## Technical data <br> Time current trip curves

## Description

Many different time－current trip characteristics are available from ABB in the vari－ ous versions of miniature circuit breakers．These various trip characteristics may meet the special electrical standards of specific countries and agencies or be spe－ cially suited for application oriented protection systems．

The three most common and UL approved trip curves are the types＂ B ＂，＂ K ＂and ＂$Z$＂．These are shown below for a typical 16 through 25 ampere rated breaker． Curves apply to both AC and DC versions．

The＂ B ＂curve is for cable protection，with an instantaneous trip point of approxi－ mately 3.3 to 5 times breaker continuous rating．

The＂ K ＂curve is cable and equipment protection including motors，transformers and other inductive loads where significant levels of in－rush current are possible． Most industrial applications are best protected with the＂K＂type trip characteristic． The instantaneous trip point is approximately 8 to 12 times the continuous rating of the breaker．

The＂$Z$＂curve is designed for the protection of semi－conductors or other devices
where a low instantaneous trip characteristic is desired．The instantaneous trip point is approximately 2 to 3 times the continuous rating of the breaker． For full size time－current trip characterisitic curves，please contact ABB Control．

| Version | Ratings | Trip Curve |
| :--- | :--- | :--- |
| S270K | $0.5-8 \mathrm{~A}$ | TD9705 |
| $10-40 \mathrm{~A}$ | TD9706 |  |
| $50-63 \mathrm{~A}$ | TD9707 |  |
| S280K | $0.2-8 \mathrm{~A}$ | TD9708 |
| $10-40 \mathrm{~A}$ | TD9709 |  |
| $50-63 \mathrm{~A}$ | TD9710 |  |
| S280Z | $0.5-63 \mathrm{~A}$ | TD9711 |
| S260B | $6-63 \mathrm{~A}$ | TD9723 |

Time－current trip curves


