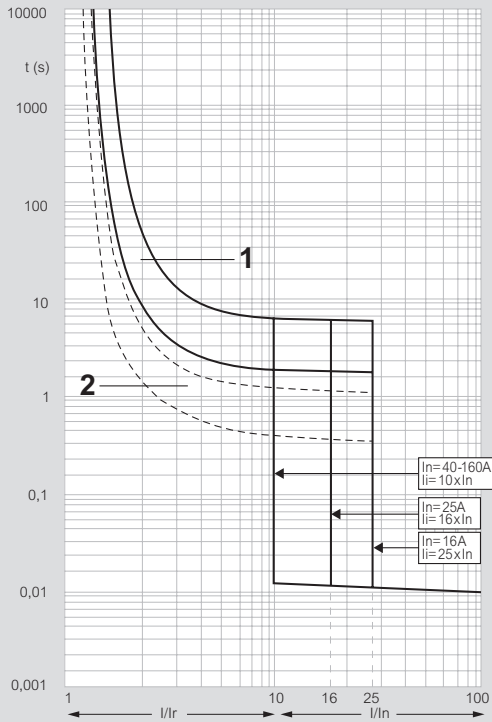


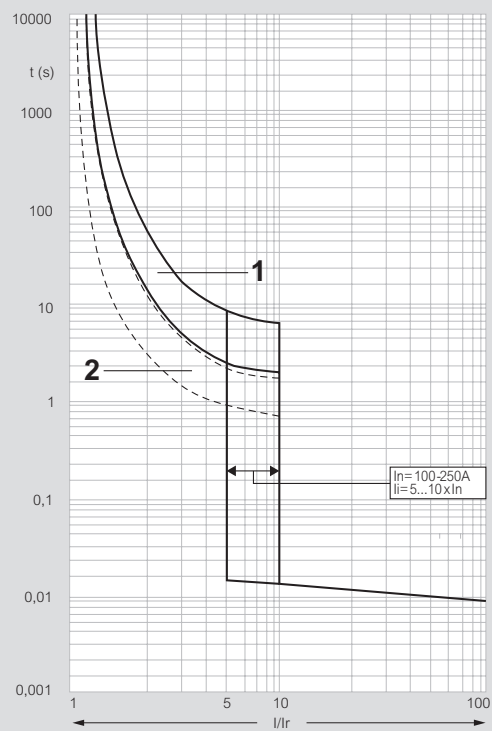
DPX³ 160/250

DPX³ 160 thermal-magnetic Tripping curve



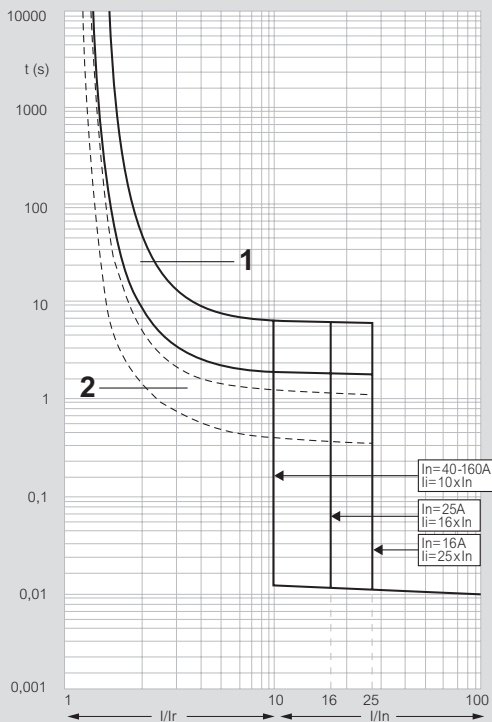
t: time
 I: rated current
 I_r: setting current
 Curve n°1: charateristic with cold start
 Curve n°2: charateristic with hot start

DPX³ 250 thermal-magnetic Tripping curves



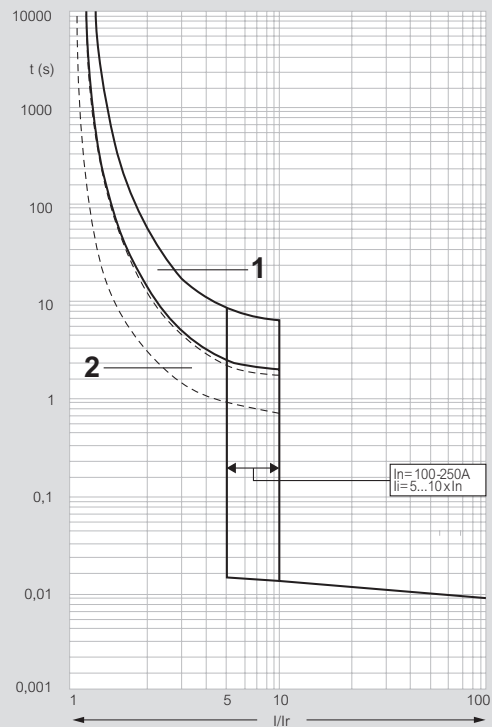
t: time
 I: rated current
 I_r: setting current
 Curve n°1: charateristic with cold start
 Curve n°2: charateristic with hot start

DPX³ 160 thermal-magnetic with integrated e.l.c.bs Tripping curves



t: time
 I: rated current
 I_r: setting current
 Curve n°1: charateristic with cold start
 Curve n°2: charateristic with hot start

DPX³ 250 thermal-magnetic with integrated e.l.c.bs Tripping curves



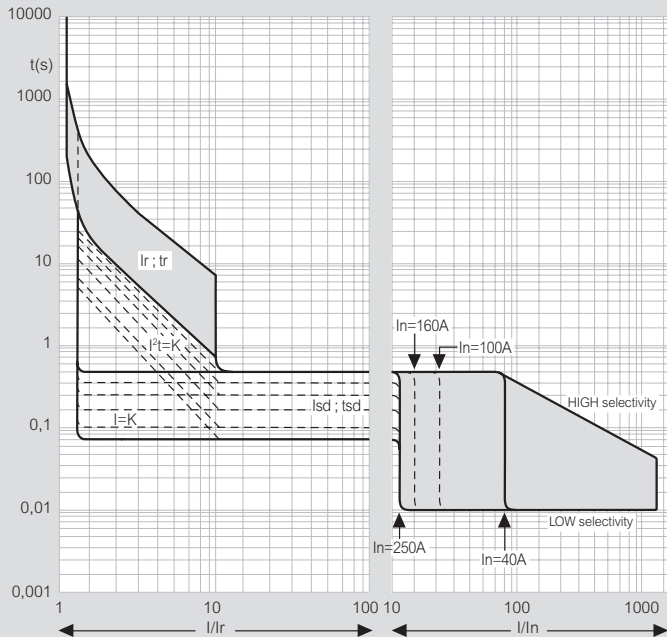
t: time
 I: rated current
 I_r: setting current

DPX³ 160/250 (continued)

DPX³ 630/1600

reading DPX³ characteristic curves and adjustment ranges

DPX³ 250 electronic release tripping curves



Adjustment for thermal-magnetic DPX³

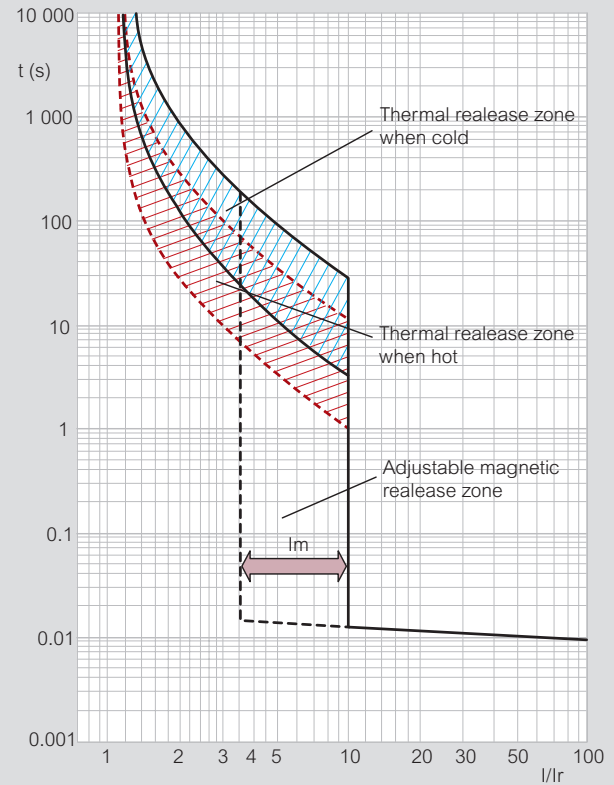
Setting	DPX ³ thermal magnetic	DPX ³ with integrated e.i.c.bs
I_r overload trip threshold (thermal)	0.4 to 1 I _n	0.4 to 1 I _n
I_m short-circuit trip threshold (magnetic)	fixed: 10 I _n ⁽¹⁾	fixed: 10 I _n ⁽¹⁾
I_{Δn} (A)	-	0.03 - 0.03 - 1 - 3
Δt (s)	-	0 - 0.3 - 1 - 3

1: 400 A for DPX³ 160 I_n 16 A and 25 A

Adjustment for DPX³ electronic release

Setting	DPX ³	DPX ³ with integrated e.i.c.bs
I_r overload trip threshold (long delay)	0.4 to 1 I _n	
t_r long delay trip time	3 - 5 - 10 - 15s	
I_{sd} short-circuit trip threshold (short delay)	1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 x I _r	
t_{sd} short delay trip time	0.01 - 0.1 - 0.2 - 0.3 - 0.4 - 0.5s	
I_g	(0.2 - 0.3 - 0.4 - 0.5 - 0.6 - 0.7 - 0.8 - 1 - OFF) x I _n	
t_g	0.1 - 0.2 - 0.5 - 1s	

Tripping curve for a DPX³ thermal-magnetic trip



I: actual current

I_r: thermal protection against overloads (setting: I_r = x I_n)

I_m: magnetic protection against short-circuits (setting: I_m = x I_n or I_m = x I_r)

As the abscissa of the curves represents the ratio I/I_r, modifying the setting of I_r will not change the graphical representation of the thermal trip. However, the magnetic setting can be read directly (between 3.5 and 10 in the example).

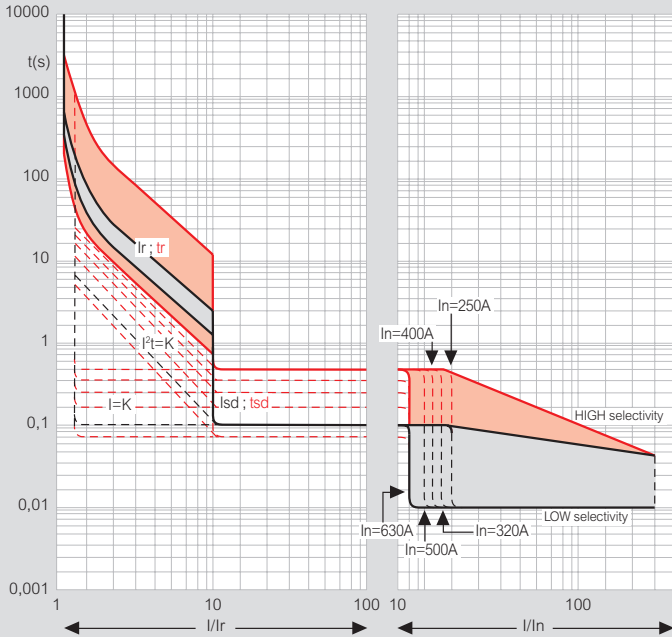
Adjustment for thermal-magnetic DPX³

Setting	DPX ³ 630	DPX ³ 1600
I_r overload trip threshold (thermal)	0.8 to 1 I _n	0.8 to 1 I _n
I_m short-circuit trip threshold (magnetic)	5 to 10 I _n	5 to 10 I _n

DPX³ 630/1600

reading DPX³ characteristic curves and adjustment ranges

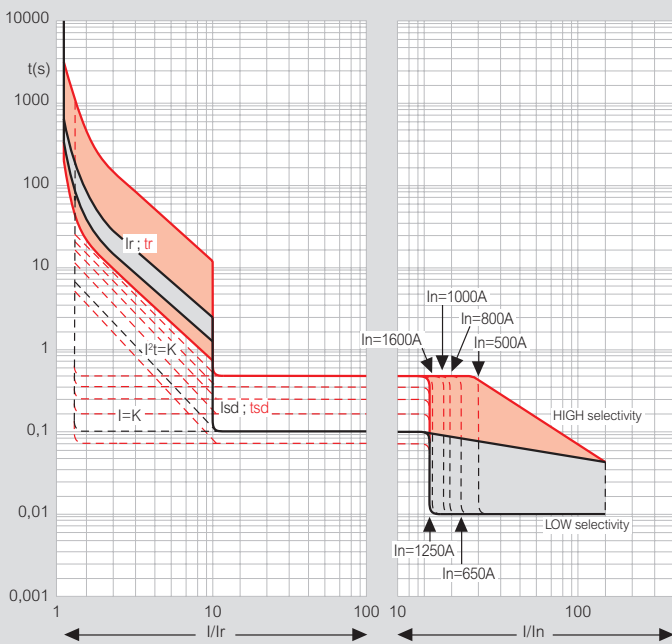
Tripping curves for a DPX³ 630 electronic release (cold start)



In: rated current
 Ir: long delay setting current (protection against overloads)
 tr: long delay protection operation time
 Isd: short delay setting current (protection against short-circuits)
 tsd: short delay protection operation time
 I²k: constant pass-through energy setting

- Black area: applies for S1, S2 and Sg versions
 - Red area: applies for S2 and Sg versions

Tripping curves for a DPX³ 1600 electronic release (cold start)



In: rated current
 Ir: long delay setting current (protection against overloads)
 tr: long delay protection operation time
 Isd: short delay setting current (protection against short-circuits)
 tsd: short delay protection operation time
 I²k: constant pass-through energy setting

- Black area: applies for S1, S2 and Sg versions
 - Red area: applies for S2 and Sg versions

Adjustment for DPX³ electronic release

Threshold Setting	S1	S2
Ir long delay setting current (protection against overloads)	$I_r = 0.4 \div 1 \times I_n$ (with 2 selectors of 10 steps)	$I_r = 0.4 \div 1 \times I_n$ (with 1 A steps)
tr long delay protection operation time	tr=5 s (with memory ON)	tr=3 ÷ 30s (with 7 steps and memory ON or OFF)
Isd short delay setting current (protection against short-circuits)	$I_{sd} = 1.5 \div 10 I_r$ (with 10 steps)	$I_{sd} = 1.5 \div 10 I_r$ (with 11 steps)
tsd short delay protection operation time	tsd=10 ms	tsd=0 ÷ 500 ms (with 6 steps and I²t=k or t=k)