

Circuit Breaker Application Data

Merlin Gerin

Thermal Magnetic Circuit Breaker Trip Unit Settings

Rated Voltage to earth (Vac) = 230

Catalogue Number	Long Time	Thermal	Short Time trip (0.4s)		Zs
	Setting (Ir)	Setting (A)	Setting (Im)	Current * (A)	Upper limit (ohms)
NS100N-TM16D	1	16	Fixed	190	1.009
	0.9	14		190	1.009
	0.8	13		190	1.009
NS100N-TM25D	1	25	Fixed	300	0.639
	0.9	23		300	0.639
	0.8	20		300	0.639
NS100N-TM32D	1	32	Fixed	400	0.479
	0.9	29		400	0.479
	0.8	26		400	0.479
NS100N-TM40D	1	40	Fixed	500	0.383
	0.9	36		500	0.383
	0.8	32		500	0.383
NS100N-TM50D	1	50	Fixed	500	0.383
	0.9	45		500	0.383
	0.8	40		500	0.383
NS100N-TM63D	1	63	Fixed	500	0.383
	0.9	57		500	0.383
	0.8	50		500	0.383
NS100N-TM80D	1	80	Fixed	640	0.299
	0.9	72		640	0.299
	0.8	64		640	0.299
NS100N-TM100D	1	100	Fixed	800	0.240
	0.9	90		800	0.240
	0.8	80		800	0.240
NS160N-TM80D	1	80	Fixed	1,000	0.192
	0.9	72		1,000	0.192
	0.8	64		1,000	0.192
NS160N-TM100D	1	100	Fixed	1,250	0.153
	0.9	90		1,250	0.153
	0.8	80		1,250	0.153
NS160N-TM125D	1	125	Fixed	1,250	0.153
	0.9	113		1,250	0.153
	0.8	100		1,250	0.153
NS160N-TM160D	1	160	Fixed	1,250	0.153
	0.9	144		1,250	0.153
	0.8	128		1,250	0.153
NS250N-TM200D	1	200	10	2,000	0.096
	0.9	180	9	1,800	0.106
	0.8	160	8	1,600	0.120
			7	1,400	0.137
			6	1,200	0.160
			5	1,000	0.192
NS250N-TM250D	1	250	10	2,500	0.077
	0.9	225	9	2,250	0.085
	0.8	200	8	2,000	0.096
			7	1,750	0.110
			6	1,500	0.128
			5	1,250	0.153

* The short time tripping current tolerance level + - 20%

Long Time Settings

Ir = 0.8, 0.9, 1

Short Time Settings

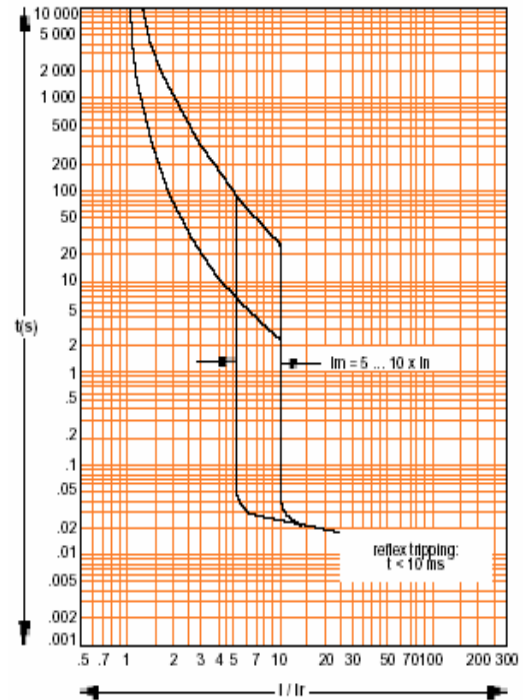
Up to 160A Im = fixed

200 & 250A Im = 5, 6, 7, 8, 9, 10 x (In) Nominal rating

The earth fault loop impedance Zs (Ohms) =

Rated Voltage to earth (Vac)

Device operating Current (A)

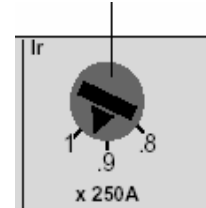


Trip curve 200, 250A circuit breaker

Long Time Settings

Current Rating = Ir x (In) Circuit Breaker Nominal Rating

Ir = 0.8, 0.9, 1



Short Time Settings

Tripping Level = Im x (In) Circuit Breaker Nominal Rating

125 & 160A Im = fixed

200 & 250A Im = 5, 6, 7, 8, 9, 10 x (In) Nominal rating

