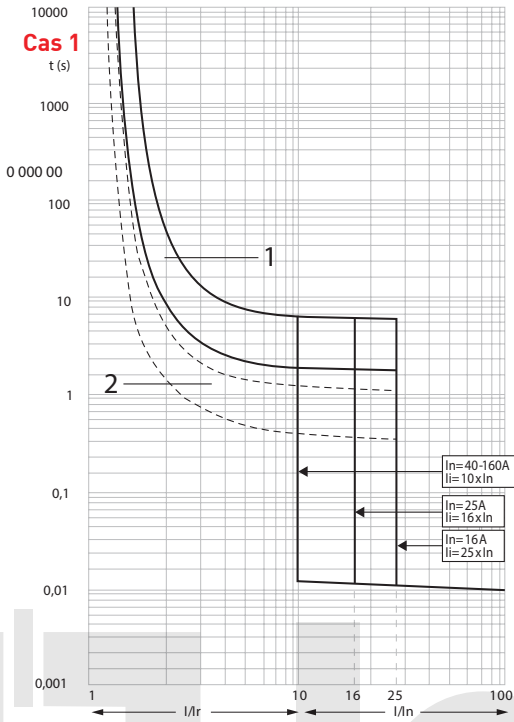
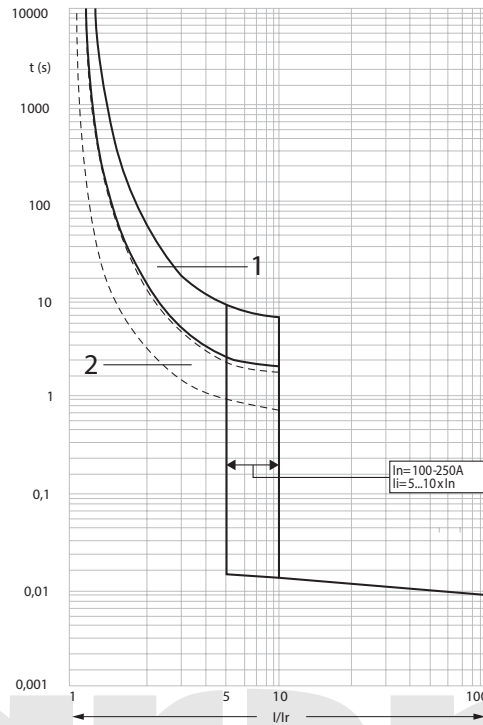


DPX³ 160 thermal-magnetic Tripping curve



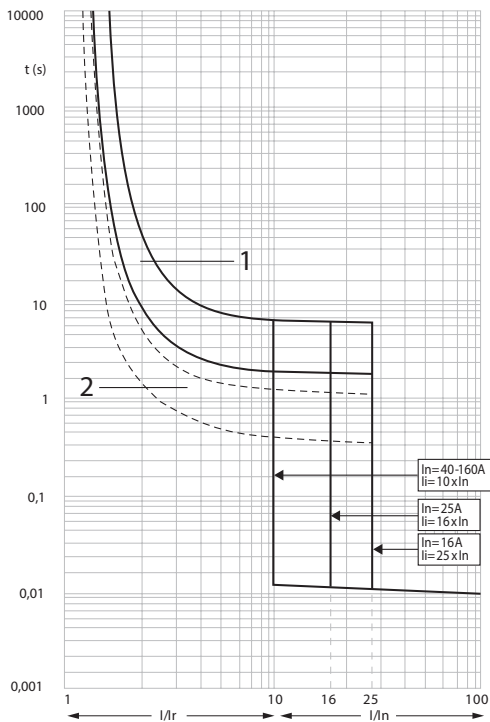
t: time
I: rated current
I_r: setting current
Curve n°1: characteristic with cold start
Curve n°2: characteristic with hot start

DPX³ 250 thermal-magnetic Tripping curves



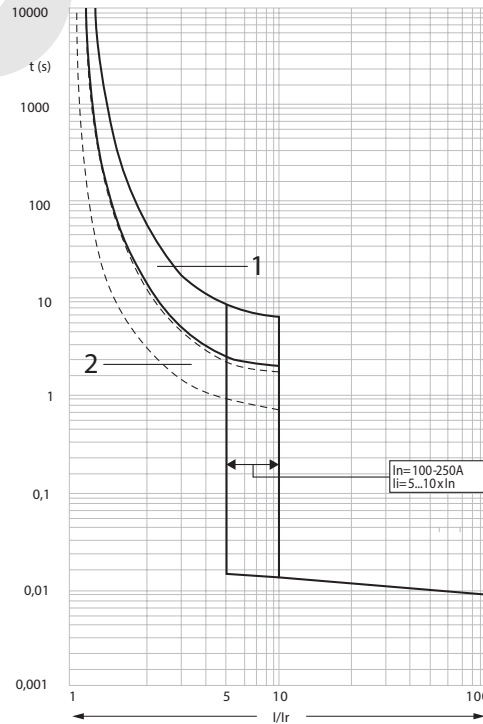
t: time
I: rated current
I_r: setting current
Curve n°1: characteristic with cold start
Curve n°2: characteristic with hot start

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



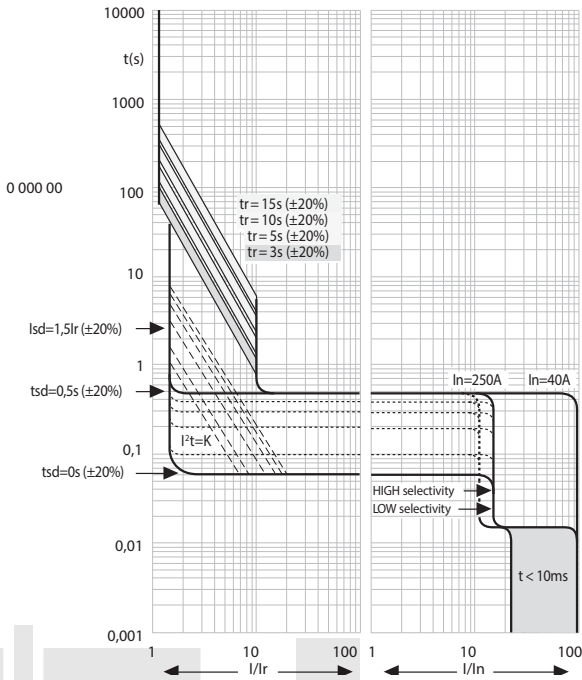
t: time
I: rated current
I_r: setting current
Curve n°1: characteristic with cold start
Curve n°2: characteristic with hot start

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

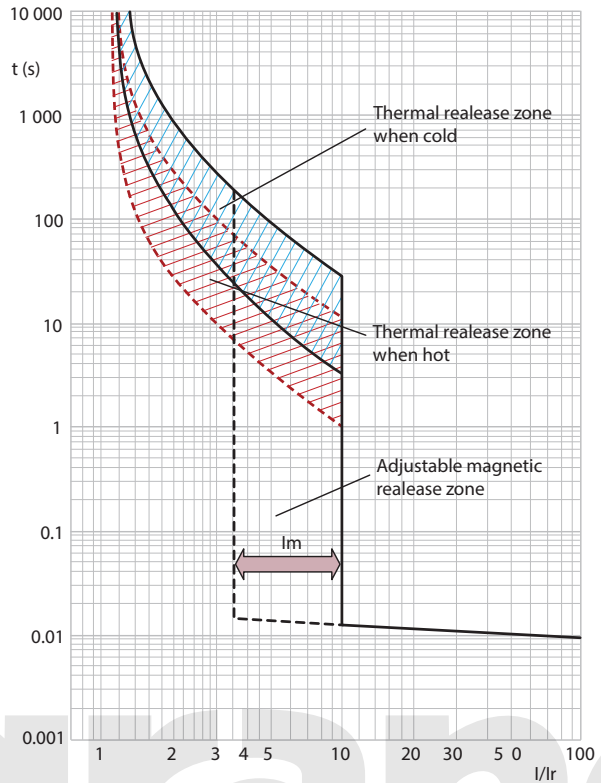


t: time
I: rated current
I_r: setting current

DPX³ 250 electronic release Tripping curves



Tripping curve for a DPX³ thermal-magnetic trip



Adjustment for thermal-magnetic DPX³

| Setting | DPX ³ thermal magnetic | DPX ³ with integrated e.i.c.bs |
|--|---|---|
| I _r overload trip threshold (thermal) | 0.8 to 1 I _n | 0.8 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 In 16 A and 25 A

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).

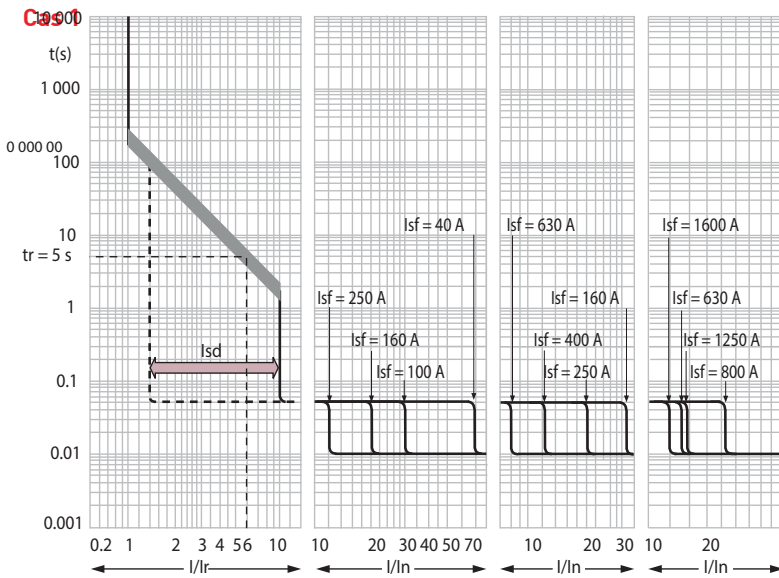
Adjustment for DPX³ electronic release

| 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 | |

DPX³ 630/1600

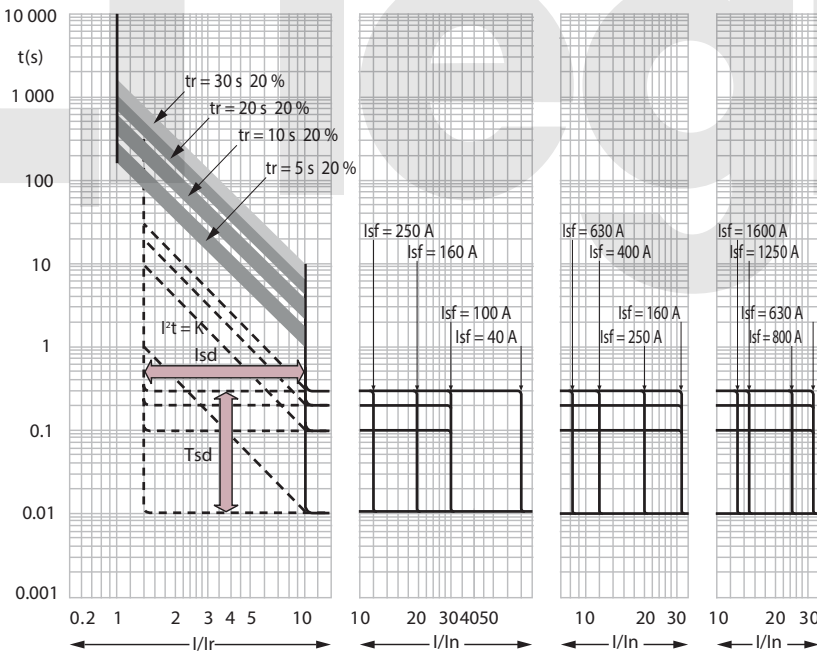
reading DPX³ characteristic curves and adjustment ranges

Tripping curve for a DPX³ electronic release S1, adjustable Ir and Isd



I: actual current
 Ir: long delay protection against overloads (setting: $I_r = x I_n$)
 Isd: long delay protection operation time (fixed value: 5 s at 6 Ir)
 Isf: short delay protection against short-circuits (setting: $I_m = x I_r$, between 1.5 and 10 Ir in the example)
 tsd: short delay protection operation time (fixed value: 0.05 s)
 If: fixed threshold instantaneous protection (4 to 20 kA depending on model)

Tripping curve for a DPX³ electronic release S2, adjustable Ir, Isd, tr and tsd



I: actual current
 Ir: long delay protection against overloads (setting: $I_r = x I_n$)
 tr: long delay protection operation time (fixed value: 5 to 30 s)
 Isd: short delay protection against short-circuits (setting: $I_m = x I_r$, between 1.5 and 10 Ir in the example)
 tsd: short delay protection operation time (setting: 0 to 0.3 s)
 I²t constant (adjustable via tsd)
 If: fixed threshold instantaneous protection (4 to 20 kA depending on model)

Adjustment for thermal-magnetic DPX³

| Setting | DPX ³ 630 | DPX ³ 1600 |
|--|----------------------|-----------------------|
| Ir overload trip threshold (thermal) | 0.8 to 1 In | 0.8 to 1 In |
| Im short-circuit trip threshold (magnetic) | 5 to 10 In | 5 to 10 In |

Adjustment for DPX³ electronic release

| Setting | DPX ³ 630 / 1600 S1 | DPX ³ 630 / 1600 S2 |
|--|--|--------------------------------|
| Ir overload trip threshold (long delay) | $(0.4 - 0.5 - 0.6 - 0.7 - 0.8 - 0.9 - 0.95 - 1) \times I_n$ | |
| tr long delay trip time | fixed: 5 s (to 6 Ir) | 5 - 10 - 20 - 30 s (to 6 Ir) |
| Isd short-circuit trip threshold (short delay) | $(1.5 - 2 - 3 - 4 - 5 - 6 - 8 - 10) \times I_r$ ⁽¹⁾ | |
| tsd Short delay trip time | fixed: 0.05 s | 0 - 0.1 - 0.2 - 0.3 s |

1: 7.9 Ir for DPX³ 630 In 630 A