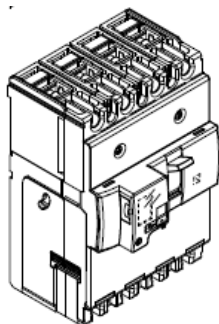


DPX³ 250 AB

 Reference(s): **420 730/732**

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1. USE

DPX³ "moulded case" offers optimal solutions to answer protection requirements of tertiary and industrial installations.

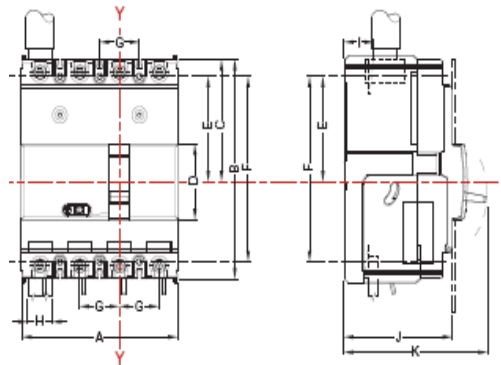
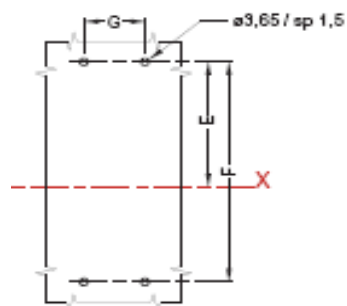
2. RANGE

 DPX³ AB

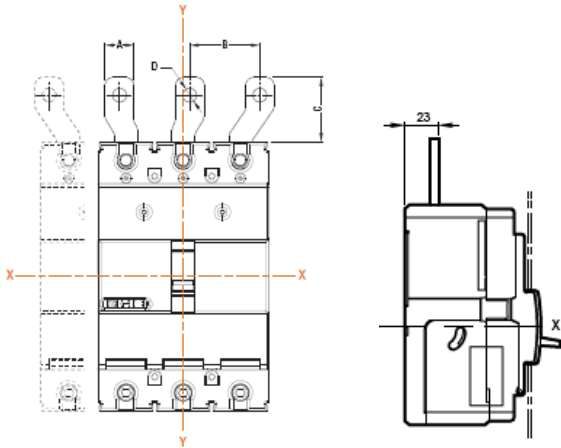
In	36 kA
(A)	4P
130	420730
240	420732

3. DIMENSIONS
3.1 Fixed version

	A	B	C	D	E	F	G	H	I	J	K
250 4P	140	165	82,5	45	61,5	123	35	28,5	18	74	97

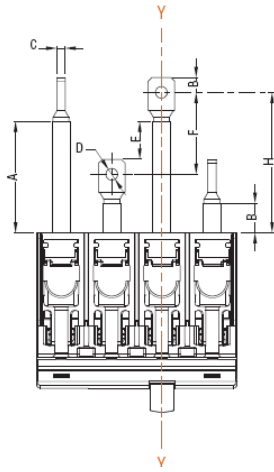


3.2 Fixed version, front terminals

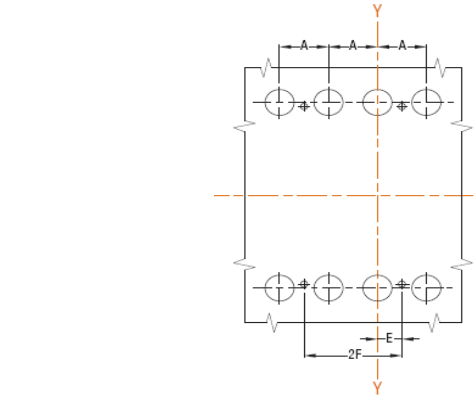


	A	B	C	D
250	33	48,5	54,75	13

3.3 Fixed version, rear terminals

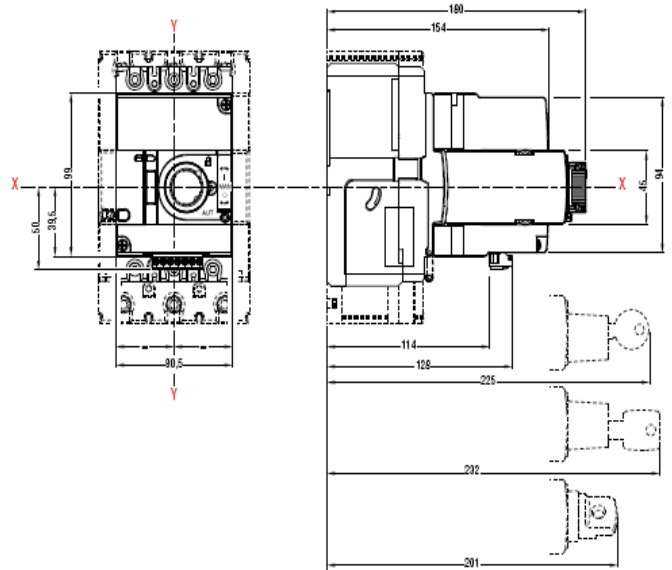


	A	B	C	D	E	F	G	H
250	66,5	22,5	6	8,4	15,5	44	15	80

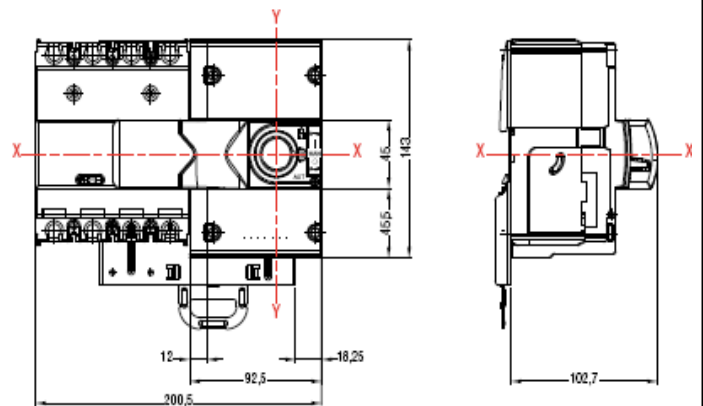


	A	B	C	D	E	F	G	H	I
250	35	142,5	3,65	19	17,5	35	61,5	123	71,5

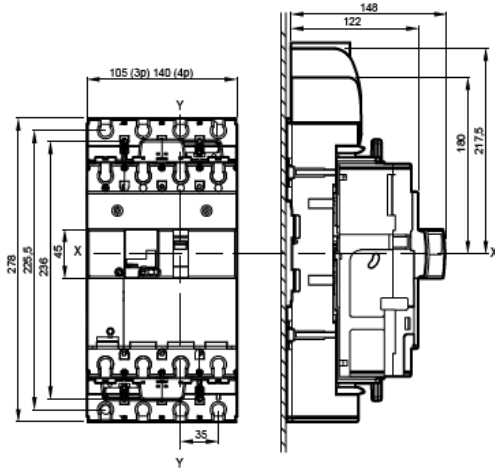
3.4 Fixed version, front motor operator



3.5 Fixed version, side motor operator



3.6 Plug-in version



4. ELECTRICAL AND MECHANICAL CHARACTERISTICS

4.1 Breaker technical characteristics

Circuit breaker	DPX ³ 250
Rated current I _n (A)	130-240
Rated insulation voltage U _i (V)	800
Rated operational voltage U _e (V)	690 V (ac)
Rated impulse withstand voltage U _{imp} (kV)	8
Ambient temperature (°C)	40
Endurance electrical / mechanical	8000/20000
Utilization category	A
Releases type	electronic
Nominal frequency (Hz)	50-60
Thermal adjustment (I _n 130 A)	60-70-80-90-100-110-120-130
Thermal adjustment (I _n 240 A)	140-150-160-170-180-190-200-220-230-240
Magnetic threshold	600 A (fixed)

4.2 Breaking capacity (KA)

Breaking capacity I _{cu} and I _{cs} in AC (kA)		
	U _e	
I _{cu} (kA)	220/240V	60
	380/415V	36
	440V	30
	480/500V	25
	690V	16
I _{cs} (%I _{cu})	-	100

4.3 Derating temperature Ta (°C)

Influence of ambient temperature Ta(°C)				
I _n (A)	40	50	60	70
130	130	120	109	99
240	240	221	202	182

There is no derating below 40°C.

4.4 Breaker power loss (W)

Power loss DPX ³ 250 ELE(W)		
I _n (A) ---->	130	240
Cage terminals	3.4	11.5
Lugs	3.4	11.5
External terminals	3.4	11.5
Spreaders	3.4	11.5
Rear terminals	3.4	11.5
Plug-in version	6.8	23.0

4.5 Altitude

Altitude (m)				
	Altitude (m)	≤2000	3000	4000
DPX ³ 250	Rated current (A)	1 x I _n	0,96 x I _n	0,93 x I _n
	Rated voltage (V)	500	500	400

4.6 Loads operation

Loads operation	
Rated current (A)	I _n =240
Opening (N)	45
Closing (N)	78
Reset (N)	75

4.7 Measure

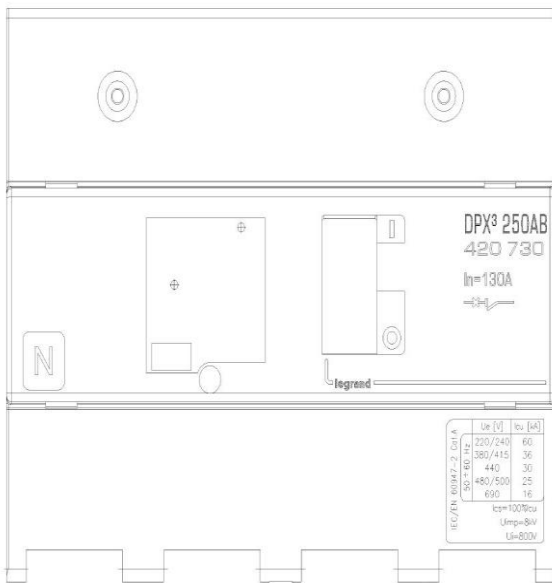
Current	phase and neutral	I1,I2,I3,I _N	Class I according to IEC 61557-12
	phases average	I _{avg}	Class I according to IEC 61557-12
	higher phase	I _{max}	Class I according to IEC 61557-12
	current unbalance	%I _{avg}	Class I according to IEC 61557-12
Voltage	Phase/phase	U12,U23, U31	0.50%
	Phase/neutral	V1N,V2N,V3N	0.50%
	phase/phase avg.	U _{avg}	0.50%
	Phase/neutral avg.	V _{avg}	0.50%
	Phases rotation	123,132	0.50%
Frequency	Electrical network	F	0.10%
Power	active	P _{tot} & for phase	Class II according to IEC 61557-12
	reactive	Q _{tot} & for phase	Class II according to IEC 61557-12
	apparent	R _{tot} & for phase	Class II according to IEC 61557-12

Energy	active	Last reset	Class II according to IEC 61557-12
	reactive	Last reset	Class II according to IEC 61557-12
	apparent	Last reset	Class II according to IEC 61557-12
THD	voltage	Pha./pha. & phase/neutral	Range 1 to 15°
	current	Phase/neutral	Range 1 to 15°

5. CONFORMITY

IEC 60947-2
EN 60947-2

6. MARKING



7. NAVIGATION

Ir (In 130 A)	60-70-80-90-100-110-120-130
Ir (In 240 A)	140-150-160-170-180-190-200-220-230-240
tr	3 – 5 – 10 – 15 – MEM 3 – MEM 5 – MEM 10 – MEM 15
Isd	600
tsd	0-100-200-300-400-500- i _t =K 0 500
N	OFF – 50% - 100%
sel	Lo - Hi
I1	I L1 measured value present
I2	I L2 measured value present
I3	I L3 measured value present
IN	I N measured value present
MEM Ir	Measured value of last intervention

8. EQUIPMENTS AND ACCESSORIES

8.1 Releases

- Shunt releases with voltage:
 - 12 Vac/dc ref. 421 012
 - 24 Vac/dc ref. 421 013
 - 48 Vac/dc ref. 421 014
 - 110-130 Vac ref. 421 015
 - 200-277 Vac ref. 421 016
 - 380-480 Vac ref. 421 017

- undervoltage releases with voltage:
 - 12 Vac/dc ref. 421 018
 - 24 Vac/dc ref. 421 019
 - 48 Vac/dc ref. 421 020
 - 110 Vac ref. 421 021
 - 200-240 Vac ref. 421 022
 - 277 Vac ref. 421 023
 - 380-415 Vac ref. 421 024
 - 440-480 Vac ref. 421 025

- auxiliary contact:
 - set of connectors for aux contacts ref. 421 044
 - aux contacts and fault signal ref. 421 011
 - aux contacts (1NC and 1 NO) for all rotary handles ref. 421 010
 - inserted device signal ref. 421 048

8.2 Rotary handles :

- Direct:
- DPX³ direct rotary handle ele / earth leakage ref. 421 001
 - DPX³ emergency direct rotary handle ele / earth leakage ref. 421 003

- Vari-depht:
- DPX³ vari depth rotary handle ref. 421 004
 - DPX³ emergency vari depth rotary handle ref. 421 005

- Locking accessories
- locking acc. for direct rotary handle - ronis ref. 421 006
 - locking acc. for direct rotary handle - profalux ref. 421 007
 - locking acc. for vari depth rotary handle - ronis ref. 421 008
 - locking acc. for vari depth rotary handle – profalux ref. 421 009

8.3 Mechanical accessories :

- Insulated shields
- Set of 3 ref. 421 070

- Sealable terminal shields
- sealable terminal shield for rear terminals 250 3P ref. 421 052
 - sealable terminal shield for rear terminals 250 4P ref. 421 053
 - sealable terminal shield for front spreaders 250 3P ref. 421 056
 - sealable terminal shield for front spreaders 250 4P ref. 421 057

- Padlocks
- DPX³ padlock accessory for handle (off) ref. 421 049

- Interlock:
- DPX³ interlock mounting plate ref. 421 058
 - DPX³ interlock for plug-in / draw-out version ref. 421 059

8.4 Connection's accessories :

- Cage terminals
- high capacity terminals for al or cu cables kit (3) - flex 1x120mm², rigid 1x150mm², bar/cable lug 18mm ref. 421 030
 - high capacity terminals for al or cu cables kit (4) - flex 1x120mm², rigid 1x150mm², bar/cable lug 18mm ref. 421 031

Front spreaders

- DPX³ front spreaders for 3P DPX³ 250 (3) ref. 421 034
- DPX³ front spreaders for 4P DPX³ 250 (4) ref. 421 035

Rear terminals

- DPX³ flat rear terminals for 3P DPX³ 250 (3) ref. 421 038
- DPX³ flat rear terminals for 4P DPX³ 250 (4) ref. 421 039

8.5 Plug-in version**Bases**

- front/rear terminals plug-in base 3P DPX³250 ref. 421 042
- front/rear terminals plug-in base 4P DPX³ 250 ref. 421 043

Locking accessories

- locking accessory for plug-in base – ronis ref. 421 045
- locking accessory for plug-in base – profalux ref. 421 046
- padlock accessory for plug-in base ref. 421 047

8.6 Motor operator

- side motor operator 24-230 Vac - 24-230 Vdc ref. 421 060
- front motor operator 24-230 Vac - 24-230 Vdc ref. 421 061

Locking accessories for front motor operator:

- locking acc. for front motor operator - ronis ref. 421 062
- locking acc. for front motor operator – profalux ref. 421 063
- padlock selector for front motor operator ref. 421 064

Locking accessories for side motor operator:

- locking acc. for side motor operator - ronis ref. 421 065
- locking acc. for side motor operator – profalux ref. 421 066
- padlock selector for side motor operator ref. 421 067

Din plate:

- DPX³ din plate for motor operator DPX³ 250 ref. 421 069

8.7 Mounting on rail fixing plate

- DPX³ din rail fixing plate DPX³ 250 3P/4P ref. 421 072

8.8 Communication interface

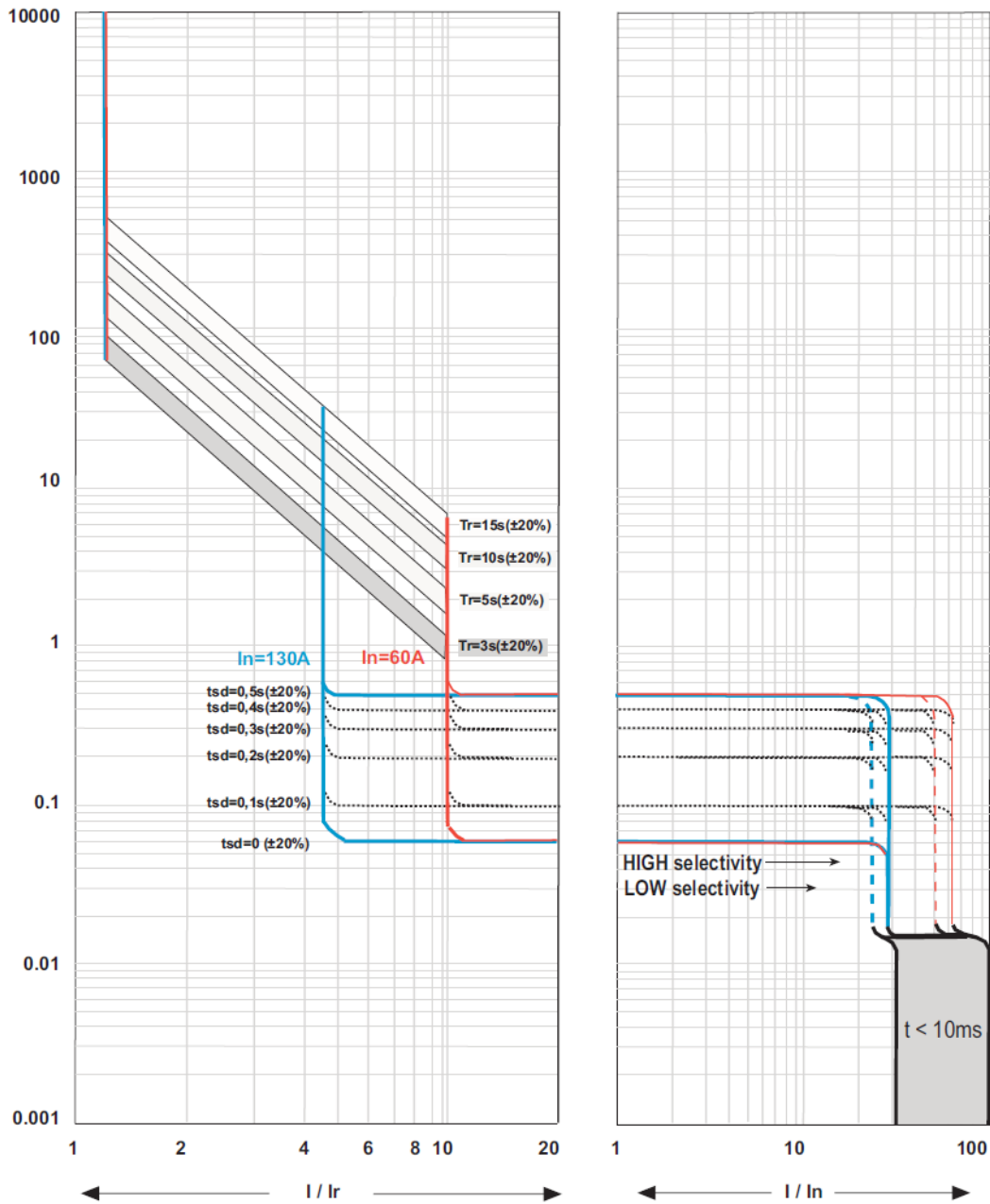
- DPX³ communication interface (Modbus) ref. 421 075

8.9 Supply

- Lithium battery CR1616 3V x 2;
- Minimum current for electronic card supply : 0.2 x I_n
- Auxiliary supply by 421 075 (24 V ac/dc);

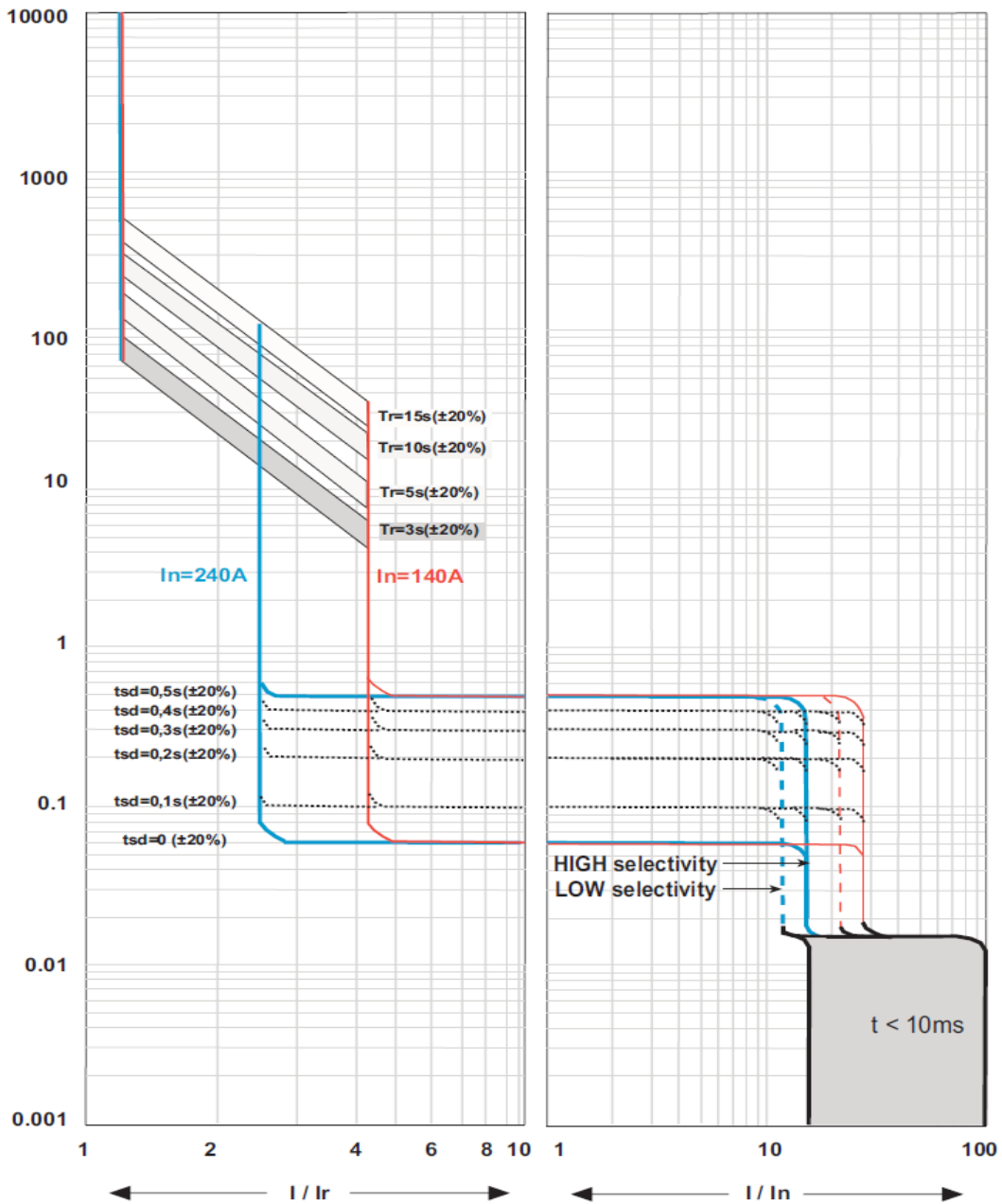
9. CURVES

9.1.1 TRIPPING CURVE : 420730



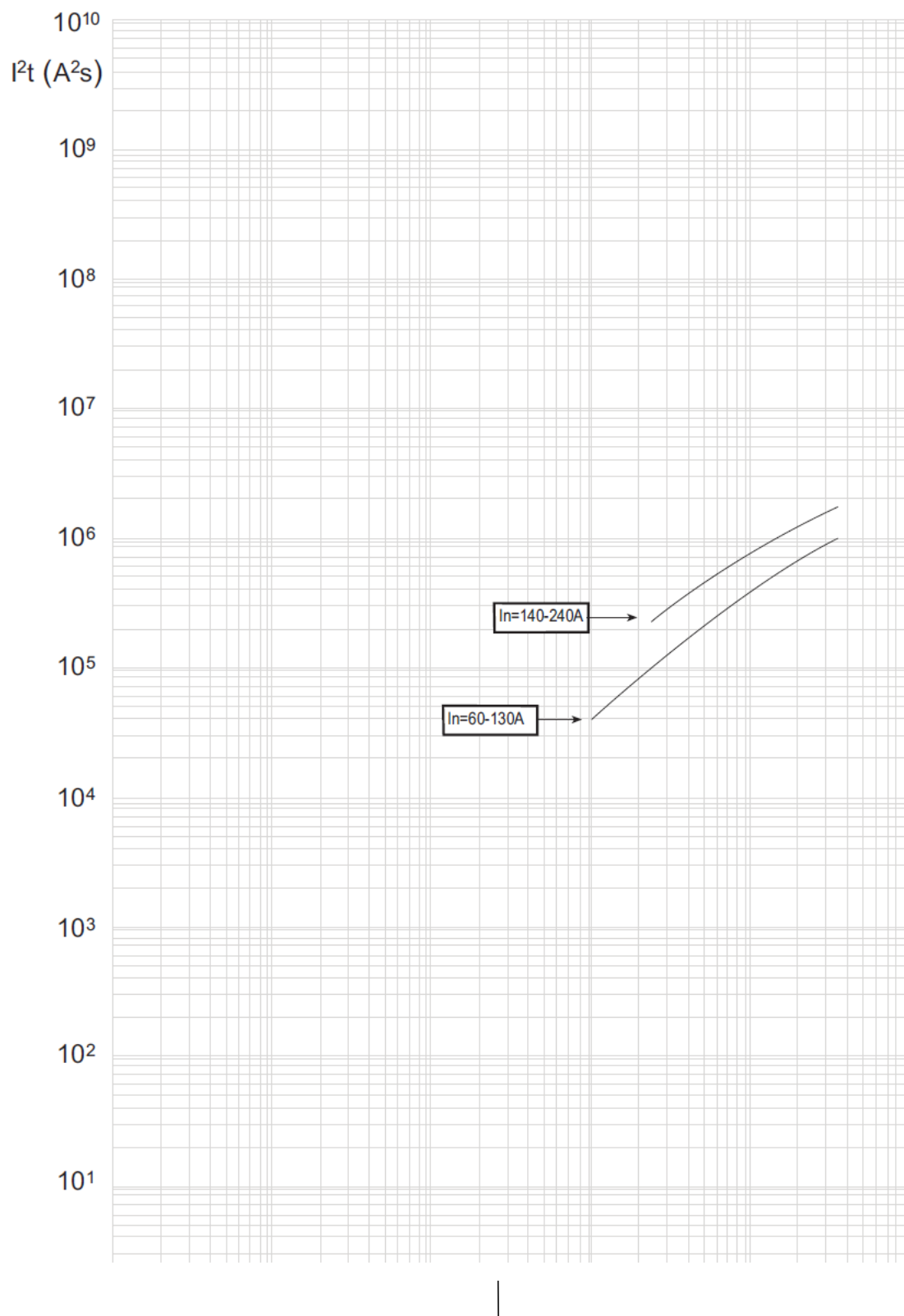
t = time
 I = rated current
 Ir = setting current
 curve number 1 = characteristic with cold start
 curve number 2 = characteristic with hot start

9.1.2 TRIPPING CURVE : 420732

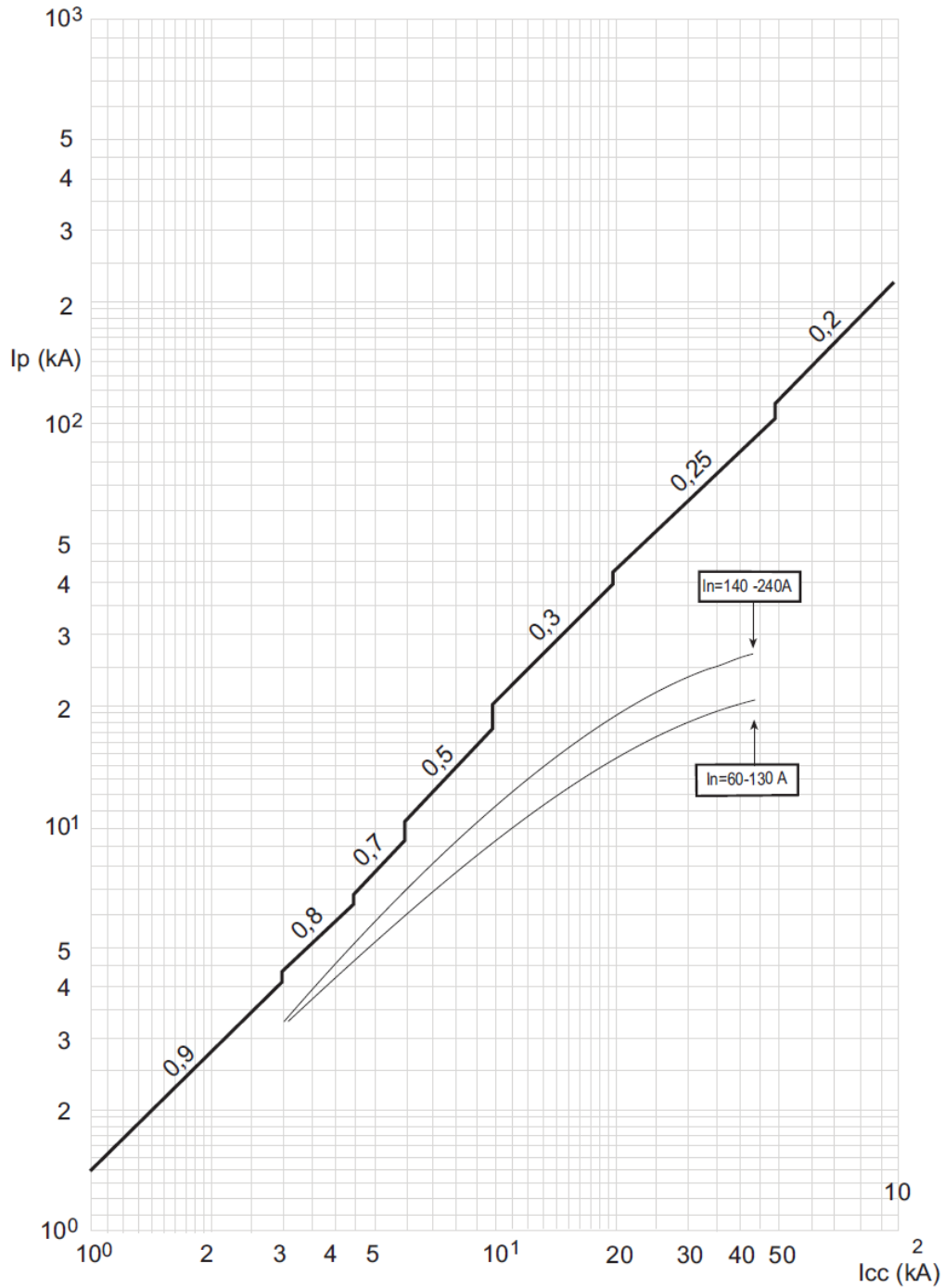


t = time
 I = rated current
 I_r = setting current
 curve number 1 = characteristic with cold start
 curve number 2 = characteristic with hot start

9.2 Energy curve



9.3 Restricted current curve



I_{cc} = estimated short circuit symmetrical current (RMS value)
 I_p = maximum short circuit peak current
 maximum prospective short circuit peak current corresponding at the power factor
 ——— maximum real peak short circuit current