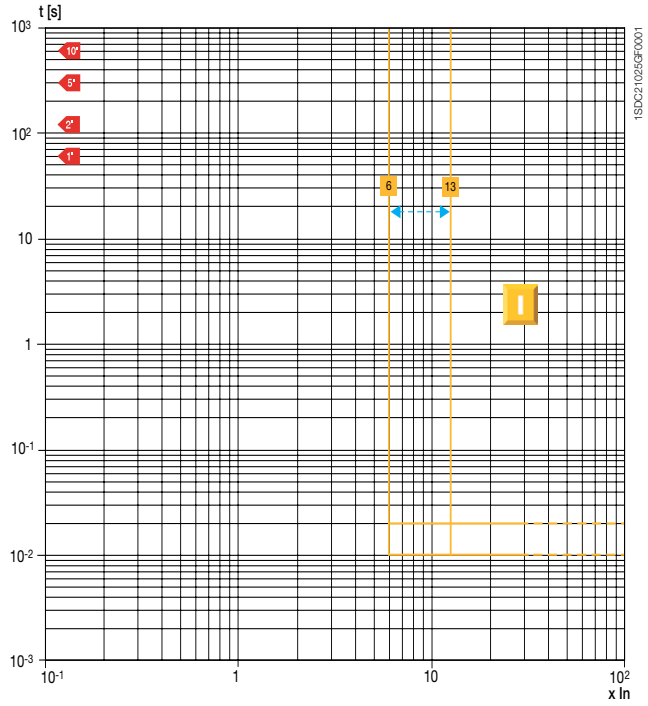
XT2-XT4 Ekip M-LIU
L function (cold trip)



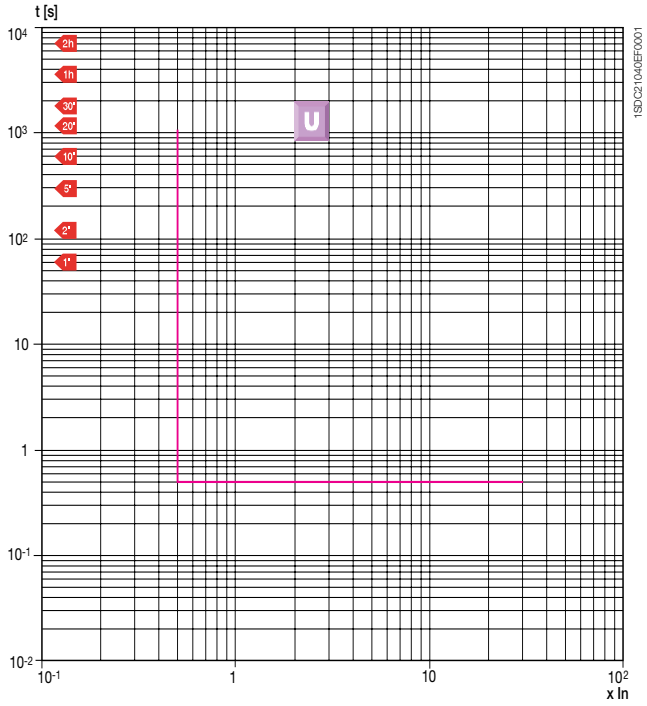
XT2-XT4 Ekip M-LIU
(hot trip)



XT2-XT4 Ekip M-LIU
I function

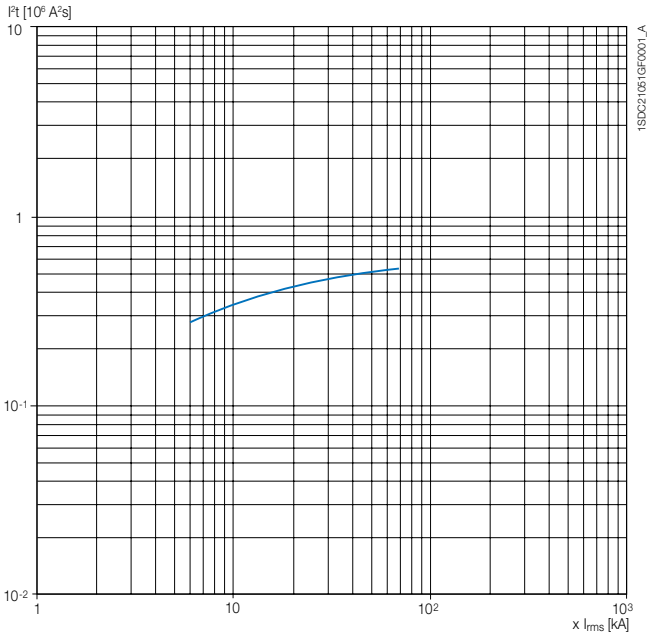


XT2-XT4 Ekip M-LIU
U function

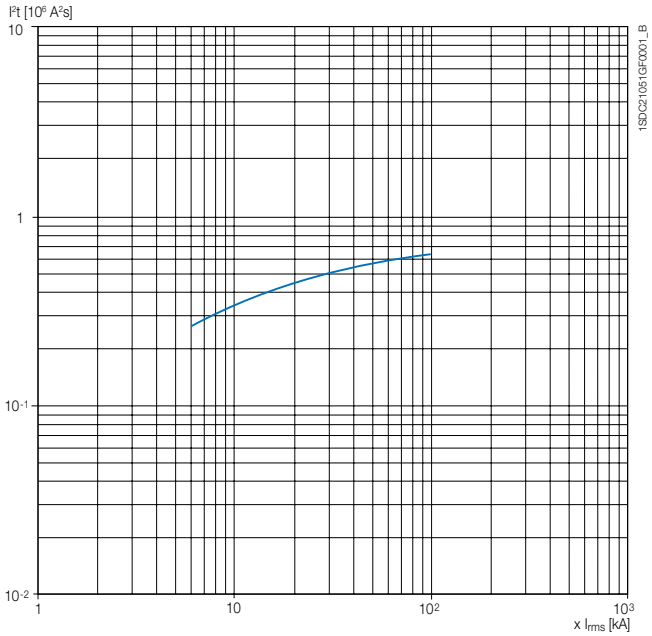


Specific let-through energy curves
480V

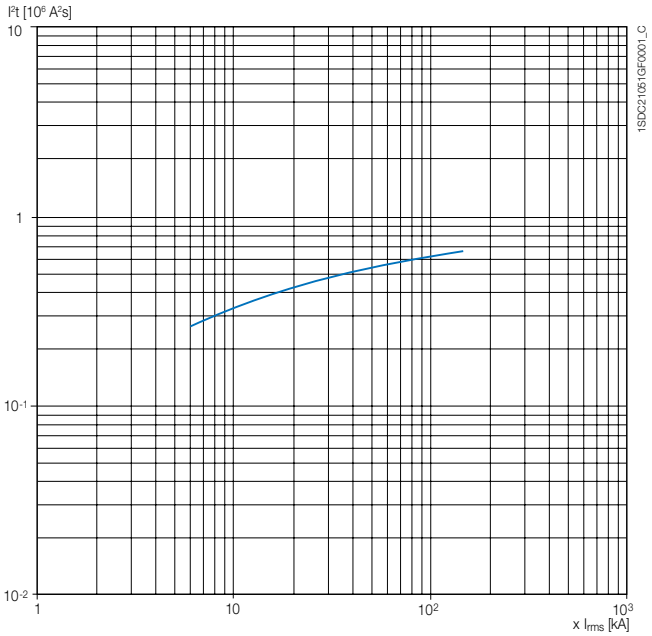
XT2H



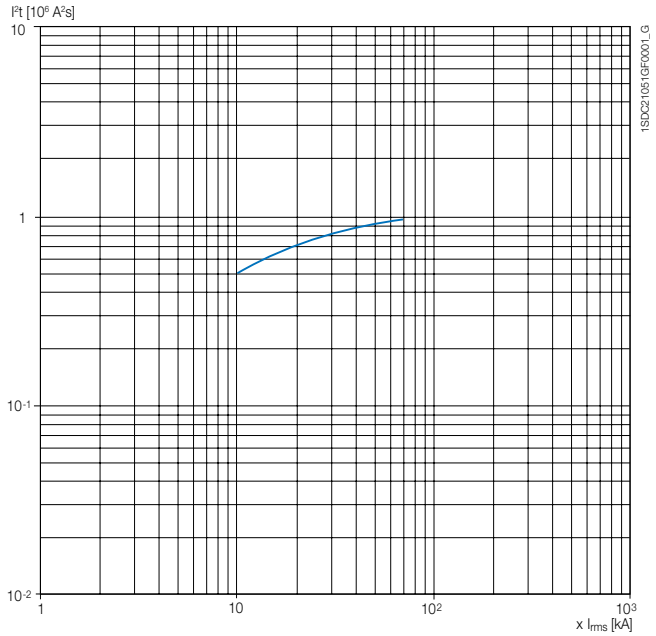
XT2L



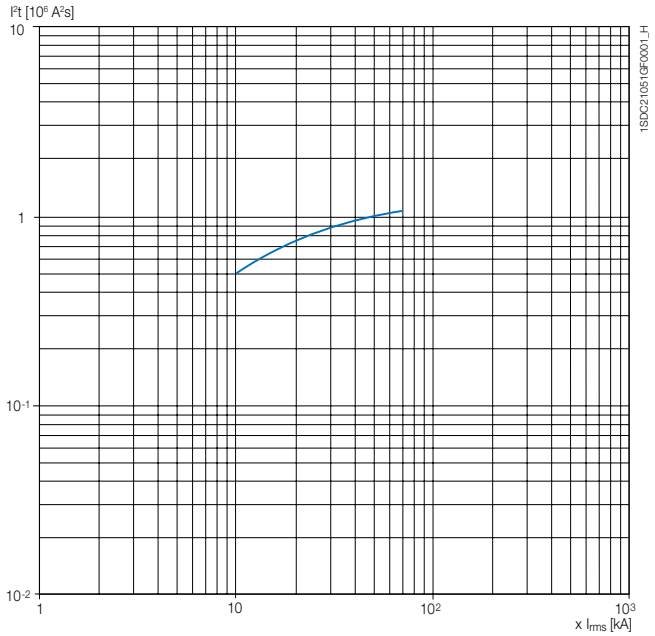
XT2V



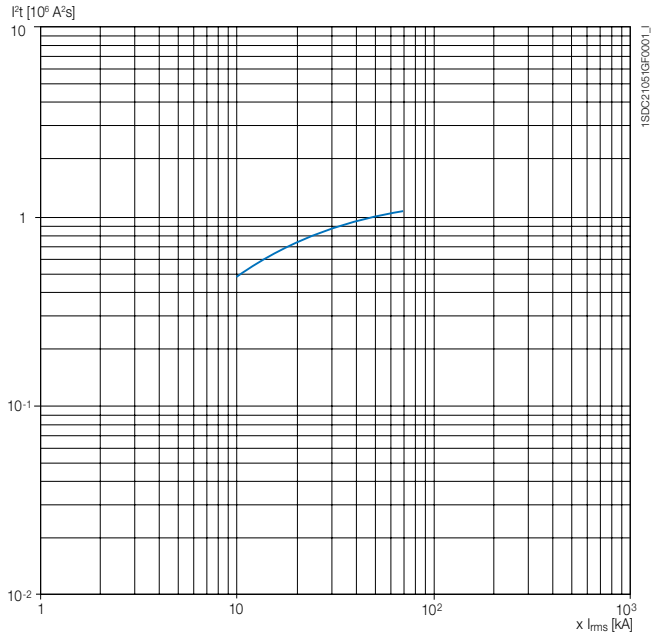
XT4H



XT4L

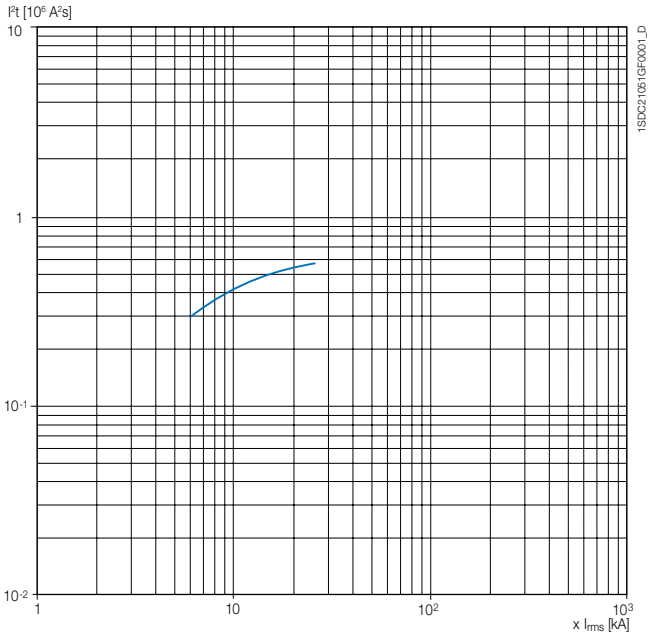


XT4V

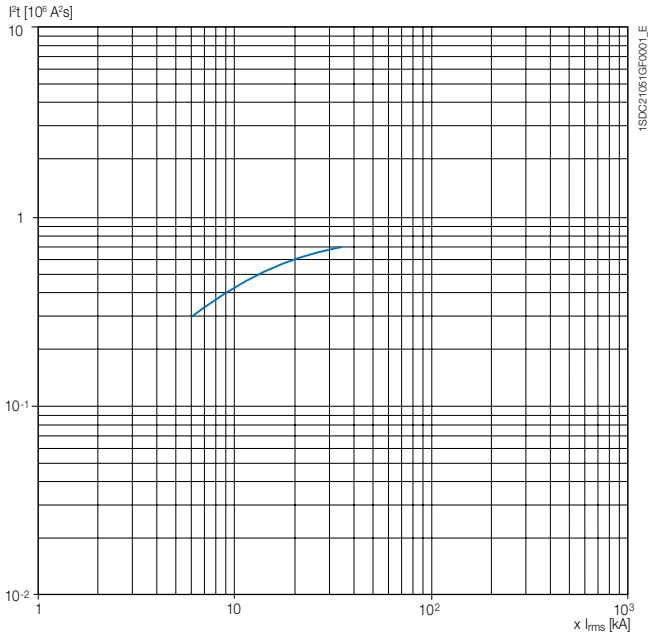


Specific let-through energy curves
600V

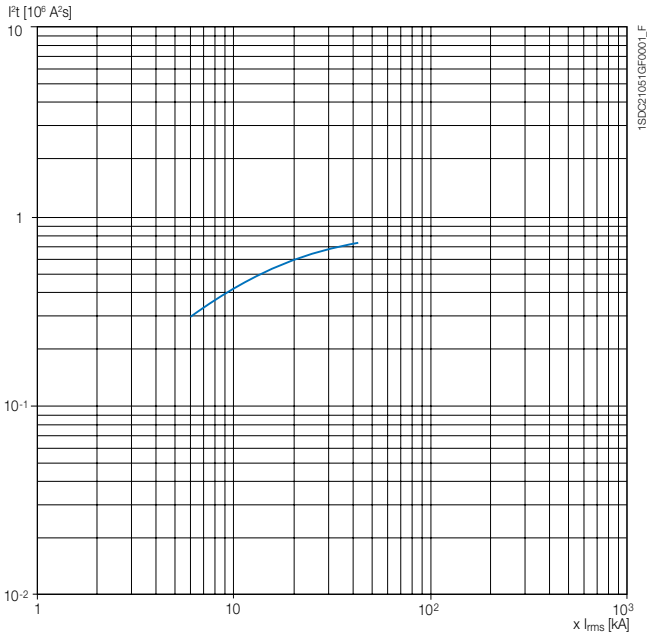
XT2H



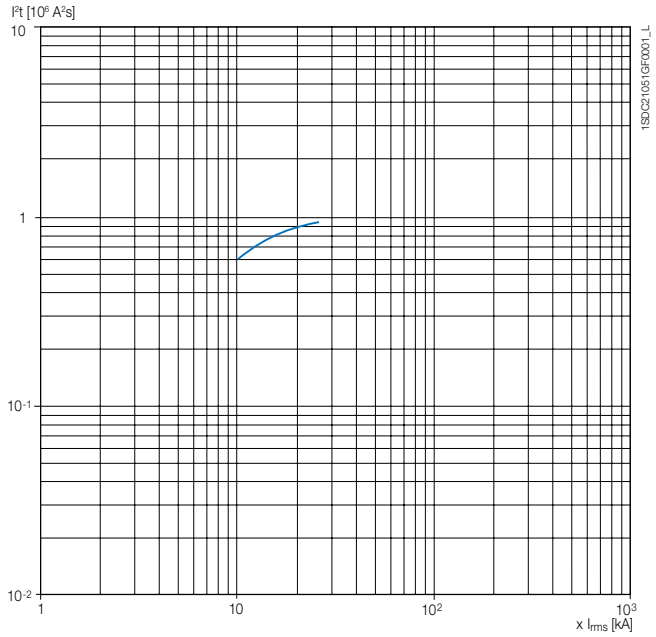
XT2L



XT2V



XT4H



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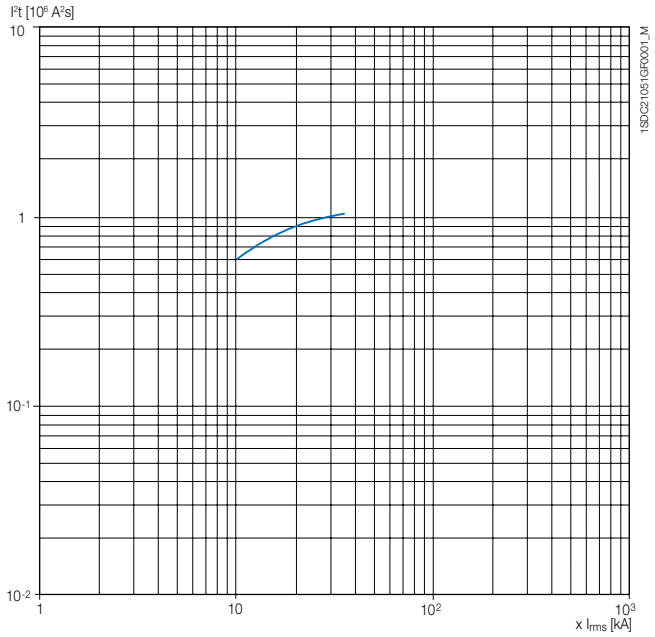

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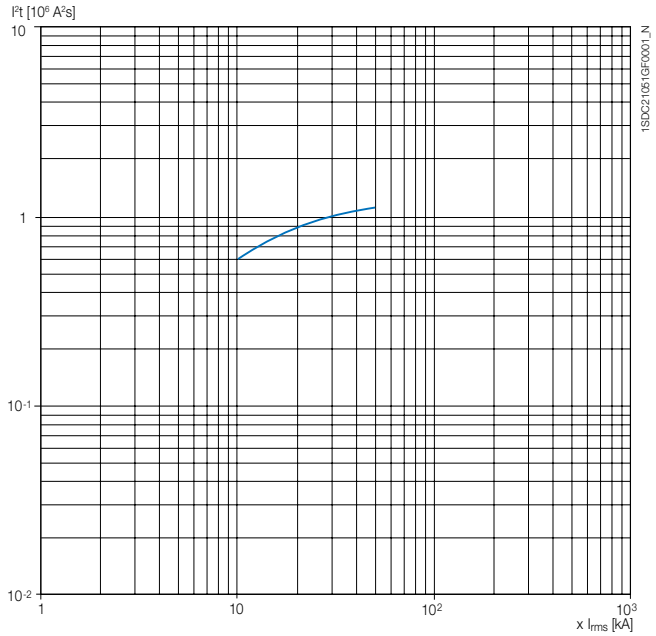
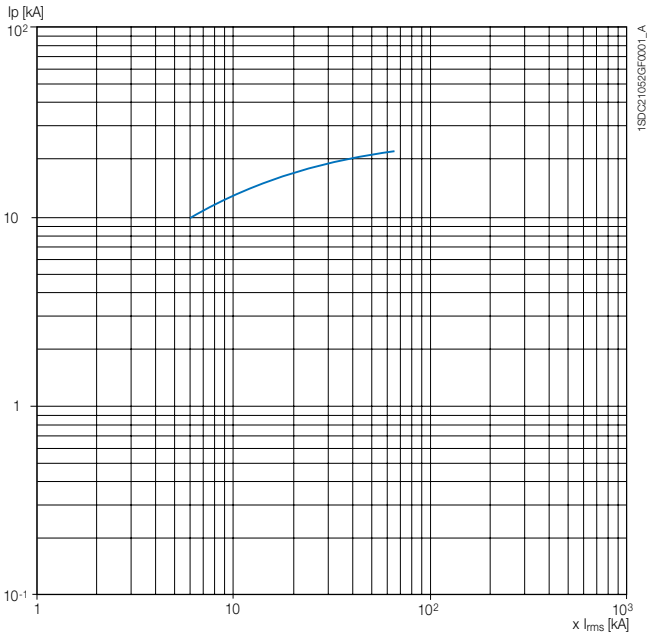


Limiting curves
480V

XT2H



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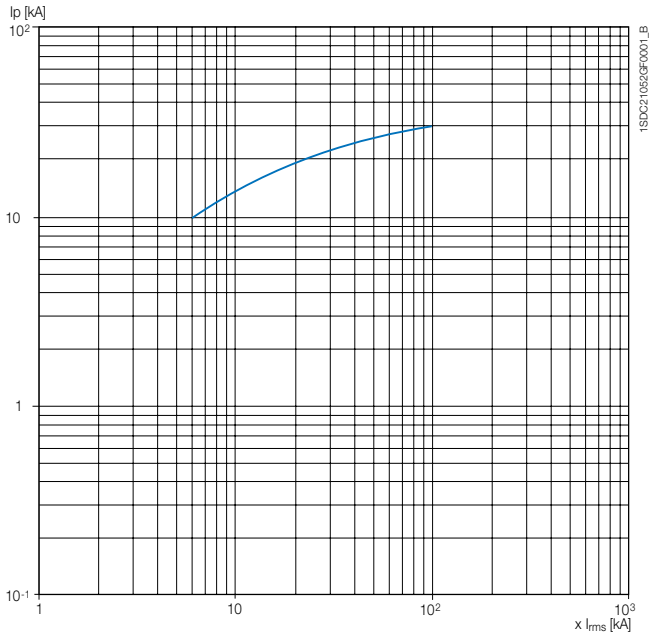
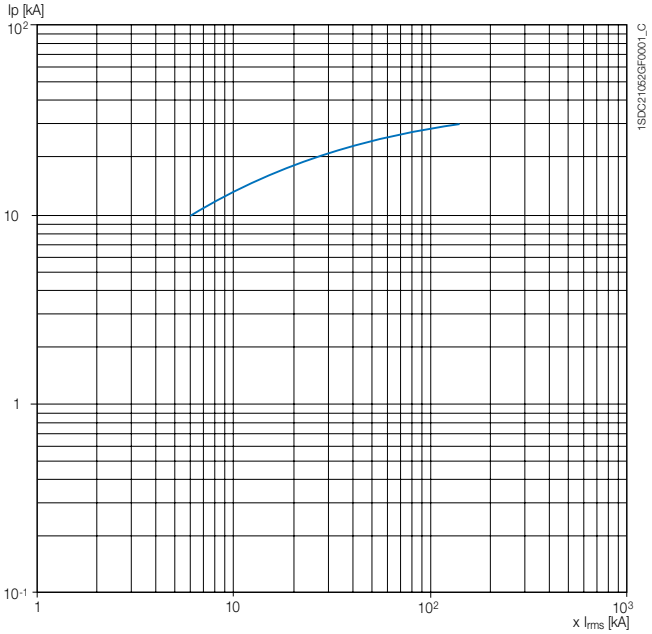
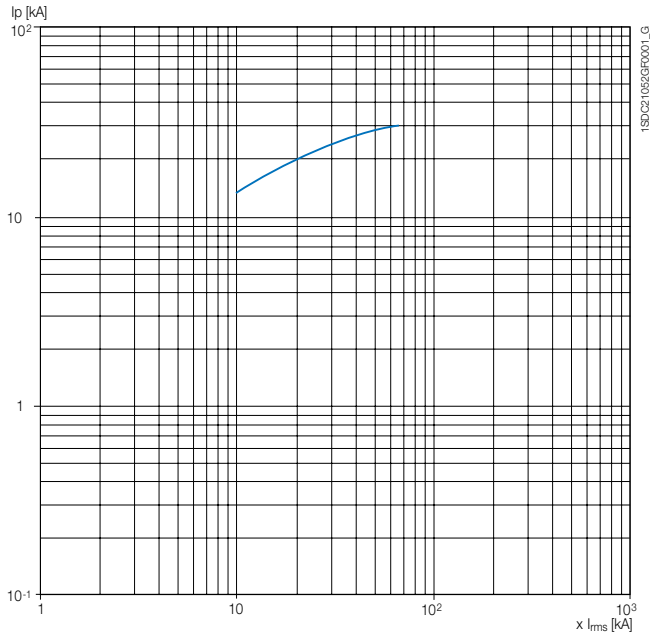


XT2V



XT4H



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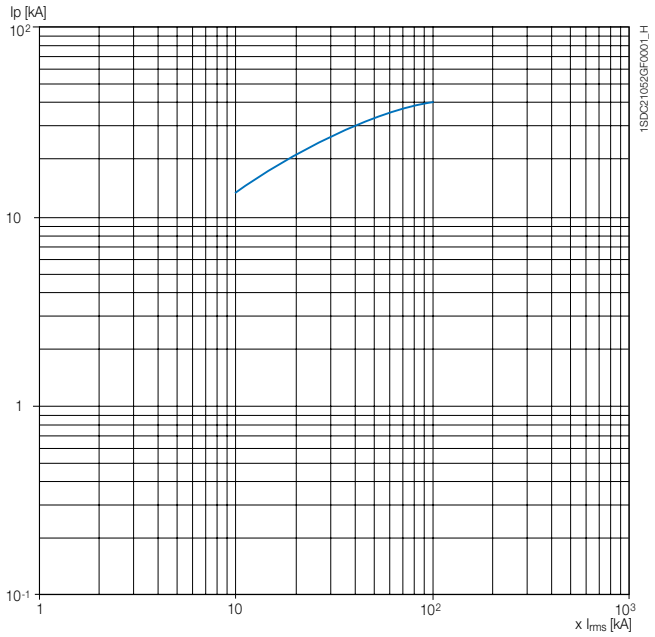
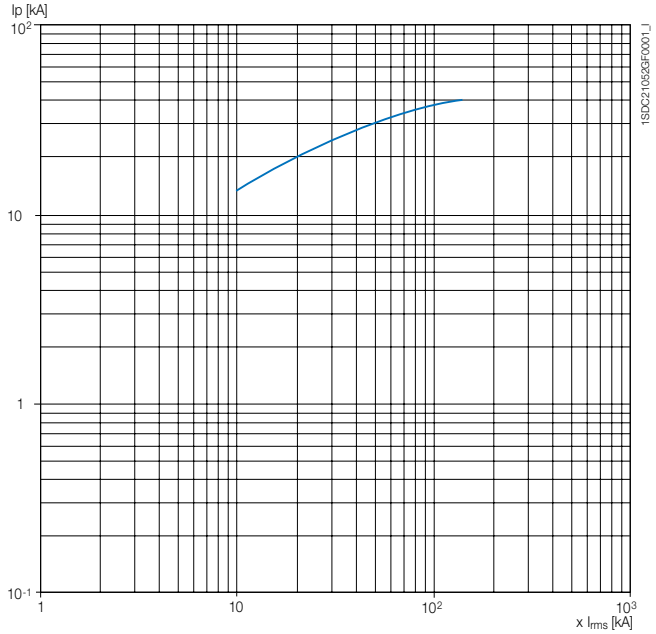
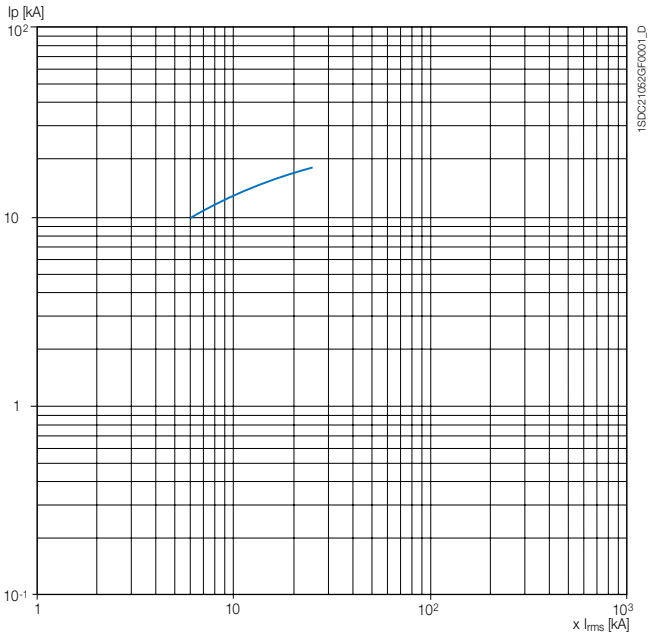


XT4V

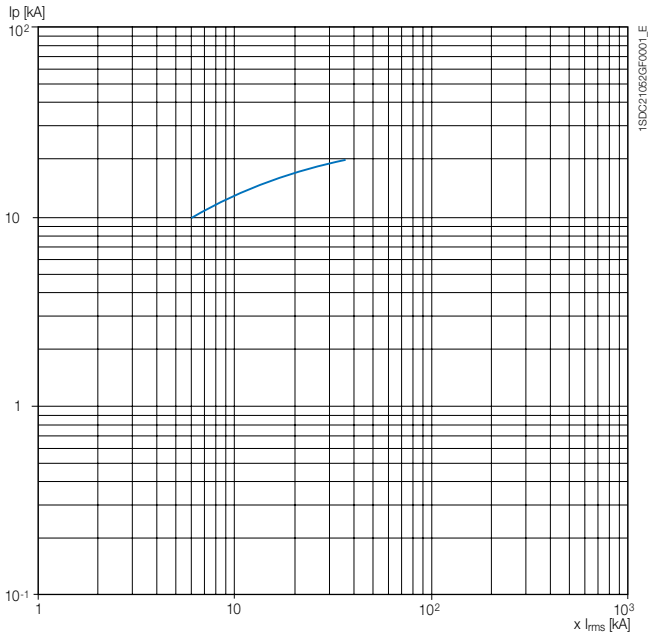


Limiting curves
600V

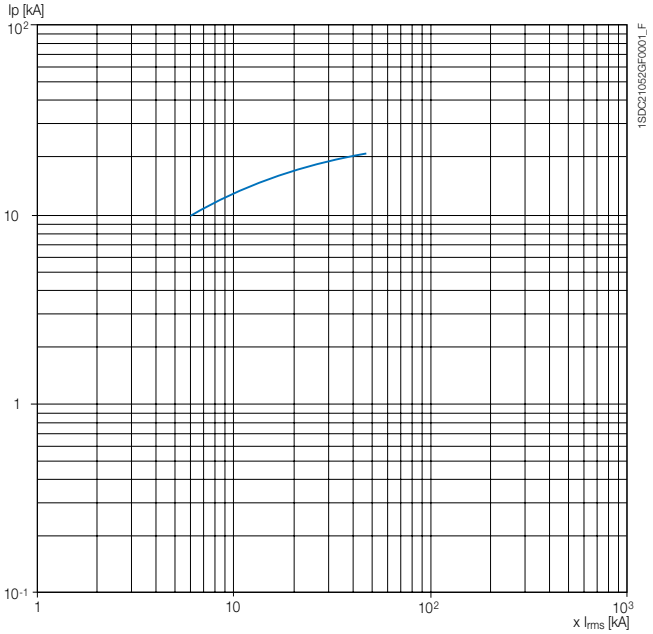
XT2H



XT2L



XT2V



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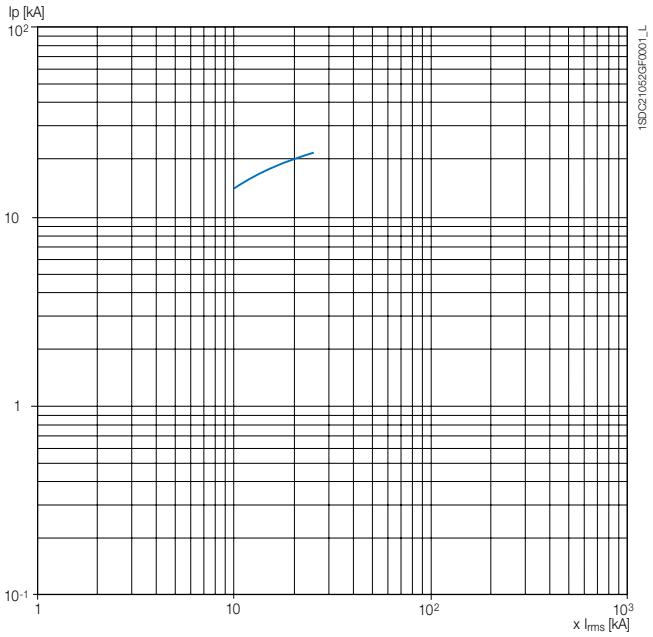

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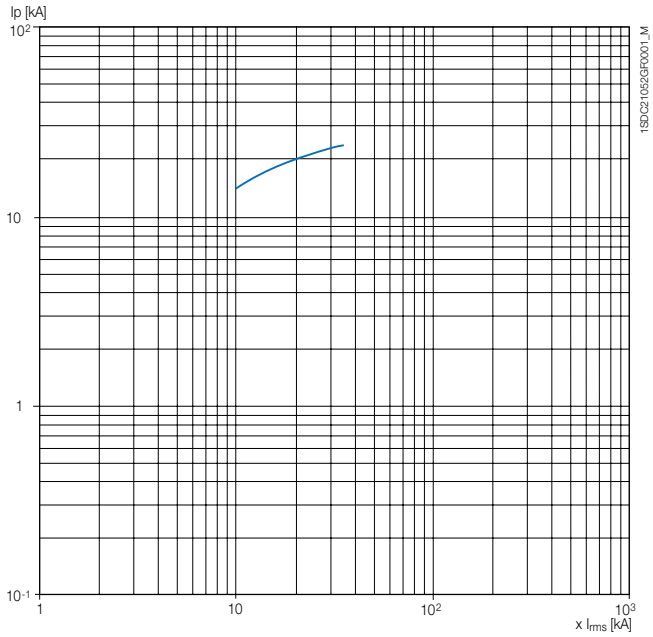

XT4V