



Delayed thermal overload tripping

In	=	Rated current Current which the miniature circuit breaker can sustain in uninterrupted operation
Ib	=	Rated operational current Current determined by the load during undisturbed operation
l ₁	=	Thermal not tripping current Current which, under defined conditions, does not lead to switching off within 60 min
l2	=	Thermal tripping current Current which, under defined conditions, leads to switching off within 60 min
l ₁ zu l;	2 =	Conditions Current which, under defined conditions, is run up from I ₁ to I ₂ with a continuous increase, and leads to switch off within 60 min
I ₃	=	Tolerance limitation at 2.55-times the rated current / nominal current Current which, under defined conditions, does not lead to switch off within 1 sec Current which, under defined conditions, leads to switch off at rated currents up to 32 A within 60 sec, at rated currents above 32 A within 120 sec

Undelayed electromagnetic short circuit tripping

I 4	=	Magnetic not tripping current	
		Current which, under defined conditions, does	
		not lead to switching off within 0.1 sec	
I5	=	Magnetic tripping current	
		Current which, under defined conditions, leads	
		to switching off within 0.1 sec	

Dependence of the short circuit trip at higher frequencies and for direct current.

at 100 Hz about 1.1 times at 200 Hz about 1.2 times at 300 Hz about 1.3 times at 400 Hz about 1.4 times at 500 Hz about 1.5 times for DC about 1.5 times MINIATURE CIRCUIT BREAKERS S, SL AND T PRODUCT RANGE Characteristic acc. to IEC 60947-2

 $1,05 - 1,2 \times l_n$ 60 — 40 — ➡ Minutes 10 4 10 -4 1 -0,4 10 4x10⁻³ ★ Seconds 10 4x10 0 4 5 6 10 12 | 100 3 | 20 8 40 → x Rated current K characteristic In = 0,3 - 10 A





