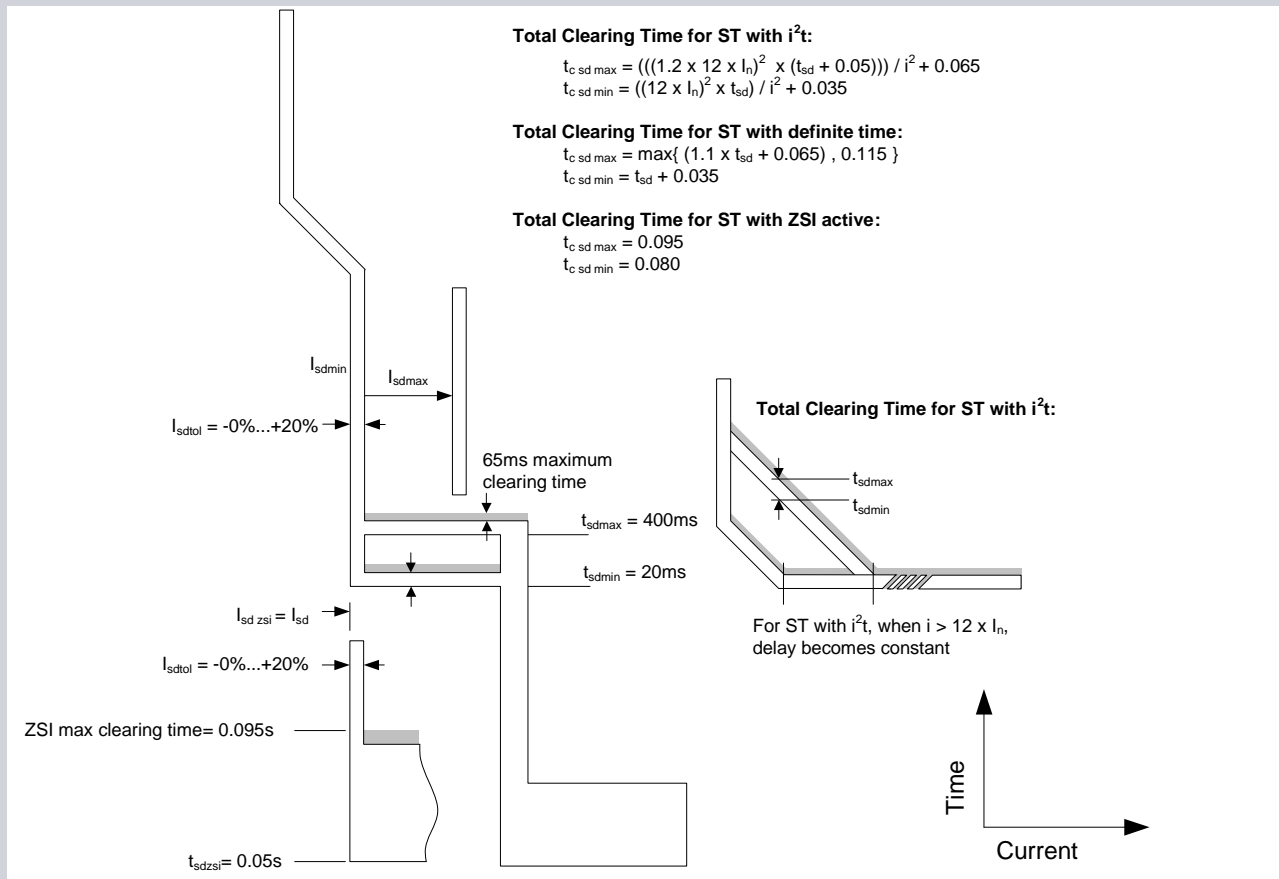


# Short Time Tripping Characteristic



## ETU 725 – 748 ST Pickup Settings:

$$I_{sd} = I_n \times [ \ ]$$

where [ ] = 1.25, 1.5, 2, 2.5, 3, 4, 6, 8, 10, 12

## ETU 755 – 776 ST Pickup Settings:

$$I_{sd} = (I_n \times 125\%) \dots (I_{cw} \times 80\%)$$

### Via ETU Keypad:

- Below 1000A: 10 ampere steps
- 1000A – 1600A: 50 ampere steps
- 1600A – 10000A: 100 ampere steps
- Above 10000A: 1000 ampere steps

### Via WLBDA, MODBUS, or PROFIBUS:

1 ampere steps

‡ When  $t_{sd} > 0.4$  is selected,  $I_{sdmax}$  is automatically reduced (FS1 & FS2 = 20kA, FS3 = 30kA).

## ETU 725 – 727 ST Delay Settings (definite time only):

$t_{sd} = 0, 0.02, 0.1, 0.2, 0.3, \text{ or } 0.4$  seconds

## ETU 745 – 748 ST Delay Settings:

$t_{sd}$  (definite time) = 0.02, 0.1, 0.2, 0.3, or 0.4 seconds

$t_{sd}$  ( $i^2t$ ) = 0.1, 0.2, 0.3, or 0.4 seconds

## ETU 755 – 776 ST Delay Settings:

$t_{sd}$  (definite time) = 0.02, or 0.08 – 4 seconds ‡

$t_{sd}$  ( $i^2t$ ) = 0.1 – 0.4 seconds

**Via ETU Keypad:** 0.005 second steps

**Via WLBDA, MODBUS, or PROFIBUS:** 0.001 second steps

Siemens Type WL Low Voltage Power Circuit Breakers®

Intelligent Power Control, Monitoring, and Protection

**SIEMENS**

## Abbreviations / Definitions

i	Actual current (amperes)
I <sub>cw</sub>	Rated short circuit withstand current (amperes)
I <sub>n</sub>	Continuous current rating, as defined by the rating plug (amperes)
I <sub>sd</sub>	Short time pickup setting (amperes)
I <sub>sdmax</sub>	Maximum short time pickup setting (amperes)
I <sub>sdmin</sub>	Minimum short time pickup setting (amperes)
I <sub>sdtol</sub>	Tolerance band for the short time pickup setting (%)
I <sub>sd zsi</sub>	Zone selective interlocking short time pickup setting (amperes)
t <sub>cd max</sub>	Maximum total clearing time at rated voltage (seconds)
t <sub>cd min</sub>	Minimum total clearing time at rated current (seconds)
Total Clearing Time	Elapsed time from the initiating point of an overcurrent event, until the final circuit interruption, at maximum rated voltage (seconds).
t <sub>sd</sub>	Short time delay setting (seconds)
t <sub>sdmax</sub>	Maximum short time delay setting (seconds)
t <sub>sdmin</sub>	Minimum short time delay setting (seconds)
t <sub>sdzsi</sub>	Unrestrained zone selective interlocking short time delay setting (seconds)

The information provided in this brochure contains merely general descriptions of characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

All rights reserved. Unless otherwise noted, all names identified by ® are registered trademarks of Siemens AG or Siemens Industry, Inc. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

© 2012 Siemens Industry, Inc.

### Siemens Industry Infrastructure and Cities Sector

5400 Triangle Parkway  
Norcross, GA 30092

1-800-241-4453  
[info.us@siemens.com](mailto:info.us@siemens.com)

[www.usa.siemens.com/circuitbreakers](http://www.usa.siemens.com/circuitbreakers)