

Moulded case circuit breakers x160

Available in 3P and 4P

Mechanical test button, lockable settings,
integrated padlocking handle
Ø 4mm,
Thermal magnetic trip unit, 2 versions:

- Z version: fixed thermal and fixed magnetic
- U version: adjustable thermal and fixed magnetic

DIN rail adaptor available for DIN rail mounting

Connection capacity

95 mm² rigid cables
70 mm² flexible cables collar terminals

Comply with IEC 60947-2

Trip-free switches

Allows tripping at distance using a voltmeter trip unit (optional)
AC22/23A

Comply with IEC60947-3



HDA125Z

Description	Rating In	Catalogue No.	
		3P	4P
MCCBs x160 18kA	16A	HDA016Z	HDA017Z
breaking capacity	20A	HDA020Z	HDA021Z
Ics : 18 kA	25A	HDA025Z	HDA026Z
(400/415 V AC)	32A	HDA032Z	HDA033Z
	40A	HDA040Z	HDA041Z
fixed thermal	50A	HDA050Z	HDA051Z
1x In	63A	HDA063Z	HDA064Z
fixed magnetic	80A	HDA080Z	HDA081Z
> 10 x In	100A	HDA100Z	HDA101Z
	125A	HDA125Z	HDA126Z
	160A	HDA160Z	HDA161Z
adjustable thermal	25A	HDA025U	HDA026U
0.63 - 0.8 - 1 x In	40A	HDA040U	HDA041U
fixed magnetic	63A	HDA063U	HDA064U
> 10 x In	80A	HDA080U	HDA081U
	100A	HDA100U	HDA101U
	125A	HDA125U	HDA126U
	160A	HDA160U	HDA161U



HDA161U

MCCBs x160 25kA	16A	HHA016Z	HHA017Z
breaking capacity	20A	HHA020Z	HHA021Z
Ics : 20 kA	25A	HHA025Z	HHA026Z
(400/415 V AC)	32A	HHA032Z	HHA033Z
	40A	HHA040Z	HHA041Z
fixed thermal	50A	HHA050Z	HHA051Z
1x In	63A	HHA063Z	HHA064Z
fixed magnetic	80A	HHA080Z	HHA081Z
> 10 x In	100A	HHA100Z	HHA101Z
	125A	HHA125Z	HHA126Z
	160A	HHA160Z	HHA161Z
adjustable thermal	25A	HHA025U	HHA026U
0.63 - 0.8 - 1 x In	40A	HHA040U	HHA041U
fixed magnetic	63A	HHA063U	HHA064U
> 10 x In	80A	HHA080U	HHA081U
	100A	HHA100U	HHA101U
	125A	HHA125U	HHA126U
	160A	HHA160U	HHA161U

Add-on blocks for x160 devices

These devices are intended to be fixed on the right side of the devices.

Type A and HI

For fault component pulsating current.

HI (High Immunity): the products with "reinforced immunity" reduce the unexpected tripping when they protect equipment generating disturbances (micro-processing, electronic ballast...)

Fixed version: 300 mA sensitivity and instantaneous tripping

Adjustable version: adjustable sensitivity and tripping.

Test button for differential functioning check.

Mechanical test button

LED or at distance signal for tripping or advance warning (25-50% $I_{\Delta n}$).

Assembly and disassembly facilitated by the drawer

assembly system. The terminal cover is dependent of the add-on block.

Connection capacity

95 mm² rigid cables

70 mm² flexible cables

Comply with IEC 60947-2 annexe B.



HNA125Z

Description	In	Catalogue No.	
		3P	4P
MCCBs x160 40kA	25A	HNA025U	HNA026U
	40A	HNA040U	HNA041U
adjustable thermal	63A	HNA063U	HNA064U
0.63 - 0.8 - 1 x In	80A	HNA080U	HNA081U
fixed magnetic	100A	HNA100U	HNA101U
> 10 x In	125A	HNA125U	HNA126U
	160A	HNA160U	HNA161U

Trip-free switches x160

suitable for
AC22A / AC 23A

Ue: 415 V AC

Icw (1s): 2 kA

125A
160A

HCA125Z HCA126Z
HCA160Z HCA161Z



HBA161H

Add-on blocks

$I_{\Delta n}$ 300 mA
fixed sensitivity
instantaneous tripping

125 A

HBA127H HBA128H

sensitivity $I_{\Delta n}$
adjustable: 0.03 - 0.1 - 0.3 - 1 -
3 - 6A
adjustable tripping:
- instantaneous
- time delay: 0.06 - 0.15 - 0.3 -
0.5 - 1s

125A
160A

HBA125H HBA126H
HBA160H HBA161H

Indication contacts

- 1 changeover switch (ON/OFF): indicates the position of the MCCB is "open" or "close".
- 1 changeover alarm contact: indicates MCCB tripping.

Coil connection

Connection capacity:
0,75 mm² flexible or rigid cables
Optional connection cables.
The cable capacity of the terminals is 0.5 to 1.25 mm².

Shunt trip

Remotes tripping of MCCBs or trip-free switches. Operating voltage: 0.7 to 1.1 x Un

Under voltage release

Allows the tripping of MCCBs or trip-free switches when voltage level drop between 35 and 70% of Un. Pick up voltage 0.85 x Un

Direct rotary handle

- padlockable
- equipped with front cover and handle
- fixing without any additional screw

Extended rotary handle

- IP 55
- supplied complete with shaft and handle

Description		Characteristics	Catalogue No.
	Auxiliary contacts	1 changeover contact (ON/OFF)	HXA021H
	AX AL	250 V AC / 3A 125 V DC / 0,4A 1 NO + 1 NC	
		1 changeover alarm contact	HXA024H
		250 V AC / 3A 125 V DC / 0,4A 1 NO + 1 NC	
	Shunt trips	24 V DC	HXA001H
	SH	200 - 240 V AC	HXA004H
	Undervoltage releases	24 V DC	HXA011H
	UV	200 - 240 V AC	HXA014H
		380 - 450 V AC	HXA015H
	Locking kit		HXA035H

HXA021H

HXA024H

HXA014H



HXA030H



HXA031H



HYA015H

Description	Characteristics	Catalogue No.	
		3P	4P
Direct rotary handle	padlockable handle max Ø 6 mm	HXA030H	HXA030H
Extended rotary handle	padlockable handle max Ø 8 mm	HXA031H	HXA031H
Extended connections	set of 3 or 4 spreader connections	HYA014H	HYA015H
Interphase barriers	set of 3, height: 50 mm	HYA019H	HYA019H
	set of 3, height: 97 mm	HYB019H	HYB019H
Din rail adaptor		HYA033H	HYA033H

Indication contacts

- 1 changeover switch (ON/OFF): indicates the position of the MCCB is "open" or "closed".
- 1 changeover alarm contact: indicates MCCB tripping.

Coil connection

Connection capacity:
0.75 mm² flexible or rigid cables
Optional connection cables.
The cable capacity of the terminals is 0.5 to 1.25 mm².

Shunt trip

Remotes tripping of MCCBs or trip-free switches.
Operating voltage: 0.7 to 1.1 x Un

Under voltage release

Allows the tripping of MCCBs or trip-free switches when voltage level drop between 35 and 70% of Un. Pick up voltage 0.85 x Un

Direct rotary handle

- padlockable
- equipped with front cover and handle
- fixing without any additional screw

Extended rotary handle

- IP 55
- supplied complete with shaft and handle



HXA021H

HXA024H



HXA014H



HXB042H

Description	Characteristics	Catalogue No.
Auxiliary contacts AX AL	1 changeover contact 250 V AC / 3A 125 V DC / 0,4A 1 NO + 1 NC	HXA021H
	1 changeover alarm contact 250 V AC / 3A 125 V DC / 0,4A 1 NO + 1 NC	HXA024H
Shunt trips SH	24 V DC	HXA001H
	200 - 240 V AC	HXA004H
Undervoltage releases UV	24 V DC	HXA011H
	200 - 240 V AC	HXA014H
	380 - 450 V AC	HXA015H
Direct rotary handles	padlockable handle max Ø 6 mm	HXB030H
Extended rotary handles	padlockable handle max Ø 8 mm	HXB031H
Motor operators	230 - 240V AC	HXB042H
Extended connections	spreaders	HYB011H HYB012H
		(3P) (4P)
Interphase barriers	set of 3 height: 97 mm	HYB019H
Mechanical Inter lock kit		HXB065H

**Moulded case circuit breakers
h250**

- Thermal magnetic trip unit:
thermal adjustment: 0.63 to 1 In
magnetic adjustment:
6-8-10-13 x In
3P & 4P / 3P (for 25kA)
Mechanical test button, lockable
settings,

Connection:

Directly on copper cable terminal,
with end lug max. width: 25 mm

Comply with IEC 60947-2



HHG250U



HNG125U

Description	Characteristics	In	Catalogue No.	
			3P	4P
MCCBs h250 25kA TM	breaking capacity	63A	HHG063U	-
	Icu : 25 kA (400/415 V AC)	100A	HHG100U	-
	Ics: 19 kA	125A	HHG125U	-
		160A	HHG160U	-
	adjustable thermal	200A	HHG200U	-
	0.63 to 1 x In	250A	HHG250U	-
	adjustable magnetic			
	6 - 8 - 10 - 13 x In			
MCCBs h250 50kA TM	breaking capacity	63A	HNG063U	-
	Icu : 30 kA (20-32A)	100A	HNG100U	-
	Icu : 50 kA	125A	HNG125U	-
	(400/415 V AC)	160A	HNG160U	-
	Ics: 25 kA	200A	HNG200U	-
		250A	HNG250U	-
	adjustable thermal			
	0.63 to 1 x In			
	adjustable magnetic			
	6 - 8 - 10 - 13 x In			
MCCBs h250 65kA TM	breaking capacity	200A	HEG200U	-
	Icu : 65 kA (400/415 V AC)	250A	HEG250U	-
	Ics: 36 kA			
	adjustable thermal			
	0.63 to 1 x In			
	adjustable magnetic			
	6 - 8 - 10 - 13 x In			

**Moulded case circuit breakers
h250**

- Electronic trip unit LSI:
L - Long time delay - protection
against overloads:
adjustable: I_r from 0.4 to 1 x I_n
S - Short time delay - protection
against short-circuits: adjustable
I_{sd} from 2.5 to 10 x I_r
time delay 0.1 or 0.2 s I
Instantaneous - definitive time
delay tripping maximum
threshold in case of short-circuit
(I_i max = 13 x I_n)

- 2 values setting:
- I_r setting
 - predefined curve selection
(9 possibilities)
3P3d and 4P3d/4dN/2
(adjustable neutral
0 - 50 - 100%)
Mechanical button,
Sealable settings.

Not for use in TPN and panel
boards.

Connection:
Directly on copper cable
terminal, with end lug max.
width: 25 mm

Comply with IEC 60947-2.



HNC125U



HEC250U

Description	Characteristics	In	Catalogue No.	
			3P	4P
MCCBs h250 50kA LSI	breaking capacity	40A	HNC040U	HNC041U
	I _{cu} : 50 kA (400/415 V AC)	125A	HNC125U	HNC126U
	I _{cs} : 25 kA	250A	HNC250U	HNC251U
	adjustable overload I _r = 0.4 to 1 x I _n adjustable short circuit 2.5 to 10 x I _r			
	3P, 3 trip units & 4P, 3 trip units			
MCCBs h250 70kA LSI	breaking capacity	40A	HEC040U	HEC041U
	I _{cu} : 70 kA (400/415 V AC)	125A	HEC125U	HEC126U
	I _{cs} : 70 kA	250A	HEC250U	HEC251U
	adjustable overload I _r = 0.4 to 1 x I _n adjustable short circuit 2.5 to 10 x I _r			
	3P, 3 trip units & 4P, 3 trip units			

Indication contacts

- 1 changeover switch (ON/OFF): indicates the position of the MCCB is "open" or "close".
- 1 changeover alarm contact: indicates MCCB tripping.

Coil connection

Connection capacity:
0.75 mm² flexible or rigid cables
Optional connection cables.
The cable capacity of the terminals is 0.5 to 1.25 mm².

Shunt trip

Remotes tripping of MCCBs or trip-free switches.
Operating voltage: 0.7 to 1.1 x Un

Under voltage release

Allows the tripping of MCCBs or trip-free switches when voltage level drop between 35 and 70% of Un.
Pick up voltage 0.85 x Un

Direct rotary handle

- padlockable
- equipped with front cover and handle
- fixing without any additional screw

Extended rotary handle

- IP 55
- supplied complete with shaft and handle

	Description	Characteristics	Catalogue No.
 HXC021H  HXC024H	Auxiliary contacts AX	1 changeover contact 250 V AC / 3A 125 V DC / 0,4A 1 NO + 1 NC	HXC021H
	AL	1 changeover alarm contact 250 V AC / 3A 125 V DC / 0,4A 1 NO + 1 NC	HXC024H
 HXC004H  HXC014H	Shunt trips SH	24 V DC 200 - 240 V AC	HXC001H HXC004H
	Undervoltage releases UV	24 V DC 200 - 240 V AC 380 - 450 V AC	HXC011H HXC014H HXC015H
 HXC030H	Direct rotary handles	padlockable handle Ø 5 - 8 mm ² max	HXC030H
	Extended rotary handles	padlockable handle Ø 5 - 8 mm ² max	HXC031H
 HYC011H	Motor operators	230-240 V AC	HXC042H
	Extended connections	spreader connections	HYC011H (3P) HYB012H (4P)
	Interphase barriers	set of 3 pieces	HYC019H
	Locking kit		HXC035H
	Mechanical Inter lock kit		HXC065H

**Moulded case circuit breakers
h400, h630**

Thermal magnetic trip unit TM:

- thermal adjustment:
from 0.63 to 1 x In
- magnetic adjustment:
from 6 to 12 x In

Connection:

Directly on copper cable
terminal, with end lug max.
width: 30 mm

Comply with IEC 60947-2



HHD400U



HND400U

Description	Characteristics	In	Catalogue No.	
			3P	4P
MCCBs h400 25kA TM	breaking capacity Icu : 25 kA (400/415 V AC) Ics: 25 kA	400A	HHD400U	-
	adjustable thermal: 0.63 to 1 x In adjustable magnetic: 6 to 12 x In 3P			
MCCBs h400 50kA TM	breaking capacity Icu : 50 kA (400/415 V AC) Ics: 50 kA	250A 400A	- HND400U	HND251U HND401U
	adjustable thermal: 0.63 to 1 x In adjustable magnetic: 6 to 12 x In			

Indication contacts

- 1 changeover switch (ON/OFF): indicates the position of the MCCB is "open" or "close"
- 1 changeover alarm contact: indicates MCCB tripping

Coil connection

Connection capacity:
0.75 mm² flexible or rigid cables
Optional connection cables.
The cable capacity of the terminals is 0.5 to 1.25 mm².

Shunt trip

Remotes tripping of MCCBs or trip-free switches.
Operating voltage:
0.7 to 1.1 x Un

Under voltage release

Allows the tripping of MCCBs or trip-free switches when voltage level drop between 35 and 70% of Un. Pick up voltage 0.85 x Un

Direct rotary handle

- padlockable
- equipped with front cover and handle
- fixing without any additional screw

Extended rotary handle

- IP 55
- supplied complete with shaft and handle

Description		Characteristics		Catalogue No.	
 HXC021H	 HXC024H	Auxiliary contacts	1 changeover contact	HXC021H	
		AX	250 V AC / 3A		
		AL	125 V DC / 0,4A		
			1 NO + 1 NC		
			1 changeover alarm contact	HXC024H	
			250 V AC / 3A		
			125 V DC / 0,4A		
			1 NO + 1 NC		
 HXC004H		Shunt trips	24 V DC	HXC001H	
		SH	200 - 240 V AC	HXC004H	
 HXC014H		Undervoltage releases	24 V DC	HXC011H	
		UV	200 - 240 V AC	HXC014H	
			380 - 450 V AC	HXC015H	
		Direct rotary handle	padlockable handle max Ø 6 mm	HXD030H	
		Extended rotary handle	padlockable handle max Ø 8 mm	HXD031H	

Moulded case circuit breakers h1000

- Electronic trip unit LSI:

L - Long time delay - protection against overloads: adjustable: I_r from 0,4 to 1 x I_n

S - Short time delay - protection against short-circuits: adjustable

I_{sd} from 2.5 to 10 x I_r (630-800A), 2.5 to 8 x I_r (1000A)

time delay 0.1 or 0.2 s

I - Instantaneous - definitive time delay tripping maximum

threshold in case of short-circuit

(I_i max = 12 x I_n)

2 values setting:

- I_r setting
- predefined curve selection (7 possibilities)

3P3d and 4P3d/4dN/2

(adjustable neutral

0 - 50 - 100%)

Mechanical button,

Sealable settings

Connection

Directly on copper cable terminal, with end lug max. width: 50 mm

Comply with IEC 60947-2

Trip-free switches

Allows tripping at distance using a voltmetrical trip unit (optional)

Comply with IEC 60 947-3
AC 23A / DC 22A



HNE970U



HEE970U

Description	Characteristics	I_n	Catalogue No.	
			3P	4P
MCCBs h1000 50kA LSI	breaking capacity	630A	HNE630U*	
	I_{cu} : 50 kA (400/415 V AC)	800A	HNE800U	HNE801U
	I_{cs} : 50 kA	1000A	HNE970U	HNE971U
	adjustable overload I_r = 0.4 to 1 x I_n adjustable short circuit 2.5 to 10 x I_r (630 - 800A) 2.5 to 8 x I_r (1000A) time delay: 0.1-0.2 s			
	neutral setting from 0-50 to 100%			
	* without straight extended connection			
MCCBs h1000 70kA LSI	breaking capacity	800A	HEE800U	HEE801U
	I_{cu} : 70 kA (400/415 V AC)	1000A	HEE970U	HEE971U
	I_{cs} : 50 kA			
	adjustable overload I_r = 0.4 to 1 x I_n adjustable short circuit 2.5 to 10 x I_r (800A) 2.5 to 8 x I_r (1000A) time delay: 0.1-0.2 s			
	neutral setting from 0-50 to 100%			
Trip-free switches	suitable for AC 22A / AC 23A	800A	HCE800U	HCE801U
	U_e : 415 V AC I_{cw} (0.3 s) = 10 kA	1000A	HCE970U	HCE971U

Indication contacts

- 1 changeover switch (ON/OFF): indicates the position of the MCCB is "open" or "close"
- 1 changeover alarm contact: indicates MCCB tripping.

Coil connection

Connection capacity:
0.75 mm² flexible or rigid cables
Optional connection cables.
The cable capacity of the terminals is 0.5 to 1.25 mm²

Shunt trip

Remotes tripping of MCCBs or trip-free switches.

Operating voltage:
0.7 to 1.1 x Un

Under voltage release

Allows the tripping of MCCBs or trip-free switches when voltage level drop between 35 and 70% of Un. Pick up voltage 0.85 x Un

	Description	Characteristics	Catalogue No.
	Auxiliary contacts	1 changeover contact	HXC021H
	AX AL	250 V AC / 3A 125 V DC / 0,4A 1 NO + 1 NC	
		1 changeover alarm contact	HXC024H
		250 V AC / 3A 125 V DC / 0,4A 1 NO + 1 NC	
	Shunt trips	24 V DC	HXC001H
	SH	200 - 240 V AC	HXC004H
	Undervoltage releases UV	24 V DC	HXE011H
		220 - 240 V AC	HXE014H
		380 - 415 V AC	HXE015H
	Mechanical Inter lock kit		HXE065H

HXC021H

HXC024H

HXC004H

HXE014H

- Direct rotary handle**
 - padlockable
 - equipped with front cover and handle
 - fixing without any additional screw
- Extended rotary handle**
 - IP 55
 - supplied complete with shaft and handle



HXE030H

Description	Characteristics	Catalogue No.	
		3P	4P
Interphase barriers	set of 3	HYE019H	HYE019H
Direct rotary handles	padlockable handle		HXE030H
Extended rotary handles	padlockable handle		HXE031H
Motor operators	100 - 240V AC		HXE042H

**Moulded case circuit breakers
h1600, selection and
protection**

• Electronic trip unit LSI:
L - Long time delay - protection
against overloads: adjustable: I_r
from 0.4 to 1 x I_n
S - Short time delay - protection
against short-circuits: adjustable
 I_{sd} from 2.5 to 10 x I_r time delay
0.1 or 0.2 s
I - Instantaneous - definitive time
delay tripping maximum
threshold in case of short-circuit
($I_i \max = 12 \times I_n$)

2 values setting:
• I_r setting
• predefined curve selection
(7 possibilities)
3P3d and 4P3d/4dN/2
(adjustable neutral
0 - 50 - 100%)
Mechanical button,
Sealable settings

Connection:

Directly on copper cable
terminal, with end lug max.
width: 60 mm

Comply with IEC 60947-2

Trip-free switches

Allows tripping at distance using
a voltmetrical trip unit (optional)

Comply with IEC 60947-3
AC 23A / DC 22A



HNF990U



HNF990U

Description	Characteristics	I_n	Catalogue No.	
			3P	4P
MCCBs h1600 50kA LSI	breaking capacity I_{cu} : 50 kA (400/415 V AC) I_{cs} : 50 kA adjustable overload $I_r = 0.4$ to 1 x I_n adjustable short circuit 2.5 to 10 x I_r time delay: 0.1-0.2 s neutral setting 0, 50, 100%	1250A	HNF980U	HNF981U
		1600A	HNF990U	HNF991U
MCCBs h1600 70kA LSI	breaking capacity I_{cu} : 70 kA (400/415 V AC) I_{cs} : 50 kA adjustable overload $I_r = 0.4$ to 1 x I_n adjustable short circuit 2.5 to 10 x I_r time delay: 0.1-0.2 s neutral setting from 0, 50, 100%	1250A	HEF980U	HEF981U
		1600A	HEF990U	HEF991U
Trip-free switches	suitable for AC 22A / AC 23A U_e : 415 V AC I_{cw} (0.3 s) = 20 kA	1250A	HCF980U	HCF981U
		1600A	HCF990U	HCF991U

Indication contacts

- 1 changeover switch (ON/OFF): indicates the position of the MCCB is "open" or "close".
- 1 changeover alarm contact: indicates MCCB tripping

Coil connection
Connection capacity:
0.75 mm² flexible or rigid cables
Optional connection cables.
The cable capacity of the terminals is 0.5 to 1.25 mm²

Shunt trip

Remotes tripping of MCCBs or trip-free switches.
Operating voltage:
0.7 to 1.1 x Un

Under voltage release

Allows the tripping of MCCBs or trip-free switches when voltage level drop between 35 and 70% of Un.
Pick up voltage 0.85 x Un

Direct rotary handle

- padlockable
- equipped with front cover and handle
- fixing without any additional screw

Extended rotary handle

- IP 55
 - supplied complete with shaft and handle
- Rear connection: included



HXC 021H



HXC 024H



HXC 004H



HXC 014H

Description	Characteristics	Catalogue No.
Auxiliary contacts AX AL	1 changeover contact 250 V AC / 3A 125 V DC / 0.4A 1 NO + 1 NC	HXC021H
	1 changeover alarm contact 250 V AC / 3A 125 V DC / 0.4A 1 NO + 1 NC	HXC024H
Shunt trips SH	24 V DC	HXF001H
	200 - 240 V AC	HXF004H
Undervoltage releases UV	24 V DC	HXE011H
	220 - 240 V AC	HXE014H
	380 - 415 V AC	HXE015H
Direct rotary handle	padlockable handle, max Ø 8 mm	HXF030H
Extended rotary handle	padlockable handle, max Ø 8 mm	HXF031H
Motor operators	200 - 230 V AC	HXF042H
Interphase barriers	3/4 P, set of 3	HYF019H
Locking kit		HXF039H

Frame	x160				x250			h250 TM		
Product	Switch		MCCB		Switch	MCCB		MCCB		
Reference	HCA	HDA	HHA	HNA	HCB	HHB	HNB	HHG	HNG	HEG
Number of poles	[No.]	3-4	1-2-3-4	1-2-3-4	3-4	3-4		3-4		
Electrical characteristics										
Rated current	In [A]	160			250			250		
Current rated range	[A]	125-160	16-125 (1P), 16-160 (2,3,4P)		250	100-250		12,5-250		
Rated service voltage, (AC)	Ue [V]	220-440			220-440			220-690		
Frequency	f [Hz]	50/60			50/60			50/60		
Rated insulation voltage	Ui [V]	690			800			800		
Rated impulse withstand voltage	Uimp [kV]	8			8			8		
Rated ultimate short-circuit breaking capacity, (Icu)										
(AC) 50-60 Hz 220/230 V	Icu [kA]	-	25	35	85	-	35	85	35	85
(AC) 50-60 Hz 380/415 V	Icu [kA]	-	18	25	40	-	25	40	25	65
(AC) 50-60 Hz 480/500/525 V	Icu [kA]	-	6	17.5	12.5	-	-	10	10	25
(AC) 50-60 Hz 660/690 V	Icu [kA]	-	-	-	6	-	-	4	-	7.5
(DC) 250 V - 2 poles in series	Icu [kA]	-	12.5	20	25	-	25	25	25	40
Rated service short-circuit breaking capacity, (Ics)										
(AC) 50-60 Hz 220/230 V	Ics [kA]	-	25	25	40	-	25	40	27	65
(AC) 50-60 Hz 380/415 V	Ics [kA]	-	18	20	20	-	20	20	19	36
(AC) 50-60 Hz 480/500/525 V	Ics [kA]	-	3	4	7.5	-	-	7.5	7.5	25
(AC) 50-60 Hz 660/690 V	Ics [kA]	-	-	-	3	-	-	2	-	7.5
(DC) 250 V - 2 poles in series	Ics [kA]	-	7	10	13	-	13	13	19	40
Rated short-circuit making capacity	Icm [kA]	2,8	-	-	-	9	-	-	-	-
Rated short-time withstand current for 1s	Icw [kA]	2	-	-	-	3	-	-	-	-
Category of use (EN 60947-2)		-	A		-	A		A		
Calibration temperature		-	50°C		-	50°C		50°C		
Derating 40°C		-	100%		-	100%		100%		
50°C		-	100%		-	100%		100%		
55°C		-	95%		-	94%		94%		
60°C		-	93%		-	91%		91%		
65°C		-	90%		-	88%		88%		
Suitability for isolation		ok			ok			ok		
Electric endurance in number of cycles		10000			10000			10000		
Mechanical endurance in number of operations		20000			20000			30000		
Operating temperature		-25 to +70°C			-25 to +70°C			-25 to +70°C		
Storage temperature		-35 to +70°C			-35 to +70°C			-35 to +70°C		
Power loss (at In for 3P)	[W]	39			60			65		
Reference standard		IEC 60947-3	IEC 60947-2		IEC 60947-3	IEC 60947-2		IEC 60947-2		
Releases: switch		ok	-		ok	-		-		
Releases: TM (thermomagnetic)		-	ok		-	ok		ok		
T fixed, M fixed		-	ok		-	ok		-		
T adjustable, M fixed		-	ok		-	-		-		
T adjustable, M adjustable		-	-		-	ok		ok		
Thermal adjustment value		-	0,63 to 1 x In		-	0,63 to 1 x In		0,63 to 1 x In		
Magnetic adjustment value		-	-		-	6-8-10-13 x In (200A) 5-7-9-11 In (250A)		6-8-10-13 x In		
Releases: LSI (electronic)		-	-		-	-		-		
Long delay		-	-		-	-		-		
Short delay		-	-		-	-		-		
Time delay		-	-		-	-		-		
Terminations										
Standard terminal type		cage			lugs			lugs		
Maximum terminal capacity		95 mm²			185 mm² (cage)			120 mm² (cage)		
Terminal width	mm	-			25			25		
Terminal shields		ok			ok			ok		
Cage terminal		integrated			ok			ok		
Extended connections		ok			ok			ok		
Rear connections		no			ok			ok		
Dimensions										
Height	mm	130			165			165		
Width	1P mm	-	25	-	-			-		
	2P mm	-	50	-	-			-		
	3P mm	75			105			105		
	4P mm	100			140			140		
Depth	mm	68			68			68		
Weight	1P kg	-	0,29	-	-			-		
	2P kg	-	0,48	-	-			-		
	3P kg	0,715			1,3			1,5		
	4P kg	0,95			1,6			1,9		

h250 LSI			h400 TM			h630 LSI			h1000 LSI			h1600 LSI		
MCCB			MCCB			Switch	MCCB		Switch	MCCB		Switch	MCCB	
HNC	HEC		HHD	HND	HKD	HCD	HND	HED	HCE	HNE	HEE	HCF	HNF	HEF
3-4			3-4			3-4			3-4			3-4		
250			400			630			1000			1600		
40-125-250			250-400			400-630	250-400-630		630-800-1000			1250-1600		
220-690			220-690			220-690			220-690			220-690		
50/60			50/60			50/60			50/60			50/60		
800			800			800			800			800		
8			8			8			8			8		
85	100		35	85	85	-	85	100	-	85 (800A) 75 (1000A)	100	-	100	100
50	70		25	50	70	-	50	70	-	50	70	-	50	70
25	45		10	30		-	30	30	-	30	30	-	45	65
7,5	20		7,5	20		-	20	20	-	20	20	-	25	45
-	-		25	40		-			-	-	-	-	-	-
85	100		35	85		-	85	85	-	85 (800A) 75 (1000A)	100 (800A) 75 (1000A)	-	75	75
25	70		25	50	50	-	50	50	-	50	50	-	50	50
10	45		10	30		-	30	30	-	30	30	-	45	50
7,5	15		7,5	15		-	15	15	-	20	20	-	25	34
-	-		25	40		-			-	-	-	-	-	-
-			-	-		9	-	-	20	-	-	45	-	-
-			-	-		5 (0,3s)	-	-	10 (0,3s)	-	-	20 (0,3s)	-	-
A			A			-	B(250-400A) - A(630A)		-	B(800A) - A(1000A)		-	B	
40°C			50°C			-	40°C		-	40°C		-	40°C	
100%			100%			-	100%		-	100%		-	100%	
95%			100%			-	100%		-	100%		-	100%	
90%			95%			-	95%		-	95%		-	95%	
80%			92%			-	90%		-	90%		-	90%	
80%			89%			-	80%		-	80%		-	80%	
ok			ok			ok			ok			ok		
10000			4500			4500			4500			4500		
30000			15000			15000			15000			15000		
-25 to +70°C			-25 to +70°C			-25 to +70°C			-25 to +70°C			-25 to +70°C		
-35 to +70°C			-35 to +70°C			-35 to +70°C			-35 to +70°C			-35 to +70°C		
75			75			150			150			170		
IEC 60947-2			IEC 60947-2			IEC 60947-3	IEC 60947-2		IEC 60947-3	IEC 60947-2		IEC 60947-3	IEC 60947-2	
-			-			ok	-		ok	-		ok	-	
-			ok			-			-			-		
-			-			-			-			-		
-			-			-			-			-		
-			ok			-			-			-		
-			0,63 to 1 x In			-			-			-		
-			6-8-10-12 x In			-			-			-		
-			-			-	ok		-	ok		-	ok	
0,4 to 1 x Ir			-			-	0,4 to 1 x Ir		-	0,4 to 1 x Ir		-	0,4 to 1 x Ir	
2,5 to 10 x Ir			-			-	2,5 to 10 x Ir (250-400A) 2,5 to 8 x Ir (630A)		-	2,5 to 10 x Ir (800A) 2,5 to 8 x Ir (1000A)		-	2,5 to 10 x Ir	
0,1 - 0,2s			-			-	0,1 - 0,2s		-	0,1 - 0,2s		-	0,1 - 0,2s	
lugs			lugs			lugs			lugs			lugs		
120 mm² (cage)			240 mm² (cage)			-			-			-		
25			30			30			45			45		
ok			ok			ok			ok			ok		
ok			ok			-			-			-		
ok			ok			integrated			integrated			integrated		
ok			ok			ok			ok			ok		
165			260			260			273/433			370/570		
-			-			-			-			-		
-			-			-			-			-		
105			140			140			210			210		
140			185			185			280			280		
97			97			97			99,5			140		
-			-			-			-			-		
-			-			-			-			-		
2,5			4,2			4,3			11			27		
3,3			5,6			5,7			14,8			31		

Product Frame		Add-on blocks h3			
		x160	x160	x250	h630
Number of poles		3, 4	3, 4	4	4
Tripping access		mechanical	mechanical	mechanical	mechanical
Standards CEI/EN 60947-2 appendix B		ok	ok	ok	ok
Electrical characteristics					
Max rated current (40°) I _n A	I _n	125A	125 - 160A	160 - 250A	400A - 500A
Rated service voltage U _e V AC (50/60Hz)	U _e	240-415V	240-415V	240-415V	240-415V
Mechanical characteristics					
Top and bottom supply		ok	ok	ok	ok
For tripping, no additional external electrical sources		ok	ok	ok	ok
Possible operating with 2 active phases		ok	ok	ok	ok
Settings					
Sensitivity I _{Δn}	I _{Δn} (A)	300mA	0.03, 0.1, 0.3, 1, 3, 6A	0.03, 0.1, 0.3, 1, 3, 6A	0.03, 0.1, 0.3, 1, 3, 6A
Time delay Δt	Δt (s)	inst.	inst., 0.06, 0.15, 0.3, 0.5, 1	inst., 0.06, 0.15, 0.3, 0.5, 1	inst., 0.06, 0.15, 0.3, 0.5, 1
Max. opening time	ms	10	10	10	10
Delay add-on block is not possible if I _{Δn} = 30mA		/	ok	ok	ok
Selective product		no	ok	ok	ok
Mechanical test button		ok	ok	ok	ok
Isolating test without cable removal		ok	ok	ok	ok
Electrical test button		ok	ok	ok	ok
Reset button		ok	ok	ok	ok
Sealable setting button		no	ok	ok	ok
Isolation level signaling by led 25 and 50%		no	ok	ok	ok
In running signalisation by led		no	ok	ok	ok
Residual default signaling contact		ok	ok	ok	ok
Signaling contact 50% I _{Δn}		no	ok	ok	ok
Anti-transient	type AC	ok	ok	ok	ok
Pulsating current	type A	ok	ok	ok	ok
High immunity	type HI	yes	yes	yes	yes
-25°C		ok	ok	ok	ok
Accessories and connection					
Steel terminal cage (x3/x4)		ok (included)	ok (included)	accessories	accessories
Connection by lugs		no	no	ok	ok
Extended connections (x4)		ok	ok	ok	ok
Spreaders (x4)		ok	ok	ok	ok
Terminal covers (3P/4P)		no	no	ok	ok
Interphase barriers (x3)		ok	ok	ok	ok
Rigid cables connection capacity mm ²		4 - 95	4 - 95	35-185	35-240
Flexible cables connection capacity mm ² (with terminal)		4 - 70	4 - 70	35-150	35-185
Tightening torque Nm		6	6	12	22
Copper bar (width) in mm		no	no	25	30
Mounting					
Clips on DIN rail		ok	ok	no	no
Fixed on mounting plate		no	no	ok	ok
Fixation type		side	side	bottom	bottom
Mounting by customer		ok	ok	ok	ok
Dimensions and weight					
Dimensions (LxHxD) in mm Side mounted 4P	L	100	100	140	184
	H	165	165	107,5	133
	D	95	95	85	110
Weight	3P	1,4	1,4	/	/
	4P	1,55	1,55	1,2	2,4

			Serie	HDx	HHx	HNx
	Pole	Trip unit	In A	18kA	25kA	40kA
x160	3P	TM fix/fix	16	HDA016Z	HHA016Z	HNA016Z
			20	HDA020Z	HHA020Z	HNA020Z
			25	HDA025Z	HHA025Z	HNA025Z
			32	HDA032Z	HHA032Z	HNA032Z
			40	HDA040Z	HHA040Z	HNA040Z
			50	HDA050Z	HHA050Z	HNA050Z
			63	HDA063Z	HHA063Z	HNA063Z
			80	HDA080Z	HHA080Z	HNA080Z
			100	HDA100Z	HHA100Z	HNA100Z
			125	HDA125Z	HHA125Z	HNA125Z
			160	HDA160Z	HHA160Z	HNA160Z
		TM adj/fix	16-20-25	HDA025U	HHA025U	HNA025U
			25-32-40	HDA040U	HHA040U	HNA040U
			40-50-63	HDA063U	HHA063U	HNA063U
			50-63-80	HDA080U	HHA080U	HNA080U
			63-80-100	HDA100U	HHA100U	HNA100U
			80-100-125	HDA125U	HHA125U	HNA125U
			100-125-160	HDA160U	HHA160U	HNA160U
	4P 100%	TM fix/fix	16	HDA017Z	HHA017Z	HNA017Z
			20	HDA021Z	HHA021Z	HNA021Z
			25	HDA026Z	HHA026Z	HNA026Z
			32	HDA033Z	HHA033Z	HNA033Z
			40	HDA041Z	HHA041Z	HNA041Z
			50	HDA051Z	HHA051Z	HNA051Z
			63	HDA064Z	HHA064Z	HNA064Z
			80	HDA081Z	HHA081Z	HNA081Z
			100	HDA101Z	HHA101Z	HNA101Z
			125	HDA126Z	HHA126Z	HNA126Z
			160	HDA161Z	HHA161Z	HNA161Z
		TM adj/fix	16-20-25	HDA026U	HHA026U	HNA026U
			25-32-40	HDA041U	HHA041U	HNA041U
			40-50-63	HDA064U	HHA064U	HNA064U
			50-63-80	HDA081U	HHA081U	HNA081U
			63-80-100	HDA101U	HHA101U	HNA101U
			80-100-125	HDA126U	HHA126U	HNA126U
			100-125-160	HDA161U	HHA161U	HNA161U
x250	3P	TM fix/fix	100		HHB100Z	HNB100Z
			125		HHB125Z	HNB125Z
			160		HHB160Z	HNB160Z
			200		HHB200Z	HNB200Z
			250		HHB250Z	HNB250Z
		TM adj/adj	63-80-100			HNB100U
			80-100-125			HNB125U
			100-125-160			HNB160U
			125-160-200			HNB200U
			160-200-250			HNB250U
	4P 0% - 4P 100%	TM fix/fix	100		HHB101Z	HNB101Z
			125		HHB126Z	HNB126Z
			160		HHB161Z	HNB161Z
			200		HHB201Z	HNB201Z
			250		HHB251Z	HNB251Z
		TM adj/adj	63-80-100			HNB101U
			80-100-125			HNB126U
			100-125-160			HNB161U
			125-160-200			HNB201U
			160-200-250			HNB251U

	Pole	Trip unit	Serie	HHx	HNx	HEx
			In A	25kA	30kA - 50kA	65kA* - 70kA
h250	3P	TM adj/adj	12,5-16-20	HHG020U	HNG020U	
			20-25-32	HHG032U	HNG032U	
			32-40-50	HHG050U		HEG050U*
			40-50-63	HHG063U	HNG063U	HEG063U*
			63-80-100	HHG100U	HNG100U	HEG100U*
			80-100-125	HHG125U	HNG125U	HEG125U*
			100-125-160	HHG160U	HNG160U	HEG160U*
			125-160-200	HHG200U	HNG200U	HEG200U*
			160-200-250	HHG250U	HNG250U	HEG250U*
		LSI	16-40		HNC040U	HEC040U
			50-125		HNC125U	HEC125U
			100-250		HNC250U	HEC250U
	4P 0%	TM adj/adj	12,5-16-20		HNG021U	
			20-25-32		HNG033U	
			32-40-50		HNG051U	HEG051U
			40-50-63		HNG064U	HEG064U
			63-80-100		HNG101U	HEG101U
			80-100-125		HNG126U	HEG126U
			100-125-160		HNG161U	HEG161U
			125-160-200		HNG201U	HEG201U
			160-200-250		HNG251U	HEG251U
		LSI	16-40		HNC041U	HEC041U
			50-125		HNC126U	HEC126U
			100-250		HNC251U	HEC251U
h400 - h630	3P	TM adj/adj	160-200-250	HHD250U	HND250U	
			250-320-400	HHD400U	HND400U	
			160-400			HED400U
			250-630		HND630U	HED630U
	4P 0%	LSI	160-400		HND400H	
			250-630		HND631U	
h1000	3P	LSI	630		HNE630U	
			800		HNE800U	HEE800U
			1000		HNE970U	HEE970U
	4P 0% - 50% - 100%	LSI	630		HNE631U	
			800		HNE801U	HEE801U
			1000		HNE971U	HEE971U
h1600	3P	LSI	1250		HNF980U	HEF980U
			1600		HNF990U	HEF990U
	4P 0% - 50% - 100%	LSI	1250		HNF981U	HEF981U
			1600		HNF991U	HEF991U

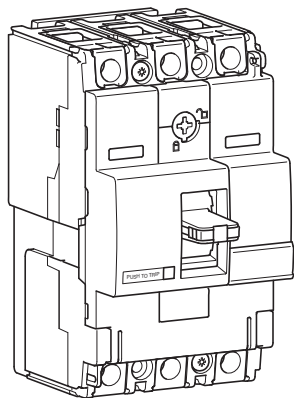
Serie				x160	x250	h630	h1000	h1600
Product	Version	Poles	In A					
Trip-free switches		3 poles	125	HCA125Z				
			160	HCA160Z				
		4 poles	125	HCA126Z				
			160	HCA161Z				
		3 poles	250		HCB250Z			
		4 poles	250		HCB251Z			
		3 poles	400			HCD400U		
			630			HCD630U		
		4 poles	400			HCD401U		
			630			HCD631U		
		3 poles	800				HCE800U	
			1000				HCE970U	
		4 poles	800				HCE801U	
			1000				HCE971U	
		3 poles	1250					HCF980U
			1600					HCF990U
		4 poles	1250					HCF981U
			1600					HCF991U
Add-on blocks	Side mounted	3 poles	125 fixed	HBA127H				
			125 adjustable	HBA125H				
			160 adjustable	HBA160H				
		4 poles	125 fixed	HBA128H				
			125 adjustable	HBA126H				
			160 adjustable	HBA161H				
	Bottom mounted	4 poles	160 adjustable		HBB161H			
			250 adjustable		HBB251H			
			400 adjustable			HBD401H		
			500 adjustable			HBD631H		

Switches and accessories for

references guide

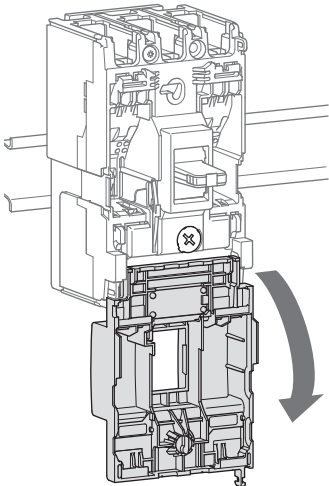
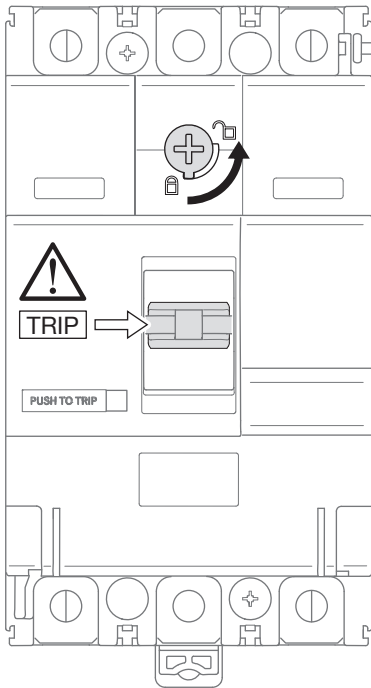
				Switches and accessories					
Products	Version	pole	In A / Ue V	x160	x250	h250	h400-h630	h1000	h1600
Auxiliaries	Shunt trip release	3/4P	24V DC	HXA001H		HXC001H			HXF001H
			200-240V AC	HXA004H		HXC004H			HXF004H
	Undervoltage release	3/4P	24V DC	HXA011H		HXC011H		HXE011H	
			200-240V AC	HXA014H		HXC014H		HXE014H	
			380-450V AC	HXA015H		HXC015H		HXE015H	
	Auxiliary contact	3/4P	1NO+1NC	HXA021H		HXC021H			
	Alarm contact	3/4P	1NO+1NC	HXA024H		HXC024H			
	Auxiliary contact - low level	3/4P	1NO+1NC	HXA025H		HXC025H			
	Alarm contact - low level	3/4P	1NO+1NC	HXA026H		HXC026H			
	Direct rotary handle			HXA030H	HXB030H	HXC030H	HXD030H	HXE030H	HXF030H
	Extended rotary handle			HXA031H	HXB031H	HXC031H	HXD031H	HXE031H	HXF031H
Connections	Padlock			HXA039H		HXC039H	HXD039H		HXF039H
	Motor operator	3/4P	24-48V DC	-	HXB040H	HXC040H	HXD040H	HXE040H	HXF040H
			200-240V AC	-	HXB042H	HXC042H	HXD042H	HXE042H	HXF042H
	Extended spreader connection	3P		HYA014H	HYB011H	HYC011H	HYD011H (250-400A) HYD014H (630A)	-	-
		4P		HYA015H	HYB012H	-	HYD012H (250-400A) HYD015H (630A)	-	-
	Interphase barrier	3/4P	short	HYA019H		-	-	-	-
			long	HYB019H		included	included	included	included
	DIN rail adaptor	3/4P		HYA033H	-	-	-	-	-

MCCBs

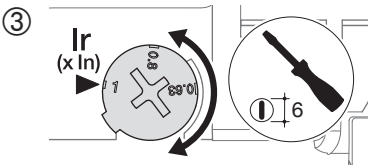


		220/240V AC IEC 60 947-2	380/415V AC IEC 60 947-2
HDA	Icu	25 kA	18 kA
	Ics	25 kA	18 kA
HHA	Icu	35 kA	25 kA
	Ics	25 kA	20 kA
HNA	Icu	85 kA	40 kA
	Ics	30 kA	20 kA
HCA	Icm	-	2.8 kA
	Icw	-	2 kA - 1s

Magnetic and thermal settings



For DIN rail mounting, use HYA033H.



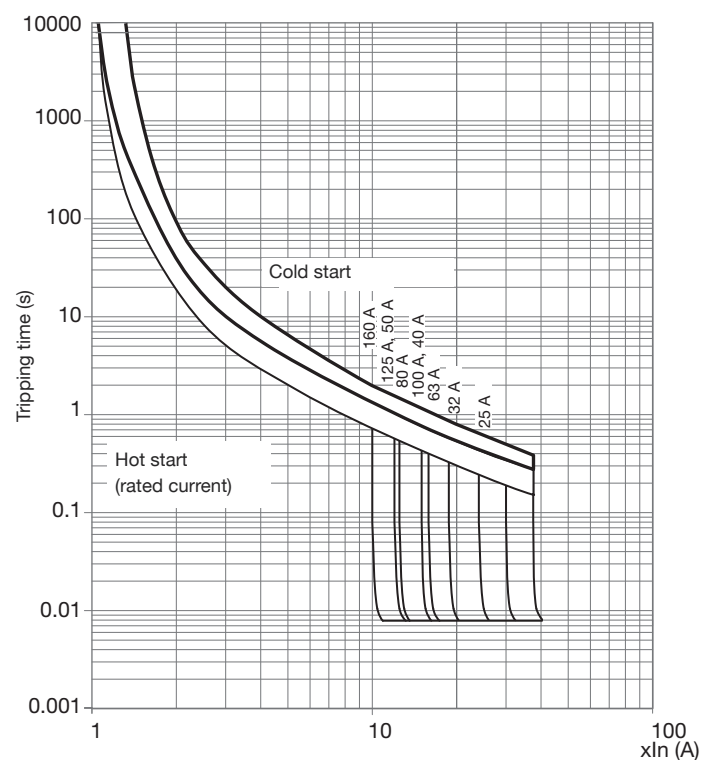
Thermal adjustment from 0,63 to 1 x In

Magnetic adjustment fixed > 10 x In

In	15 - 50 A	63 - 80 A	100 - 125 A	160 A
Imag	600 A	1000 A	1500 A	1600 A

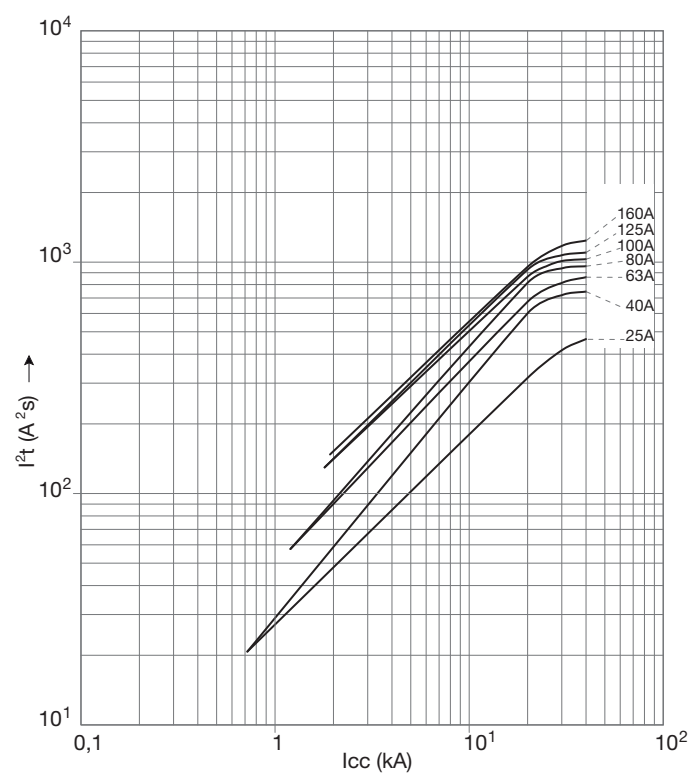
Tripping curve

MCCB x160



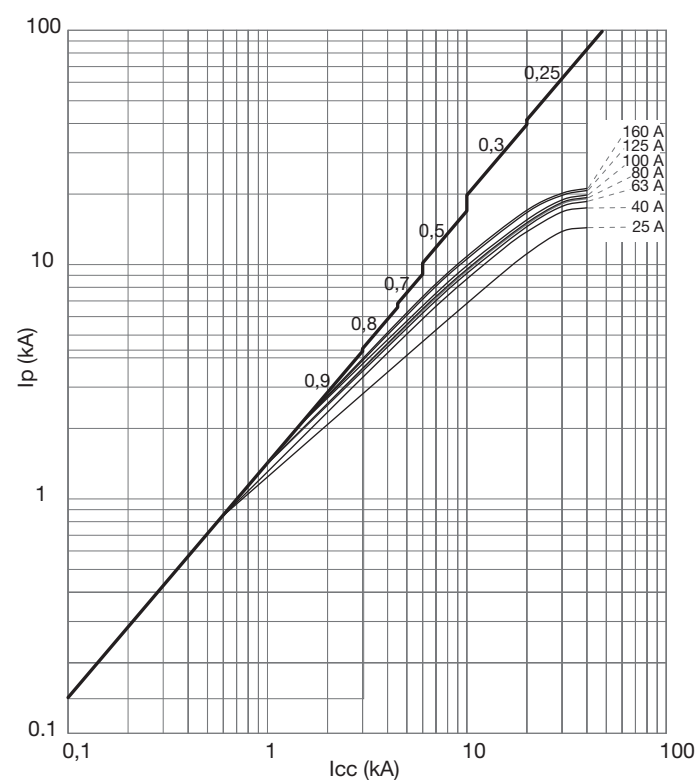
Thermal constraint curve at 400V (Let-through energy)

MCCB x160



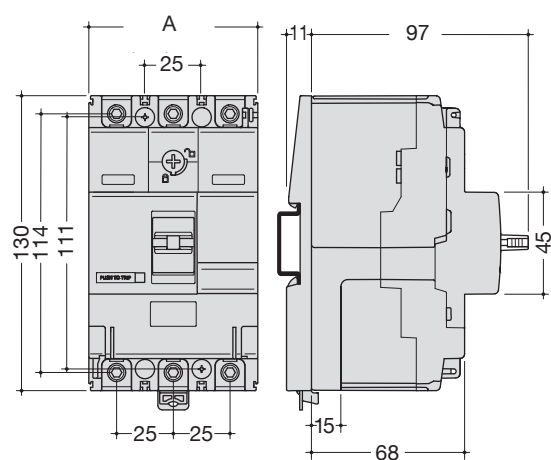
Current limiting curve at 400V (Let-through pick current)

MCCB x160



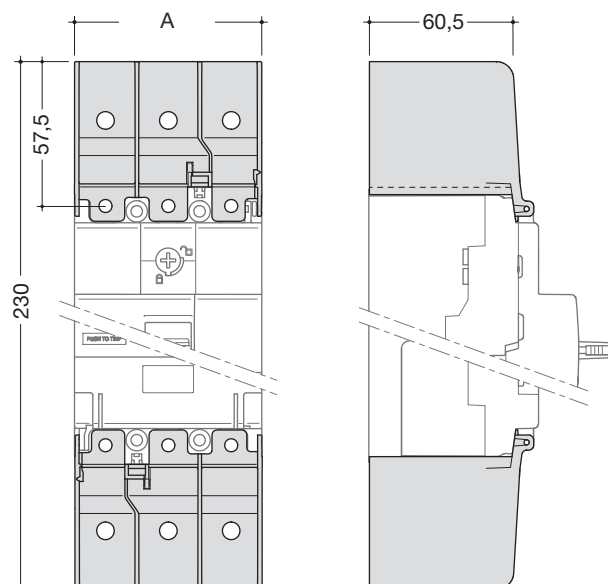
Dimensions

MCCB x160



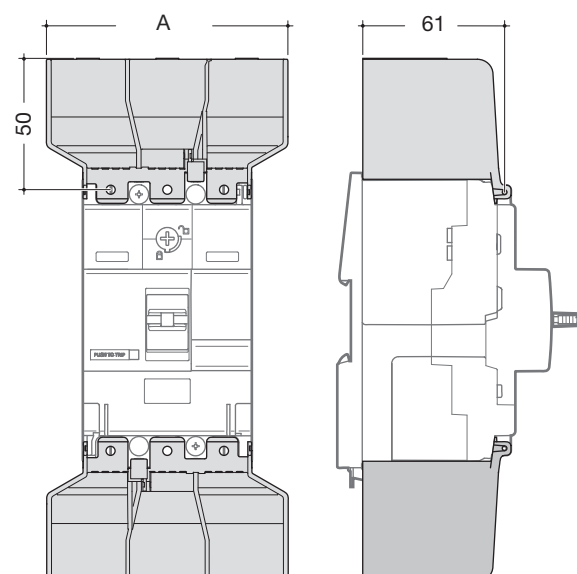
	A (mm)	B (mm)	C (mm)
1P	24.8	25	111
2P	49.5	25	111
3P	74.5	25	111
4P	99.5	25	111

Terminal covers for extended straight connections



	A (mm)	B (mm)	C (mm)
1P	24.4	57.5	60.5
2P	49.5	57.5	60.5
3P	74.5	57.5	60.5
4P	99.5	57.5	60.5

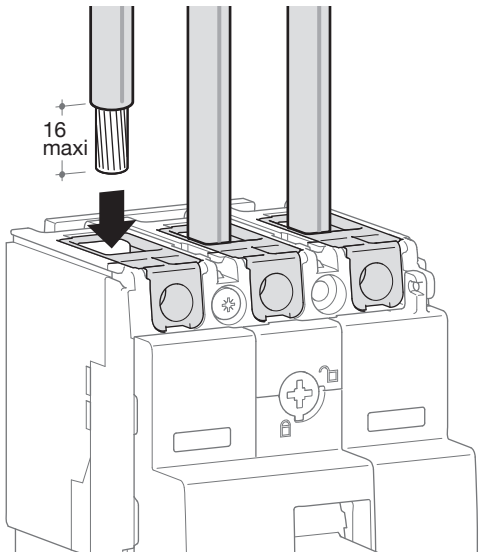
Terminal cover for extended spreader connections



	A (mm)	B (mm)	C (mm)
3P	106.5	50	60.5
4P	141.5	50	60.5

Connection

Connection with end lugs



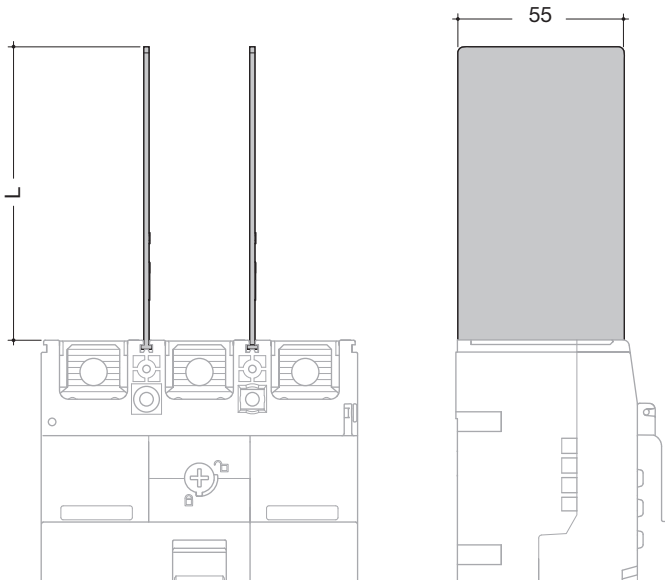
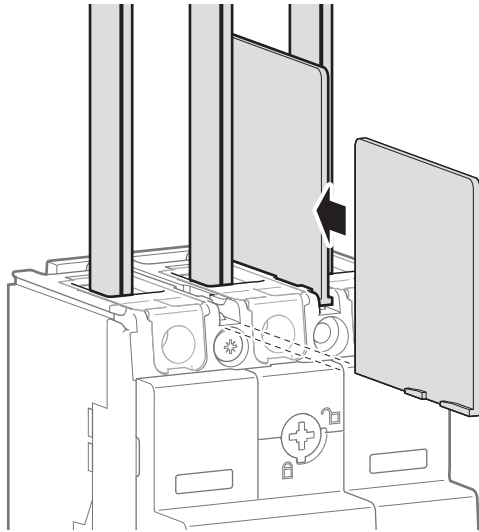
Terminals for copper conductors (standard)

	min. 6 mm ²	max. 70 mm ²
	min. 6 mm ²	max. 95 mm ²
	4	6 Nm

Terminals for aluminium / copper conductors (accessory)
HYA005H, HYA006H

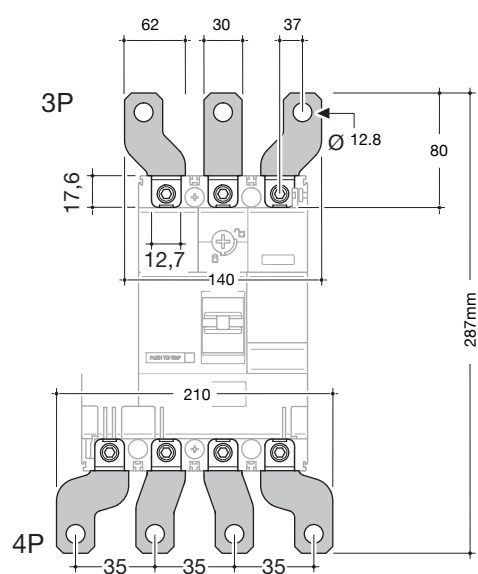
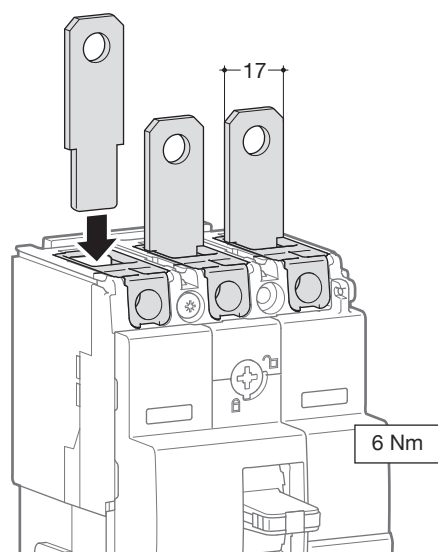
	min. 35 mm ²	max. 70 mm ²
	5	10 Nm

Interphase barriers

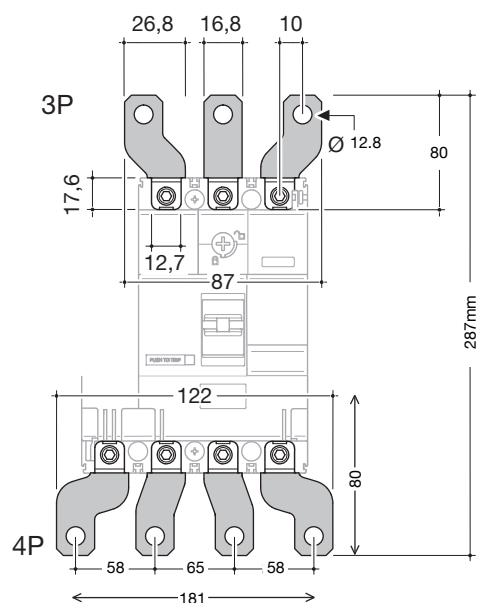
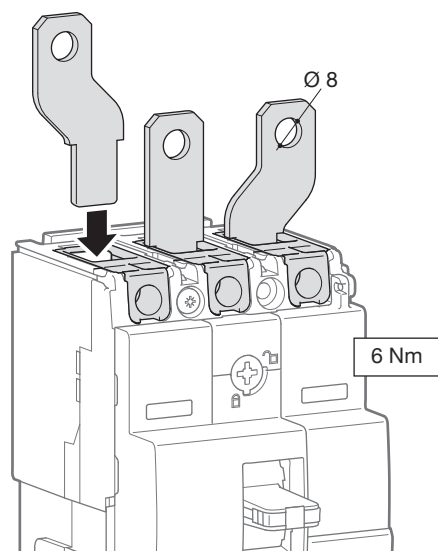


	L (mm)
HYA019H	50
HYB019H	97

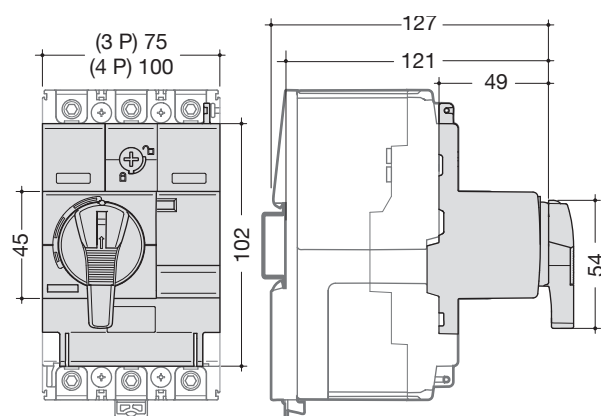
Extended straight connections



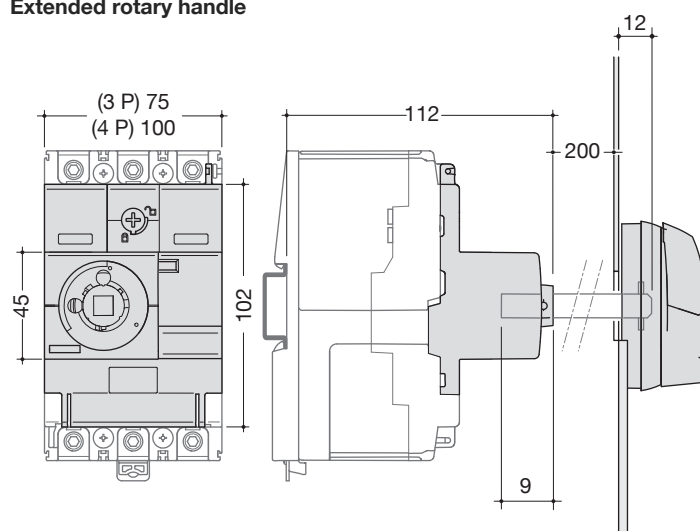
Extended spreader connections



Direct rotary handle

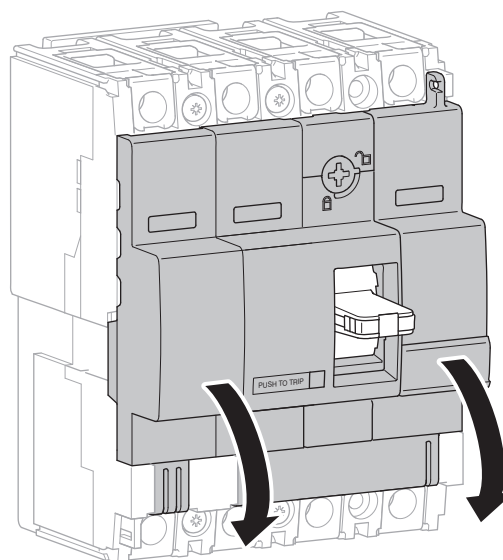
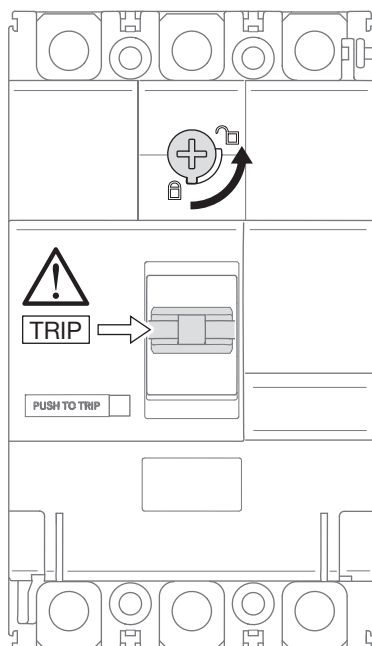


Extended rotary handle



Auxiliaries

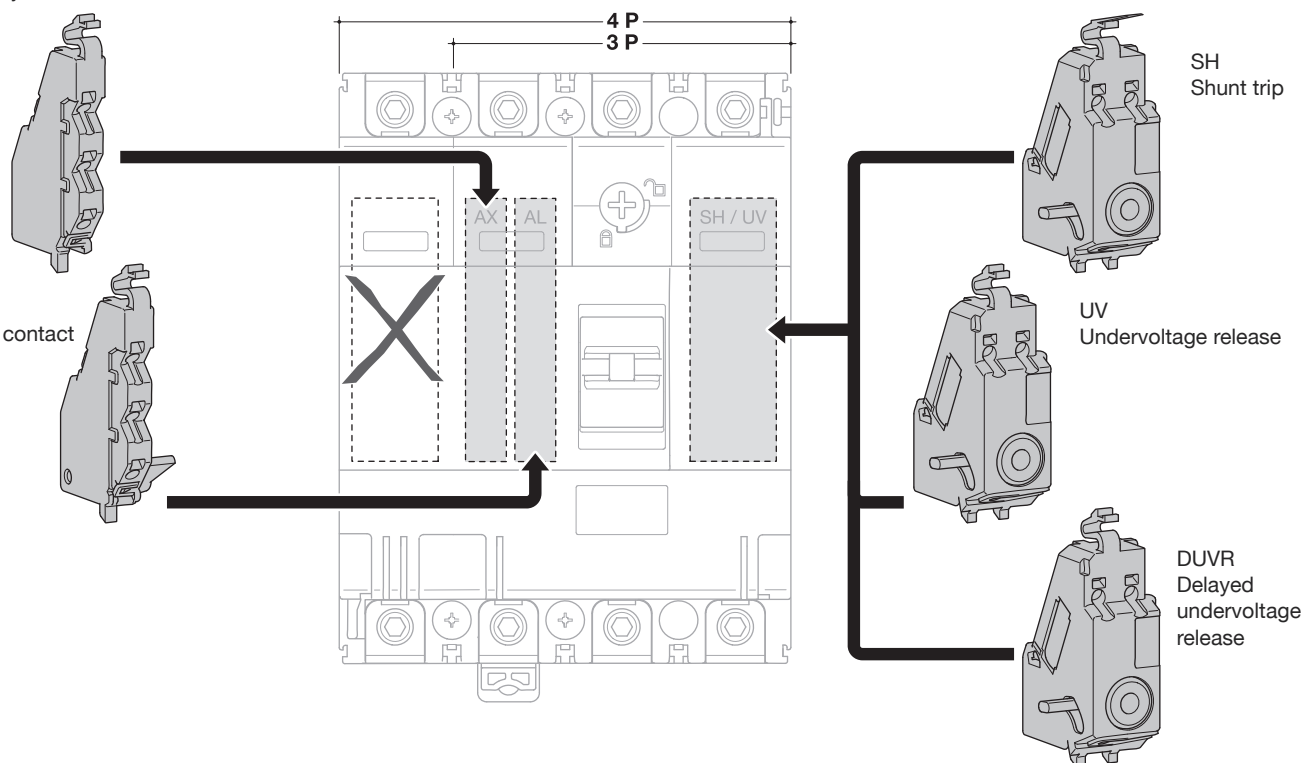
Auxiliaries for MCCBs and trip-free switches

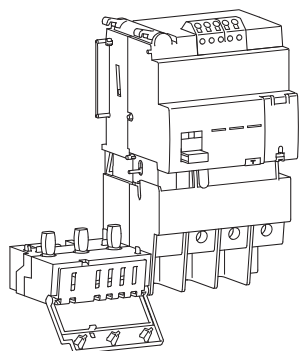


Mounting combination for auxiliaries and releases

AX
Auxiliary contact

AL
Alarm contact





When associated with MCCB, the add-on block provides an earth fault protection and protects against electrical shocks by direct or indirect contacts.

The add-on blocks are protected against nuisance tripping caused by transient voltages. It's able to detect sinusoidal alternating currents and residual pulsating direct currents (A type ). It also avoids miss tripping (HI type - High Immunity).

Characteristics

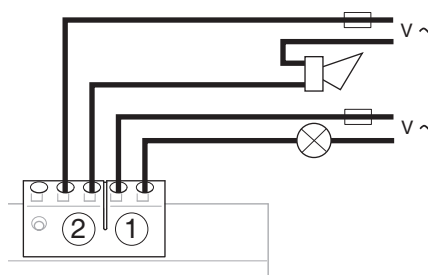
Reset button :
Signals add-on block tripping and must be acknowledged before switching on the installation.

Test button for differential functioning :
Allows to check the electrical operating of the MCCB / Add-on block association.

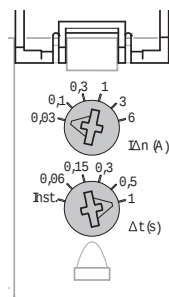
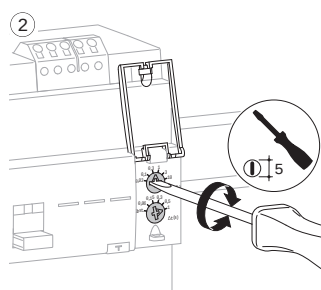
Mechanical test button :
Allows to check the mechanical operating of the MCCB / Add-on block association.

LED signaling default current level in the installation:
25% (orange) and 50% (red) $I_{\Delta n}$; green light to signal correct operating.

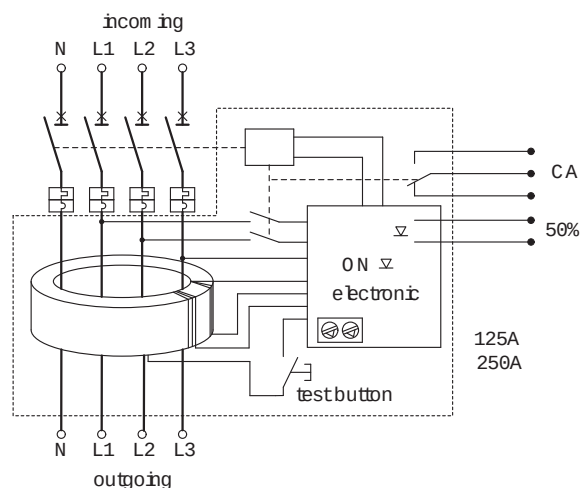
Remote tripping and advanced warning (50% $I_{\Delta n}$) signaling thanks to these contacts:



Earth leakage current ($I_{\Delta n}$) and delay (Δt) setting

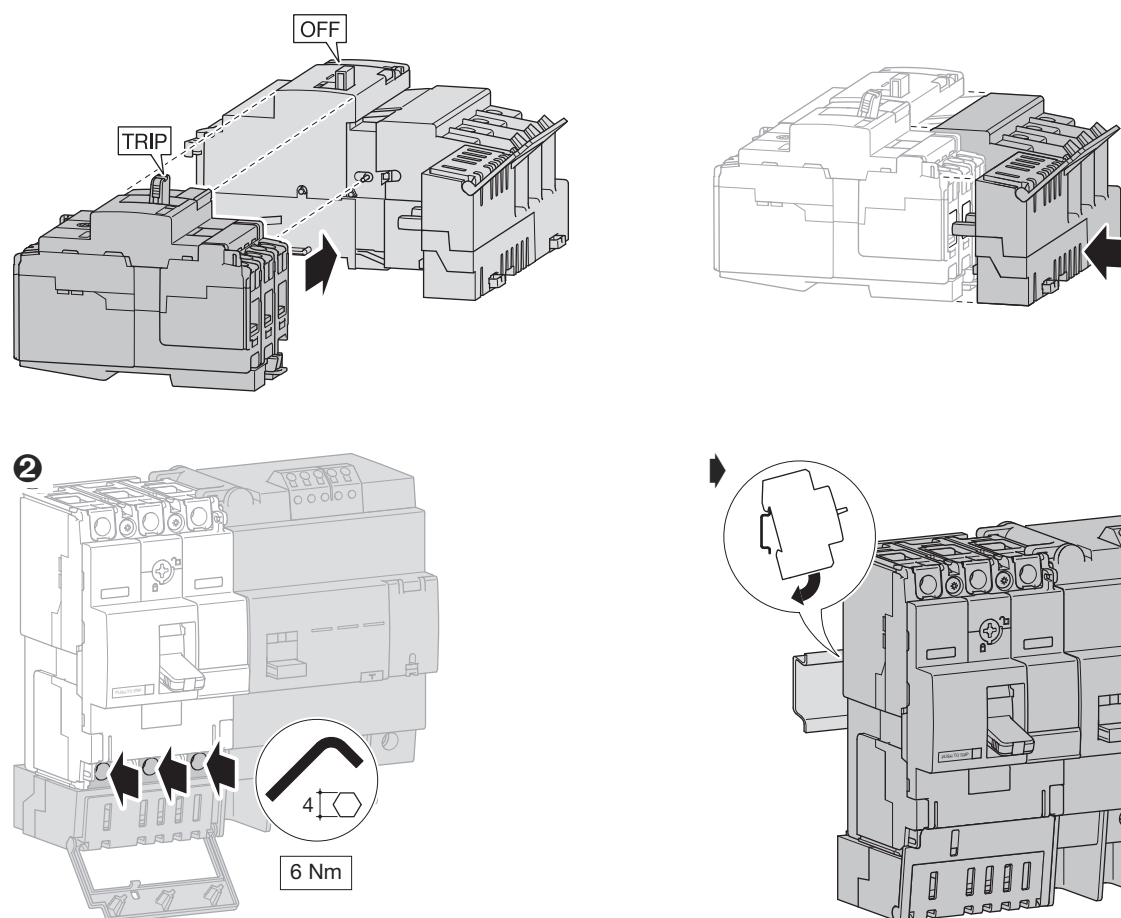


Add-on block operating



S (Δt)	A ($I_{\Delta n}$)						
		0,03	0,1	0,3	1	3	6
	Inst.	OK	OK	OK	OK	OK	OK
	0.06	no	OK	OK	OK	OK	OK
	0.15	no	OK	OK	OK	OK	OK
	0.3	no	OK	OK	OK	OK	OK
	0.5	no	OK	OK	OK	OK	OK
	1	no	OK	OK	OK	OK	OK

Add-on block mounting

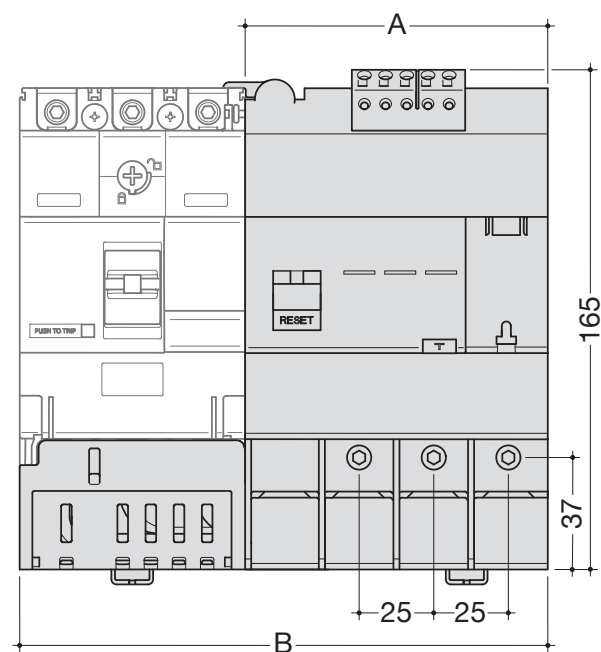


Exclusive drawer assembly system allows quick mounting and makes MCCB and add-on block association a complete monoblock unit.

Reinforced insulation connexion (class II)

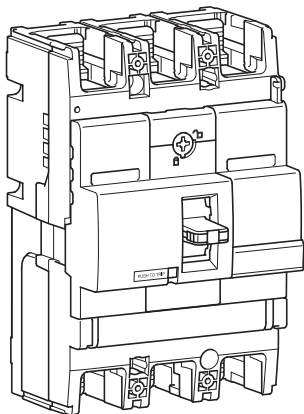
System avoids the omission of terminal tightening

Dimensions



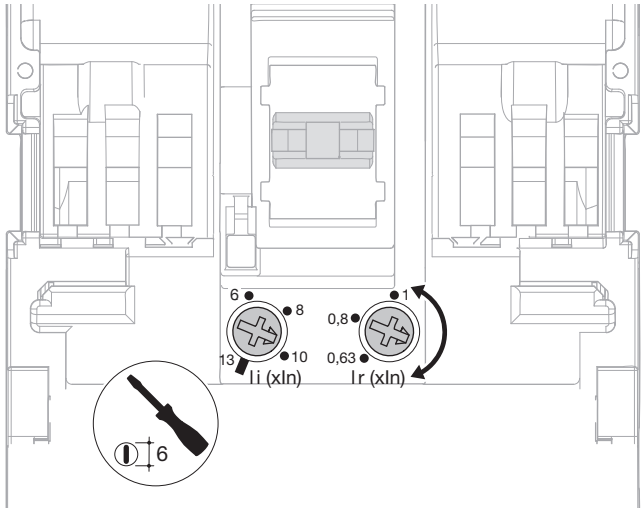
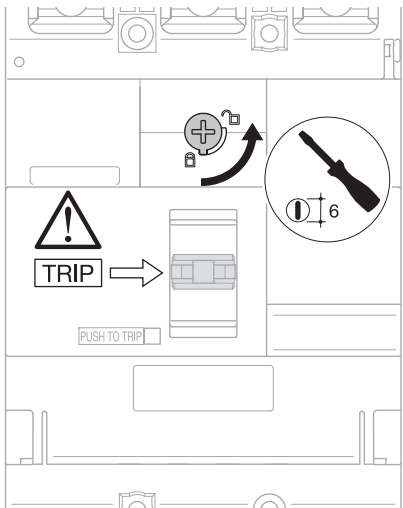
	3P	4P
A (mm)	100	100
B (mm)	174.5	199.5

MCCBs



		220/240V AC IEC 60 947-2	380/415V AC IEC 60 947-2
HHB	Icu	35 kA	25 kA
	Ics	25 kA	40 kA
HNB	Icu	85 kA	40 kA
	Ics	40 kA	20 kA
HCB	Icm	-	9 kA
	Icw	-	3 kA - 1 s

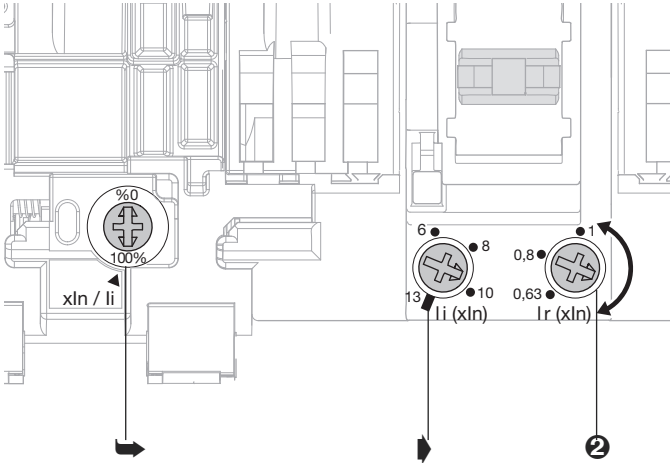
Magnetic and thermal settings



Thermal adjustment from 0.63 to 1 x In

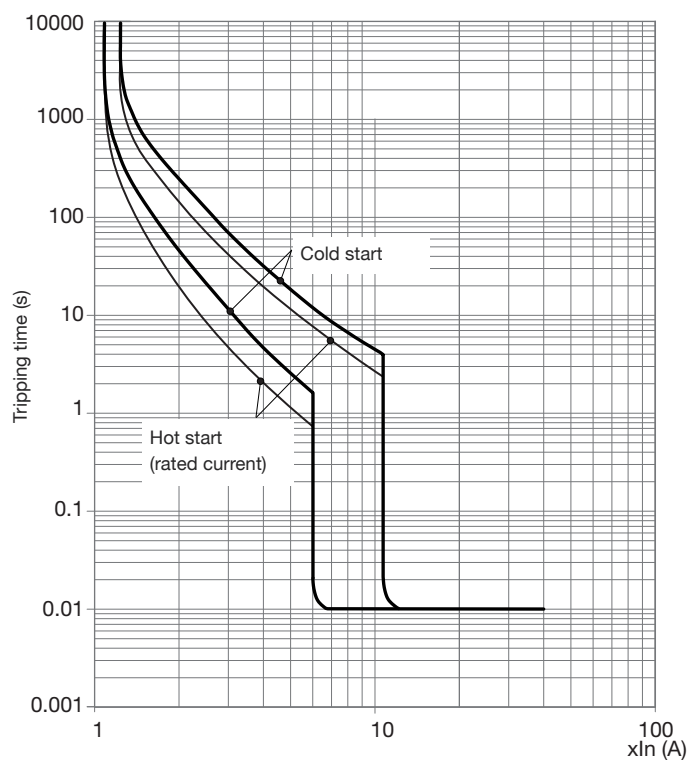
Magnetic adjustment from 6 to 13 x In (100 - 200A)
from 5 to 11 x In (250A)

	100 - 200A	250A
I _r (x I _n) ↺	0.63 - 0.8 - 1 x I _n	
I _i (x I _n) ↻	6 - 8 - 10 - 13 x I _n	5 - 7 - 9 - 11 x I _n
x I _n /I _i ↗	0 - 100%	
	0 - 60%	



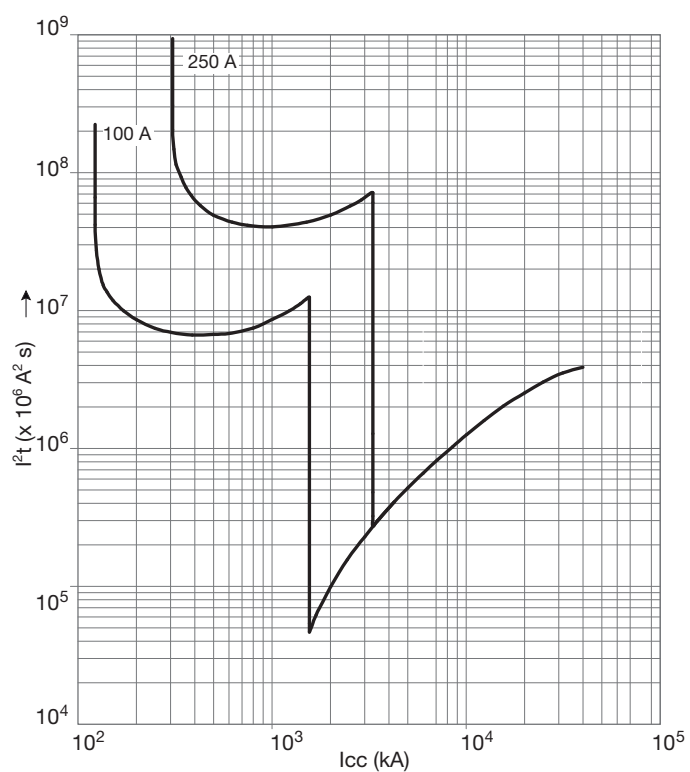
Tripping curve

MCCB x250



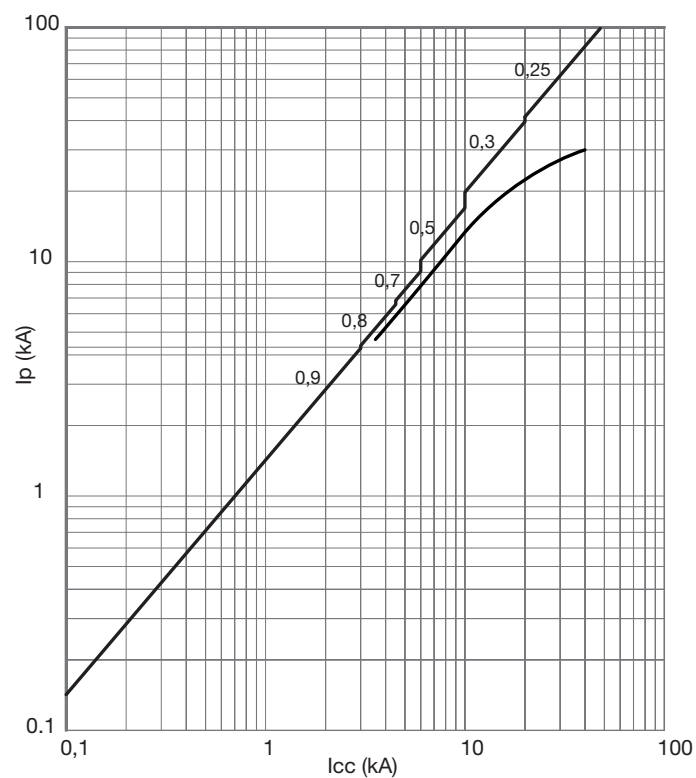
Thermal constraint curve at 400V (Let-through energy)

MCCB x250



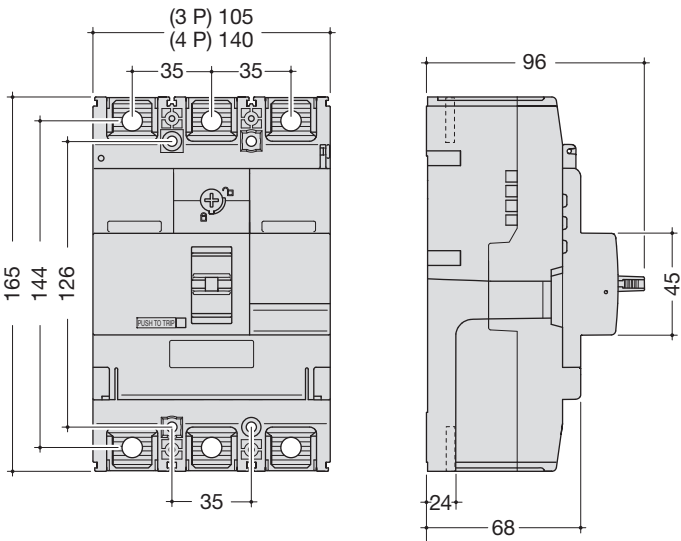
Current limiting curve at 400V (Let-through pick current)

MCCB x250

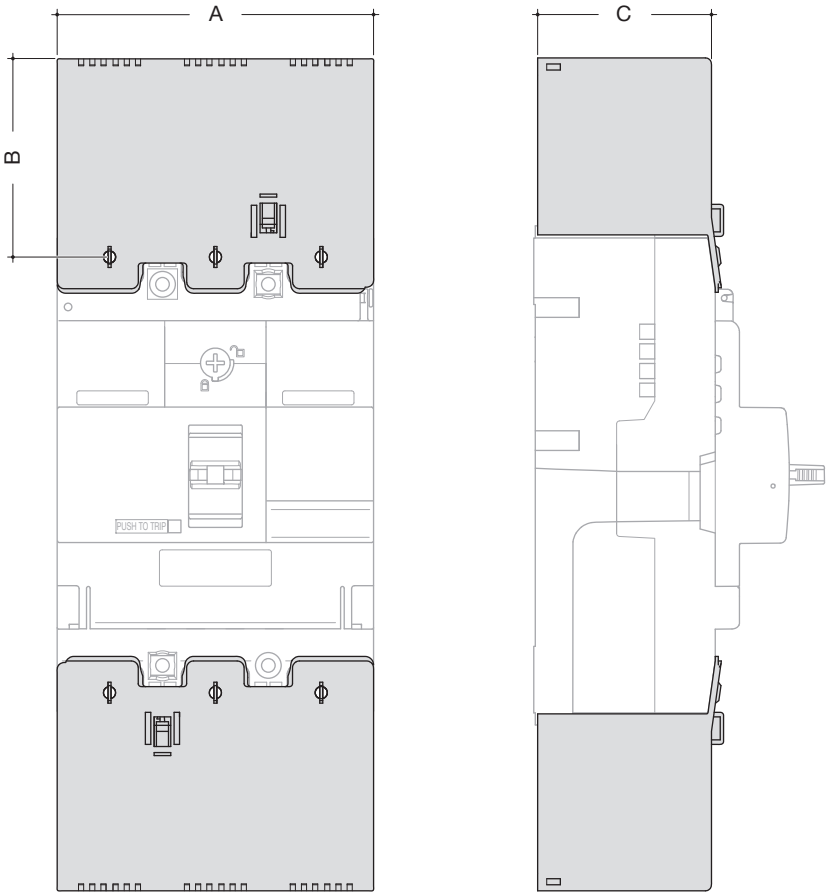


Dimensions

MCCB x250



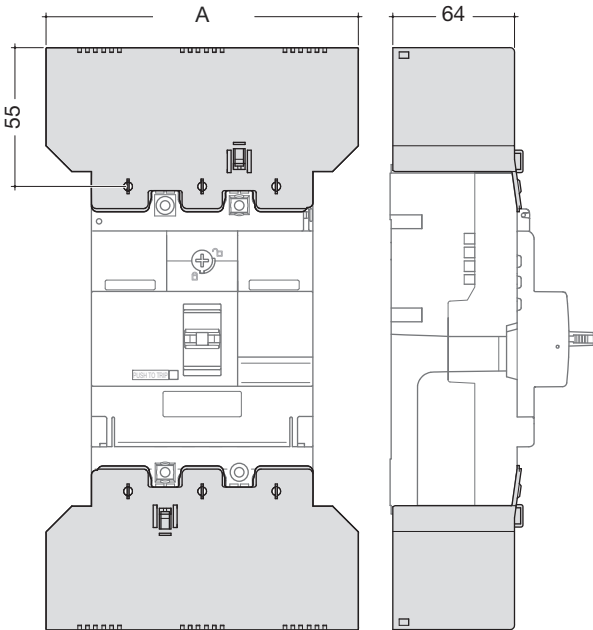
Terminal covers for extended straight connections



	A (mm)	B (mm)	C (mm)
3P	105	54.5	64
4P	140	54.5	64

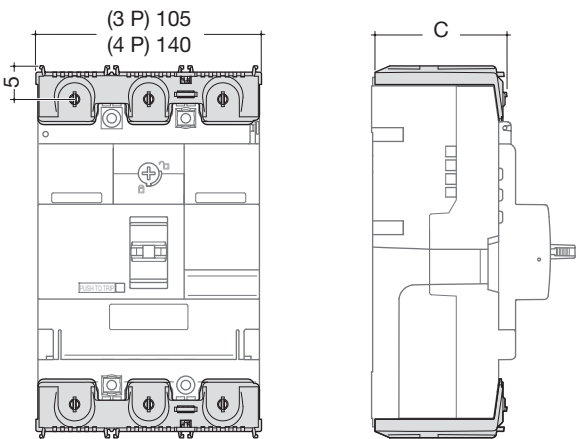
Accessories

Terminal cover for extended spreader connections



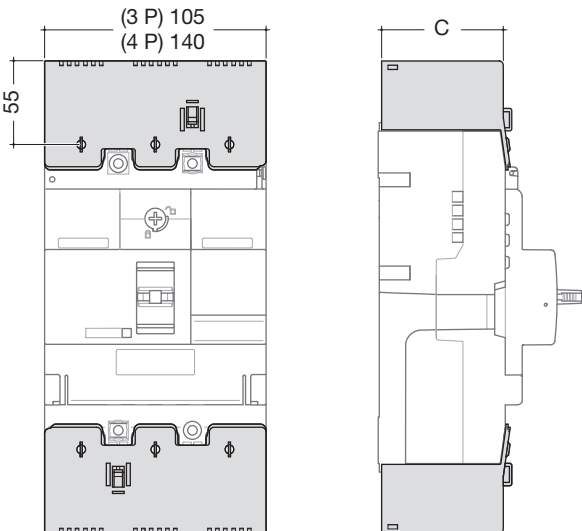
	A (mm)	B (mm)	C (mm)
3P	147.5	54.5	64
4P	196	54.5	64

Terminal cover for rear connections



	A (mm)	B (mm)	C (mm)
3P	105	5	64
4P	140	5	64

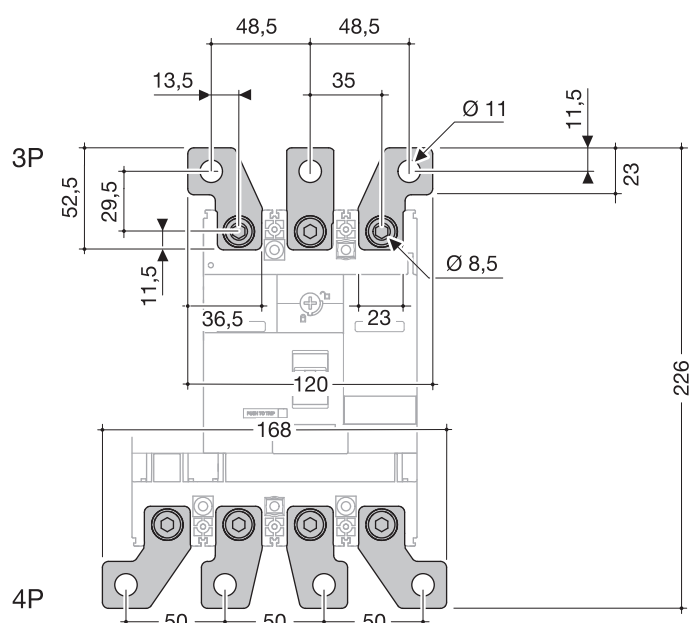
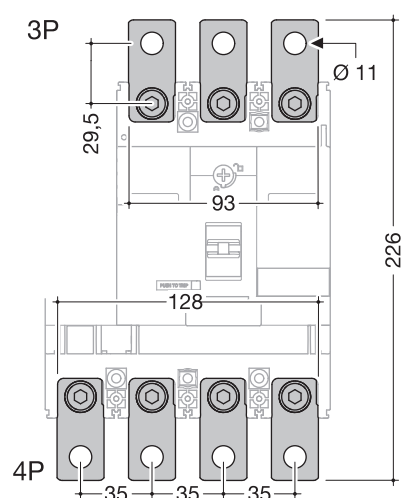
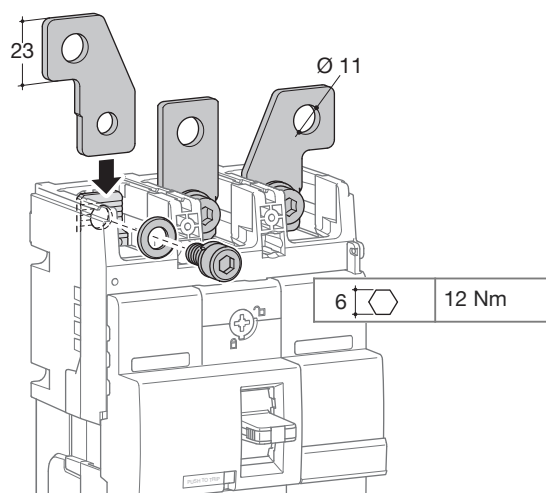
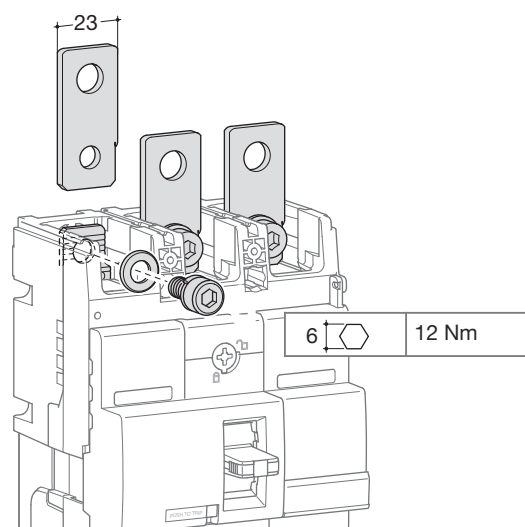
Terminal covers for collar terminals



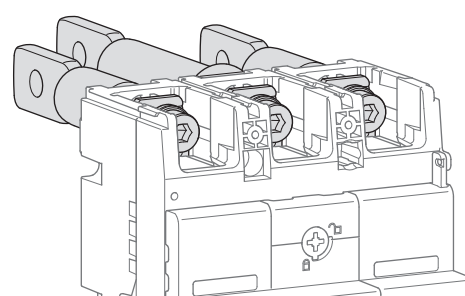
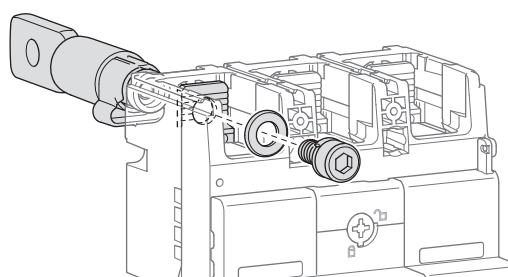
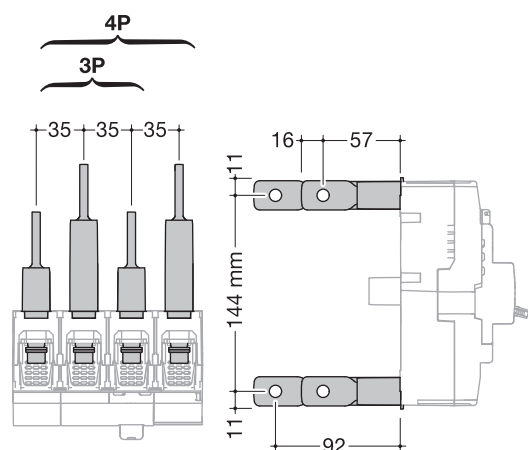
	A (mm)	B (mm)	C (mm)
3P	105	28.5	64
4P	140	28.5	64

Connection

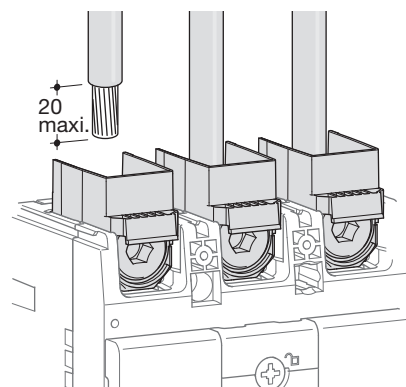
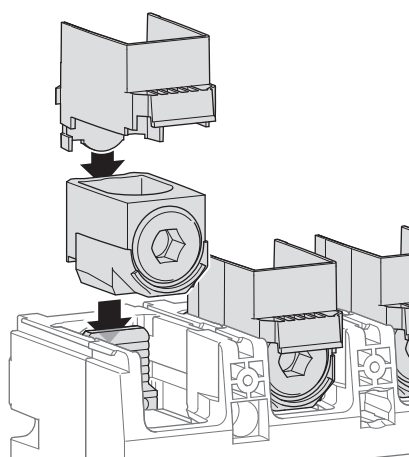
Extended straight and spreader connections



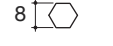
Rear connections



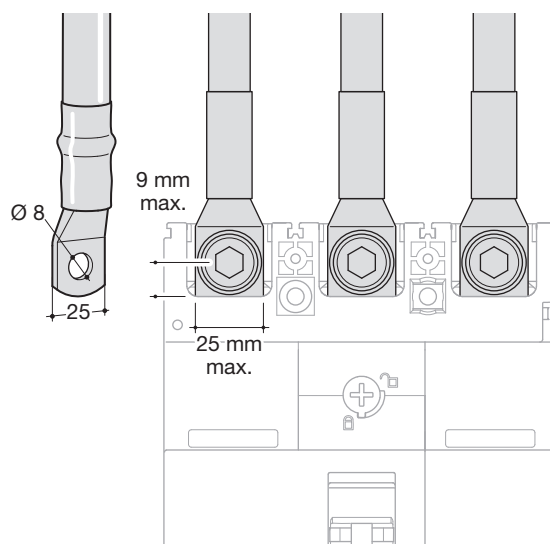
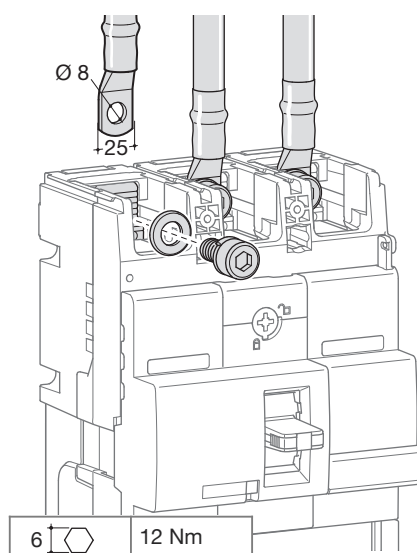
Connection by collar



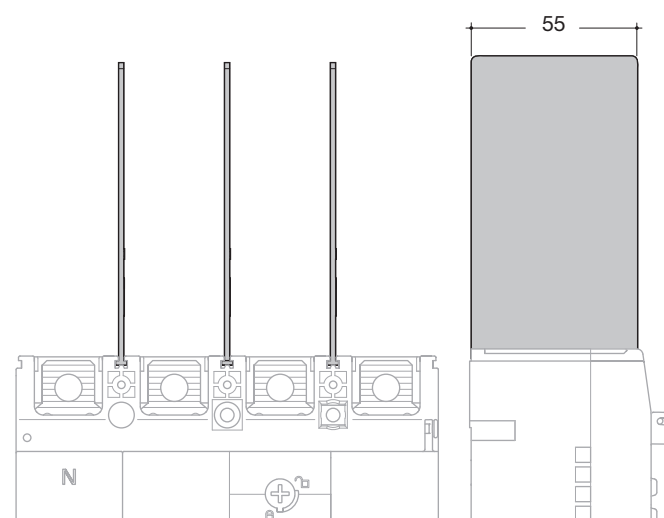
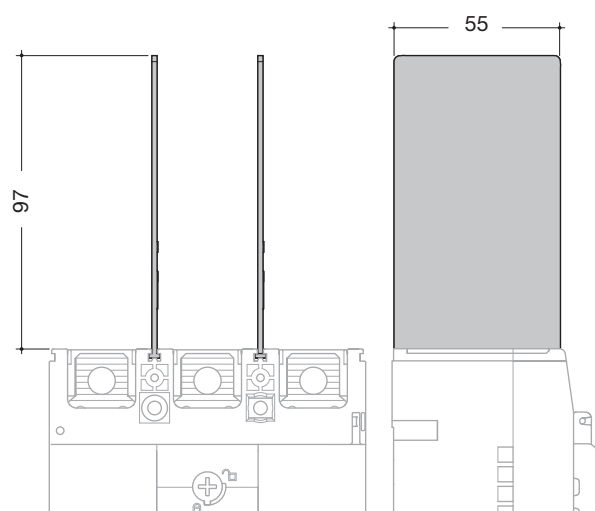
Terminals for aluminium / copper conductors (accessory)
HYB001H, HYB002H

	min. 35 mm ²	max. 150 mm ²
	min. 35 mm ²	max. 185 mm ²
	35 mm ² to 50 mm ² = 25 Nm 60 mm ² to 185 mm ² = 25 Nm	

Connection with end lugs

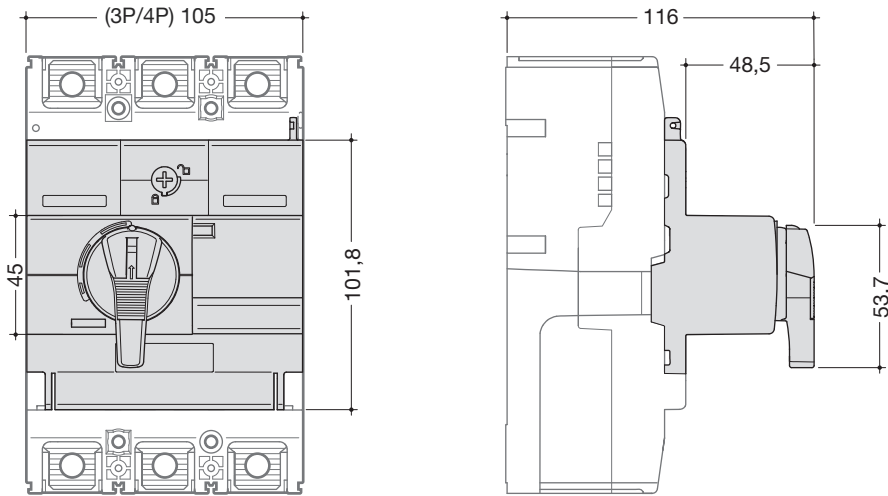


Interphase barriers

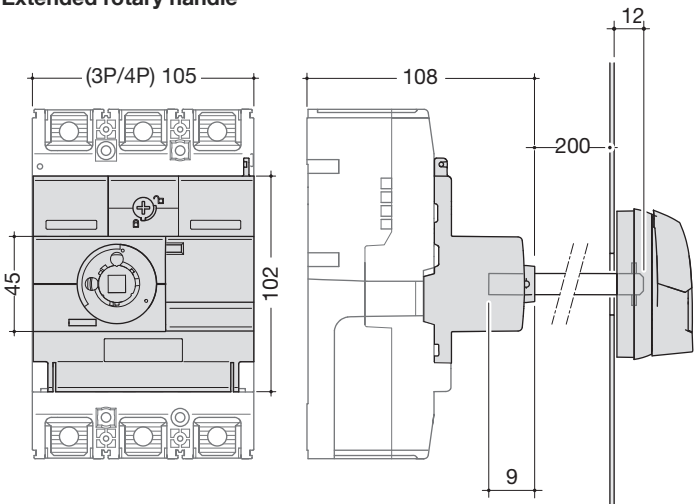


Accessories

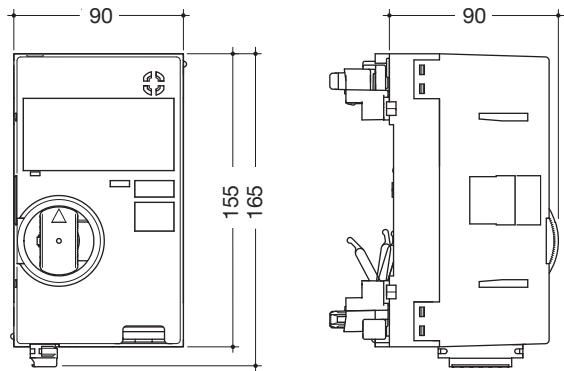
Rotary handle



Extended rotary handle



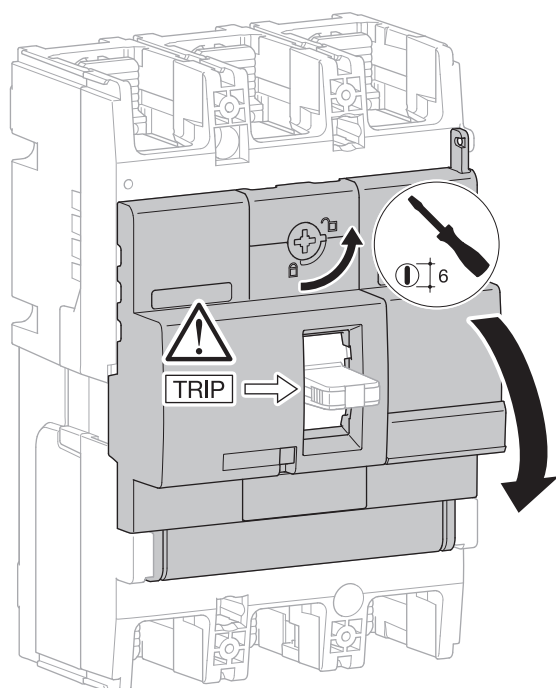
Motor operator



		HXB040H	HXB042H
Operating voltage		24V DC	230-240V AC
Operating current / starting current peak value (A)	24V DC	18/26	-
	230-240V AC	-	3.5/7
Operating time (s)	(ON)	0.1s	
	(OFF)	0.1s	
	(RESET)	0.1s	
Power supply required		300VA min.	
Dielectric properties (1 min)		1000V AC	1500V AC

Auxiliaries

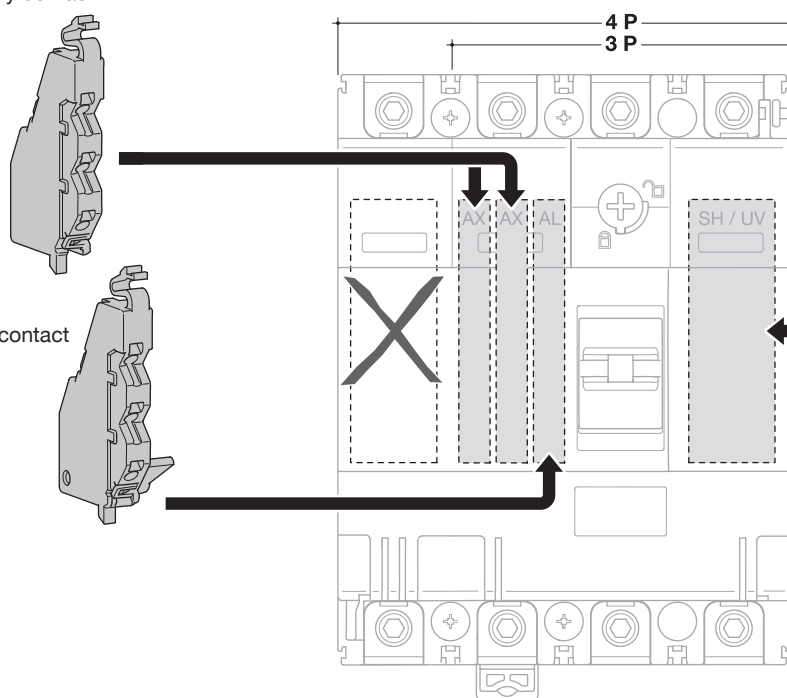
Auxiliaries for MCCBs and trip-free switches



Mounting combination for auxiliaries and releases

AX
Auxiliary contact

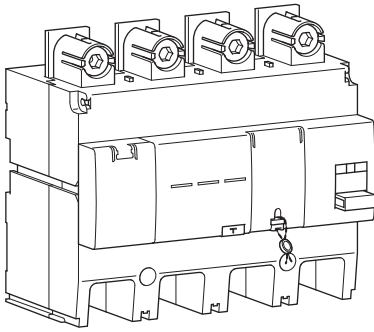
AL
Alarm contact



SH
Shunt trip

UV
Undervoltage release

DUVR
Delayed
undervoltage
release



When associated with MCCB, the add-on block provides an earth fault protection and protects against electrical shocks by direct or indirect contacts.

The add-on blocks are protected against nuisance tripping caused by transient voltages. It's able to detect sinusoidal alternating currents and residual pulsating direct currents (A type ). It also avoids miss tripping (HI type - High Immunity).

Characteristics

Reset button :

Signals add-on block tripping and must be acknowledged before switching on the installation.

Test button for differential operating :

Allows to check the electrical operating of the MCCB / Add-on block association.

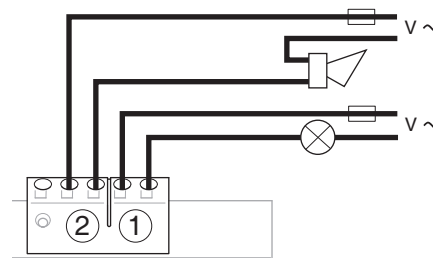
Mechanical test button :

Allows to check the mechanical operating of the MCCB / Add-on block association.

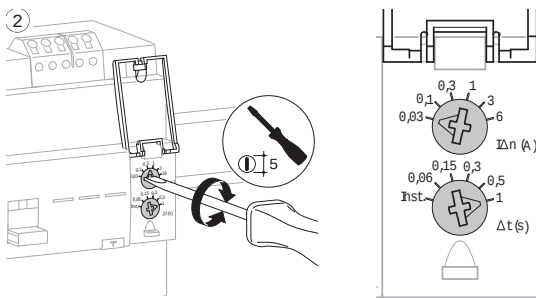
LED signaling default current level in the installation:

25% (orange) and 50% (red) $I_{\Delta n}$; green light to signal correct operating.

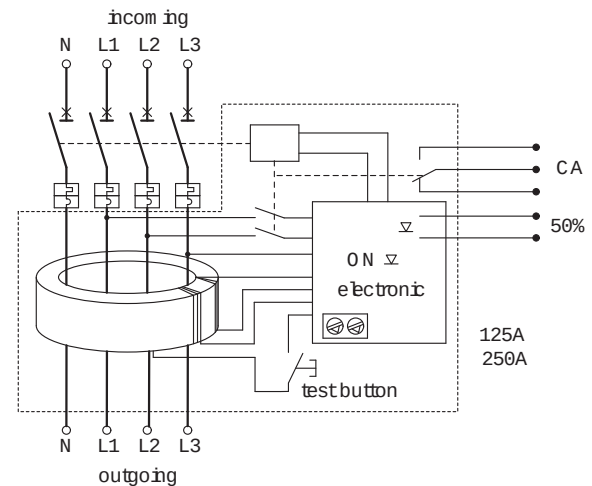
Remote tripping and advanced warning (50% $I_{\Delta n}$) signaling thanks to these contacts:



Earth leakage current ($I_{\Delta n}$) and delay (Δt) setting

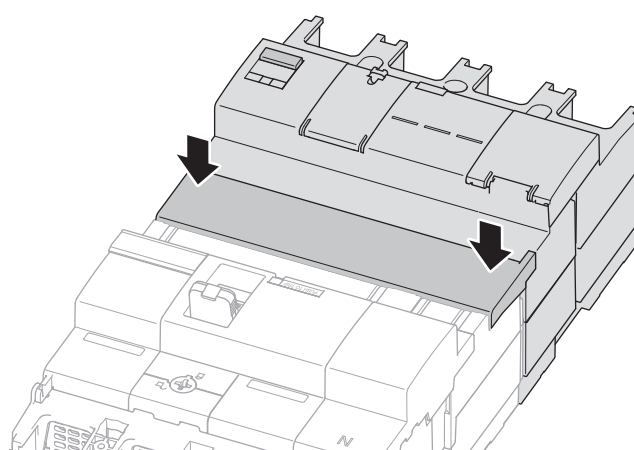
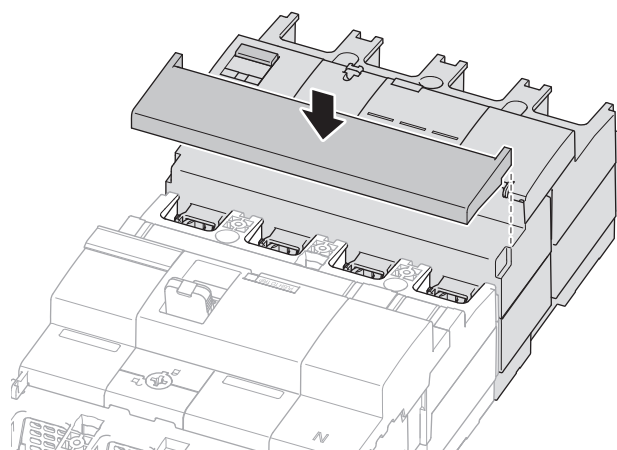
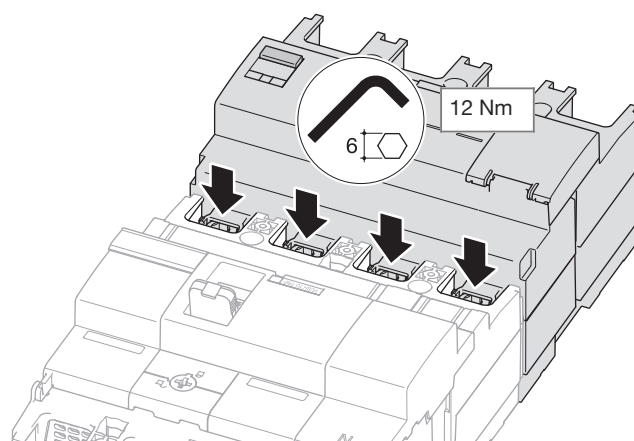
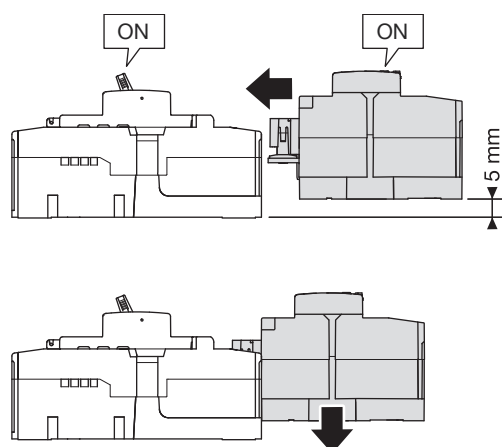


Add-on block operating

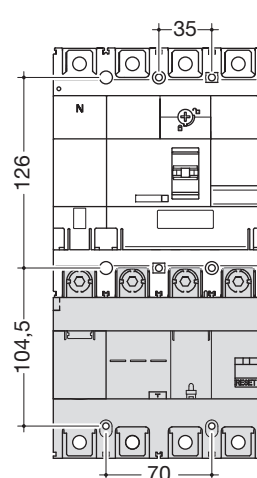
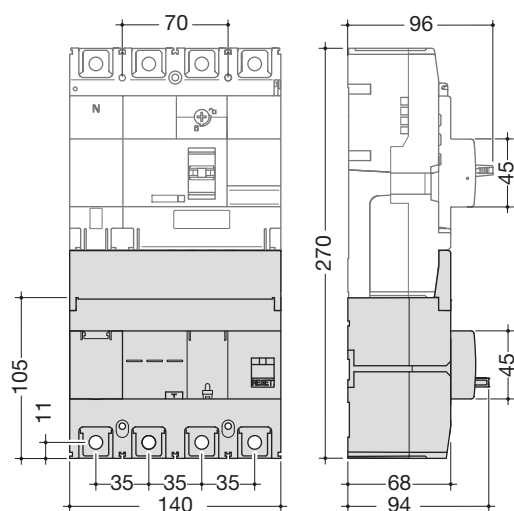


S (Δt)	A ($I_{\Delta n}$)						
		0.03	0.1	0.3	1	3	6
	Inst.	OK	OK	OK	OK	OK	OK
	0.06	no	OK	OK	OK	OK	OK
	0.15	no	OK	OK	OK	OK	OK
	0.3	no	OK	OK	OK	OK	OK
	0.5	no	OK	OK	OK	OK	OK
	1	no	OK	OK	OK	OK	OK

Add-on block mounting

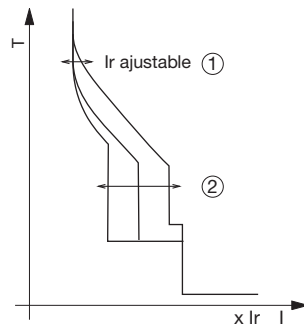
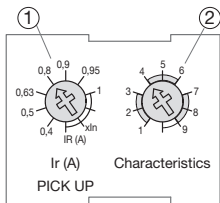


Dimensions



Magnetic adjustment from 6 to 10 x In (250A)
from 6 to 13 x In (160 and 200A)
from 6 to 12 x In (32, 63, 100 and 125A)

I - Instantaneous - max. instantaneous threshold (< 10 ms) in case of short circuit: 2,5 to $10 \times I_r$.



Use	Characteristics (*)	
	3 P	4 P
Generator protection	pos. 1	pos. 1, 4 and 7
Standard protection	pos. 2 and 3	pos. 2, 5 and 8
Motor protection	pos. 4 and 5	pos. 3, 6 and 9

LSI			In A										
			3P					4P					
								Long Time Delay		Short Time Delay		Inst	Long Time Delay
			lr (x ln)	tr (s)	isd (xlr)	tsd (s)	li (xlr)	lr (x ln)	tr (s)	isd (xlr)	tsd (s)	li (xlr)	Neutral
lr (x ln)	0.4	OK						OK					
	0.5	OK						OK					
	0.63	OK						OK					
	0.8	OK						OK					
	0.9	OK						OK					
	0.95	OK						OK					
	1	OK						OK					
Characteristics	1		11 s at 2 xlr	2.5	0.1	14 (max 12 x ln)		11 s at 2 xlr	2.5	0.1	14 (max 10 x ln)	no	
	2		21 s at 2 xlr					5					
	3		5										
	4		5 s at 6 xlr	10	0,2	11 s at 2 xlr		2.5	0.1	50%			
	5		7.5 s at 6 xlr			21 s at 2 xlr		10					
	6					7.5 s at 6 xlr		2.5	0.2	100%			
	7					11 s at 6 xlr		2.5	0.1				
	8					21 s at 2 xlr		5					
	9							21 s at 2 xlr	10	0.2			

Tripping curve

MCCB h250 TM

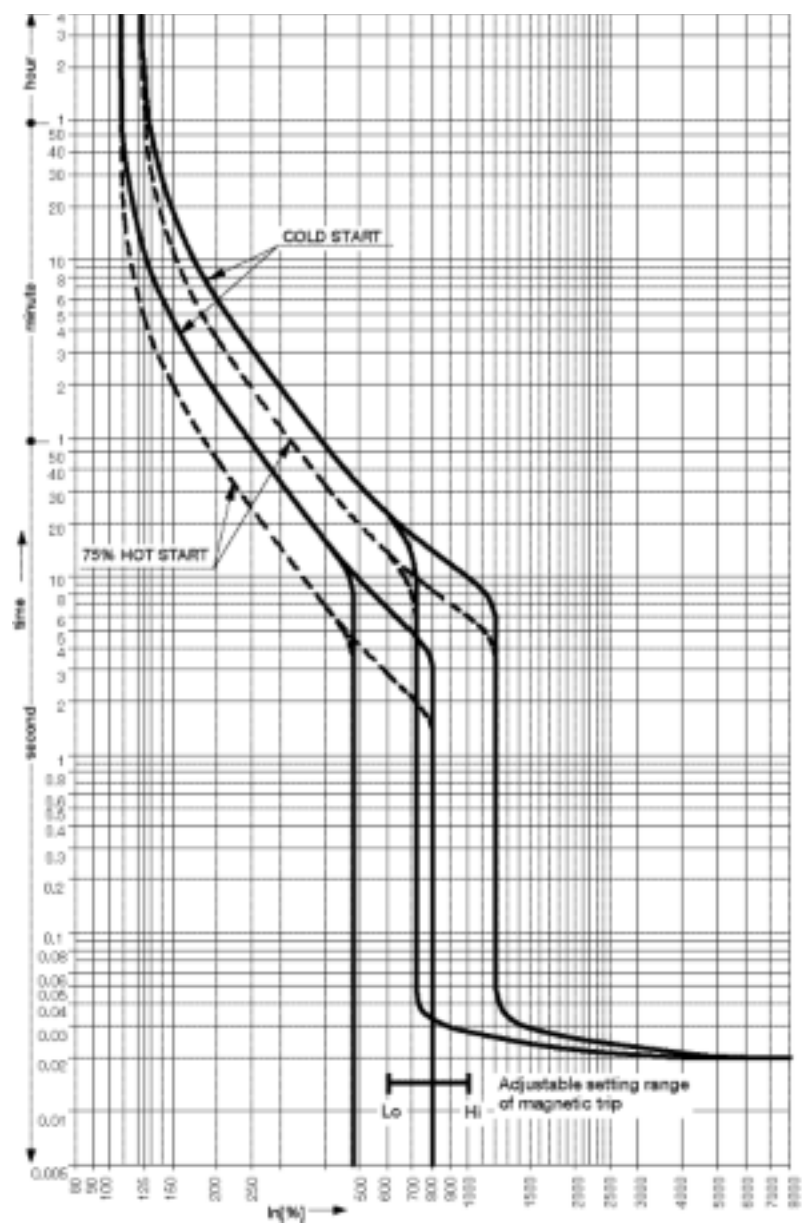
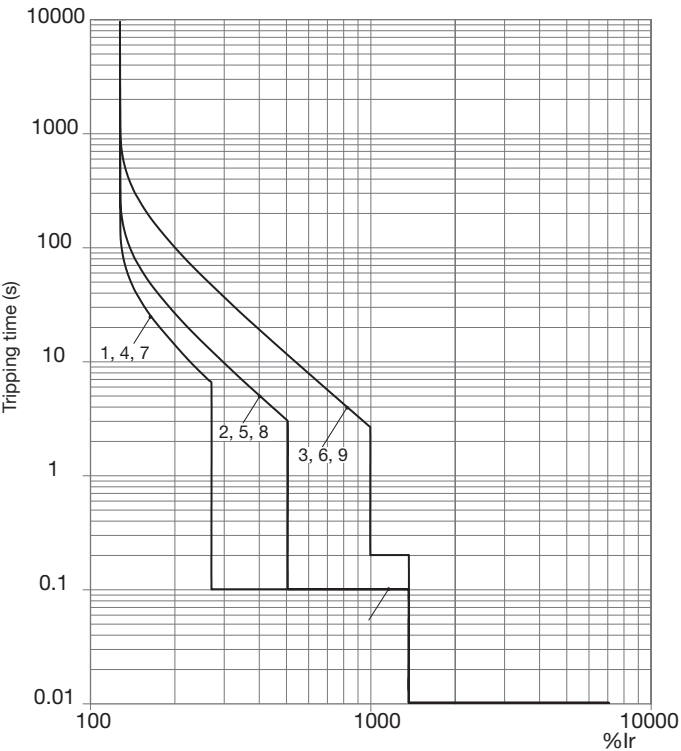


Figure 1 is a log-log plot showing Tripping time (s) on the y-axis (ranging from 0.01 to 10000) versus %Ir on the x-axis (ranging from 100 to 10000). The plot displays five curves, labeled 1 through 5, representing different tripping times. Curve 1 is the steepest, followed by 2, 3, 4, and 5. Curve 5 is the least steep. All curves show a sharp drop in tripping time as %Ir increases beyond a certain point.

LTD pick-up current		Ir	x In	0.4	0.5	0.63	0.8	0.9	0.95	1
Characteristics			No.	1	2	3	4	5		
Standard	LTD	Tr	(s)	11	21	21	5	7.5		
				200 % x Ir				600 % x Ir		
	STD	Isd	x Ir	2.5	2.5	5	10	10		
		tsd	(s)	0.1	0.1	0.1	0.1	0.2		
	INST	li	x Ir	14 (max 13 x In)						

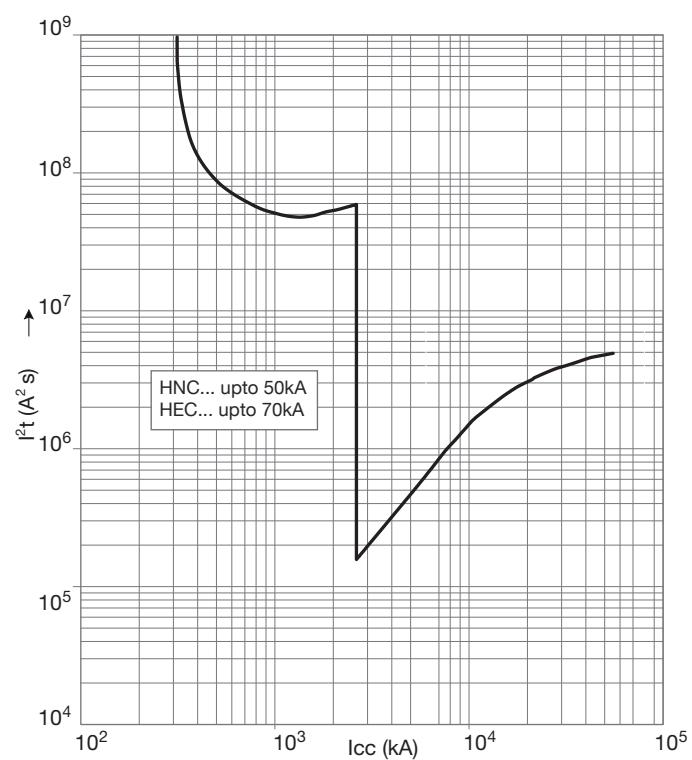
MCCB h250 4P LSI



LTD pick-up current		Ir	x In	0.4		0.5		0.63		0.8		0.9		0.95		1					
Characteristics			No.	1		2		3		4		5		6		7		8		9	
	LTD	Tr	(s)	11 s		21 s		7.5 s		11 s		21 s		7.5 s		11 s		21 s		7.5 s	
				200 % x Ir			600% x Ir			200 % x Ir			600% x Ir			200 % x Ir			600% x Ir		
	STD	I _{sd}	x Ir	2.5		5		10		2.5		5		10		2.5		5		10	
			(s)	0.1			0.2			0.1			0.2			0.1			0.2		
	INST		x Ir	14 (max 13 x In)																	
	Neutral protection				no						0.5						1				

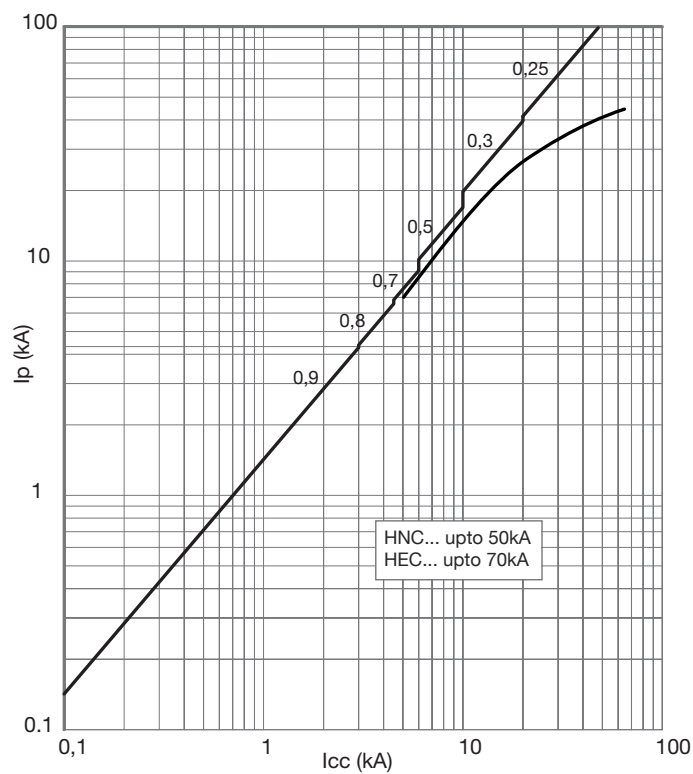
Thermal constraint curve at 400V (Let-through energy)

MCCB h250



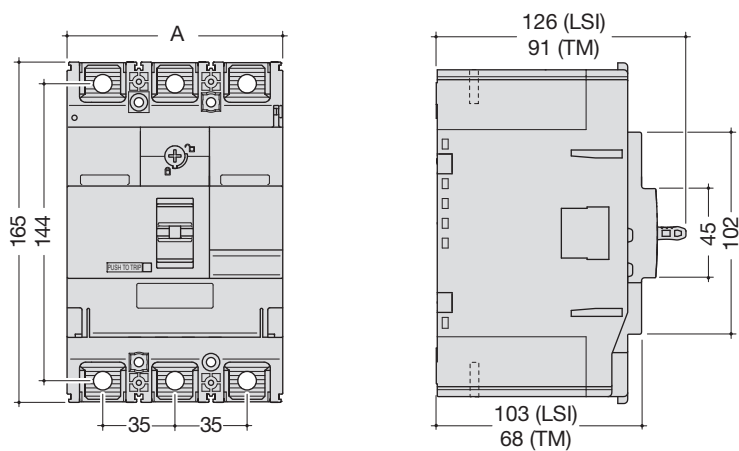
Current limiting curve at 400V (Let-through peak current)

MCCB h250



Dimensions

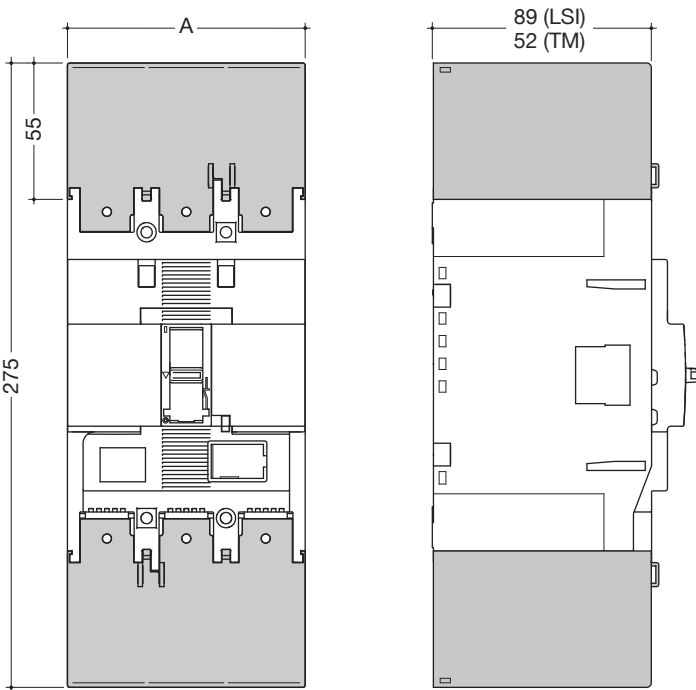
MCCBs



	A (mm)
3P	105
4P	140

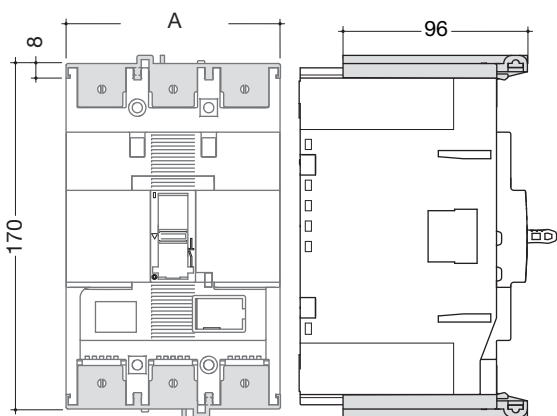
Accessories

Terminal covers for extended straight connections



	A (mm)
3P	105
4P	140

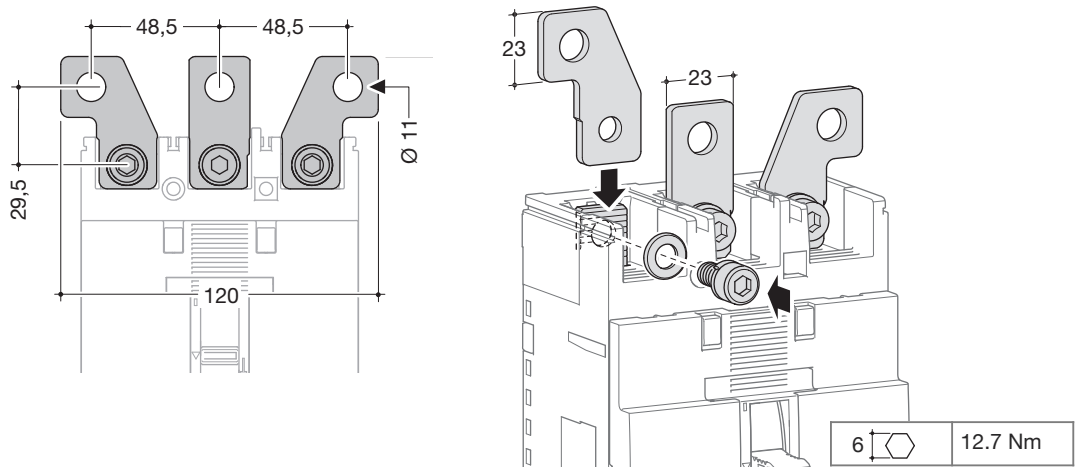
Terminal cover for rear connections (LSI only)



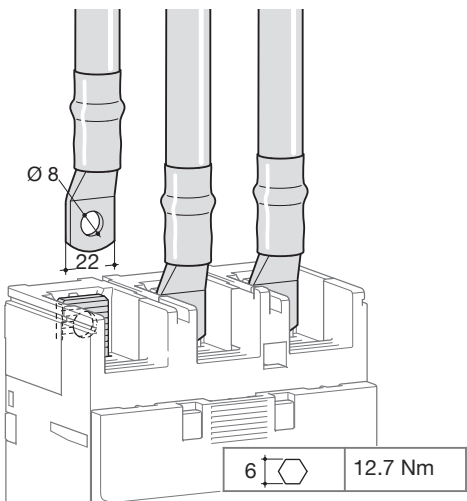
	A (mm)
3P	105
4P	140

Connection

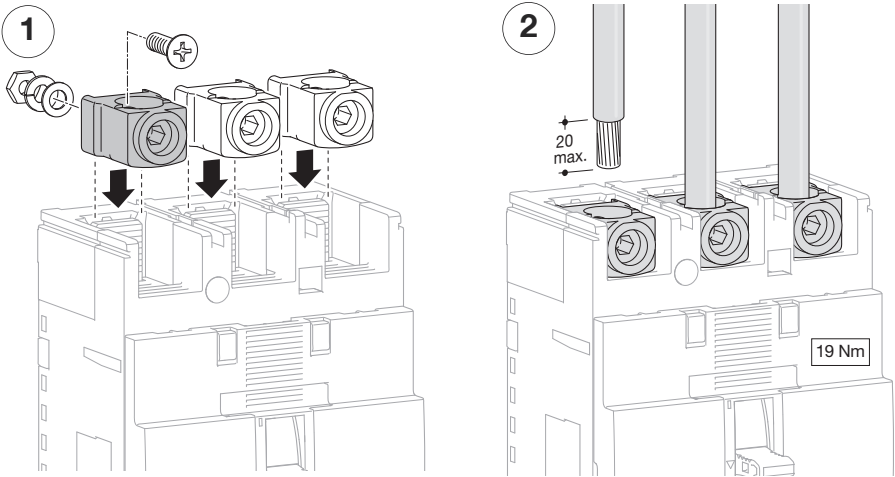
Extended straight and spreader connections



Connection with end lugs



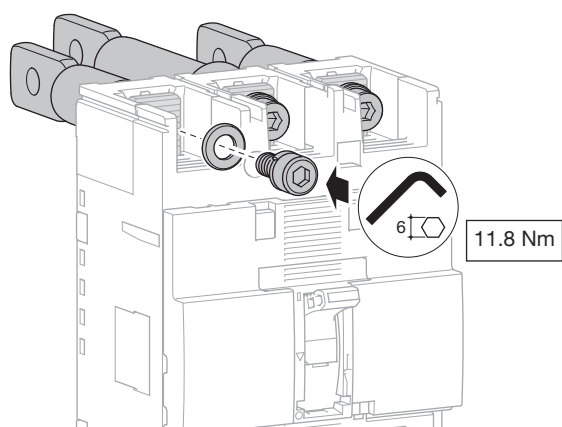
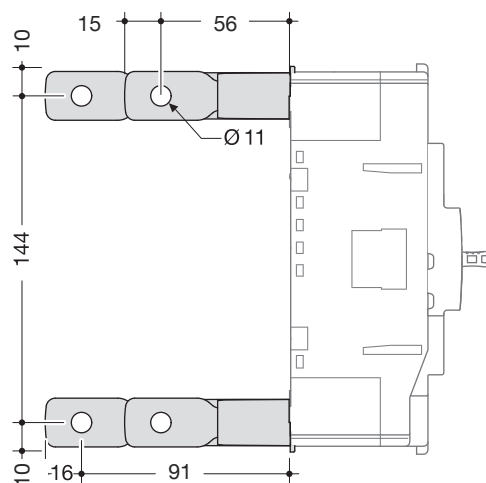
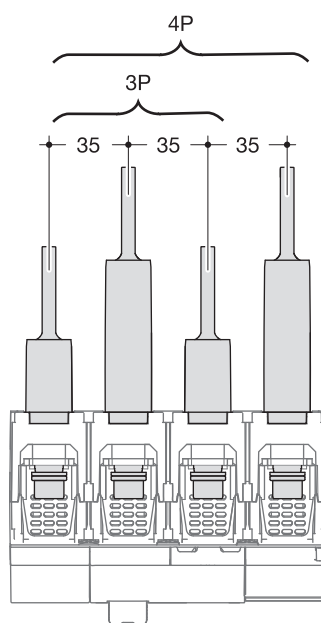
Connection by collar



Terminals for copper conductors
HYC003H, HYC004H

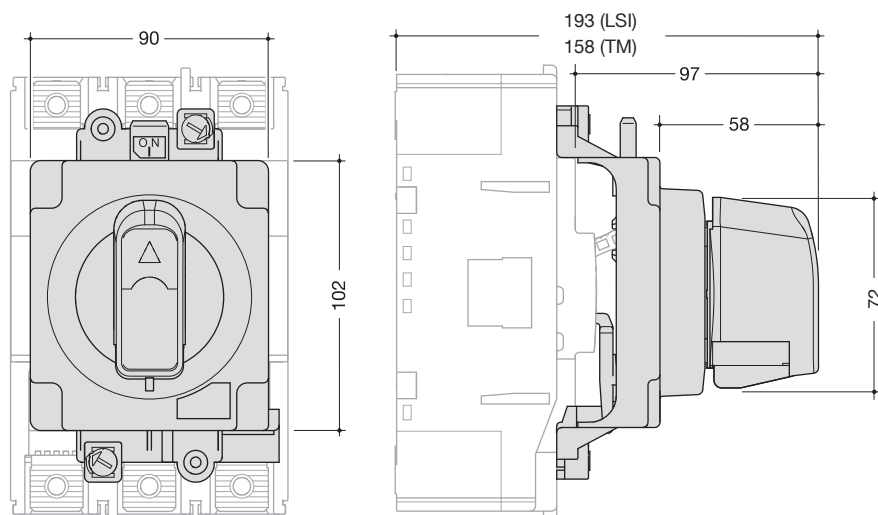
	min. 35 mm ²	max. 120 mm ²
	min. 35 mm ²	max. 120 mm ²
	19 Nm	

Rear connections (LSI only)

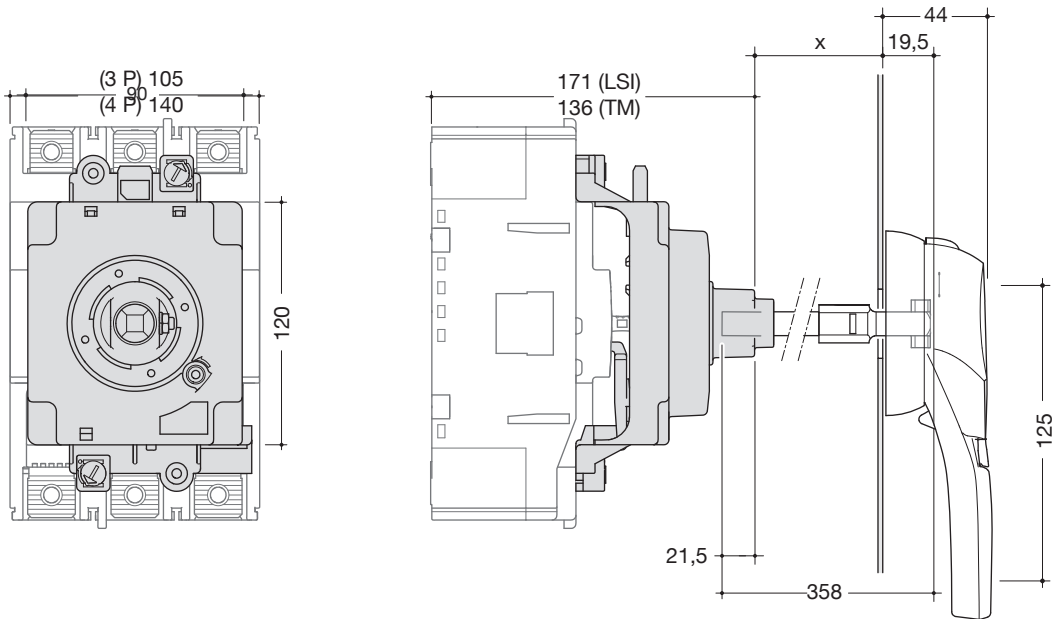


Accessories

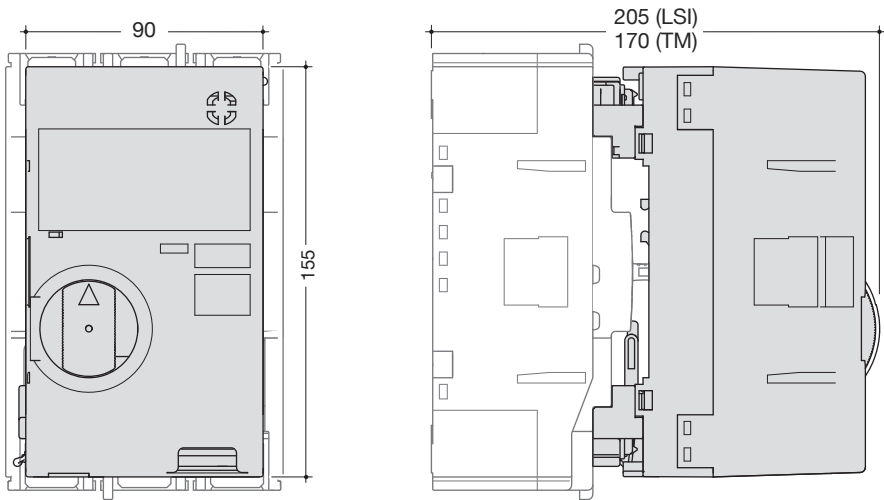
Direct rotary handle



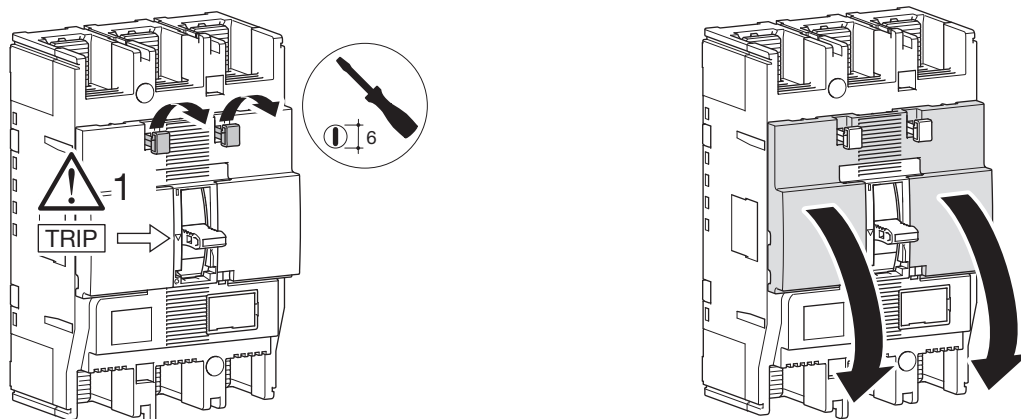
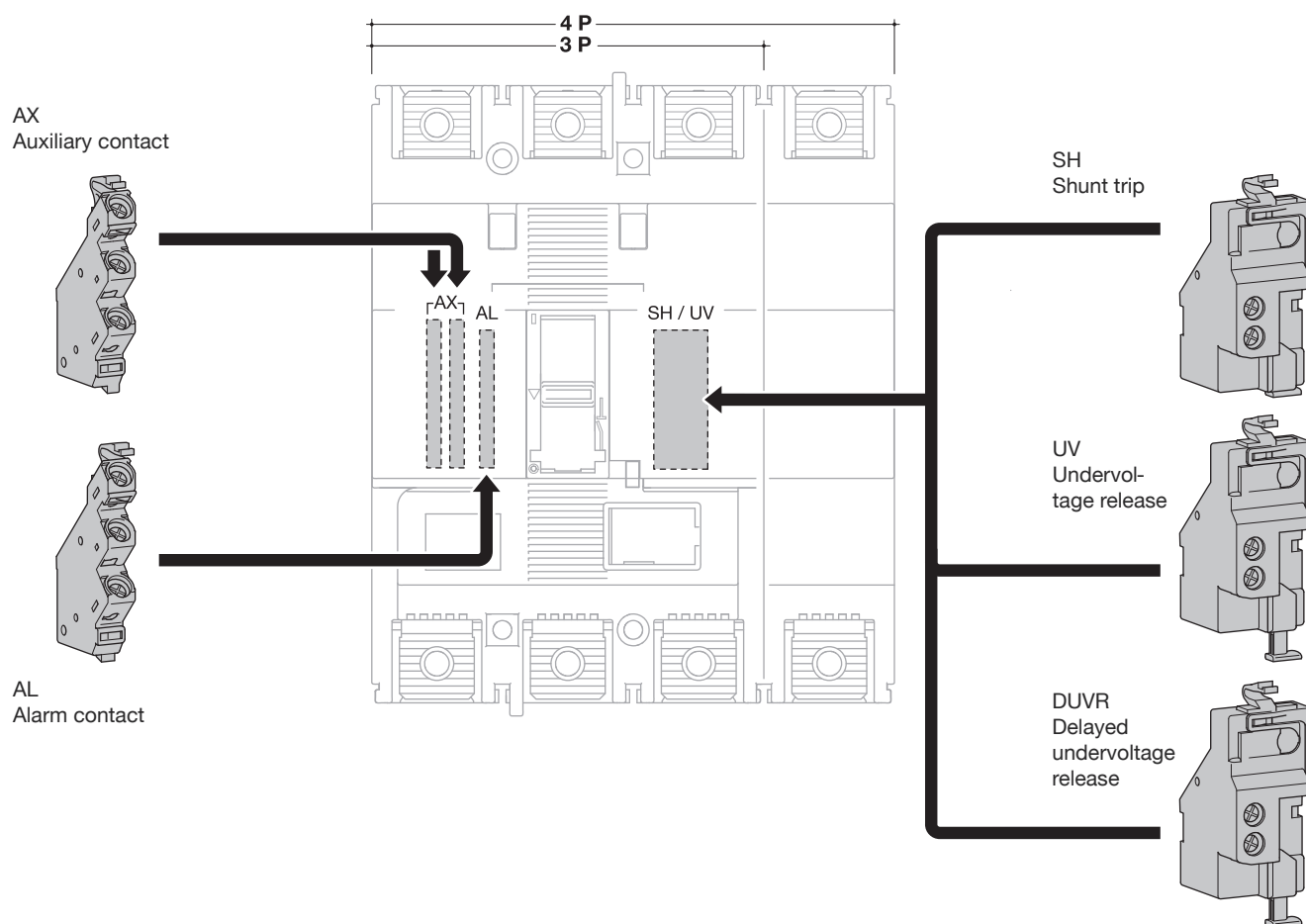
Extended rotary handle



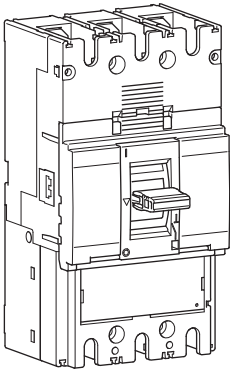
Motor operator



		HXC040H	HXC042H
Operating voltage		24V DC	230-240V AC
Operating current / starting current peak value (A)	24V DC	18/26	-
	230-240V AC	-	3.5/7
Operating time (s)	(ON)	0.1s	
	(OFF)	0.1s	
	(RESET)	0.1s	
Power supply required		300VA min.	
Dielectric properties (1 min)		1000V AC	1500V AC

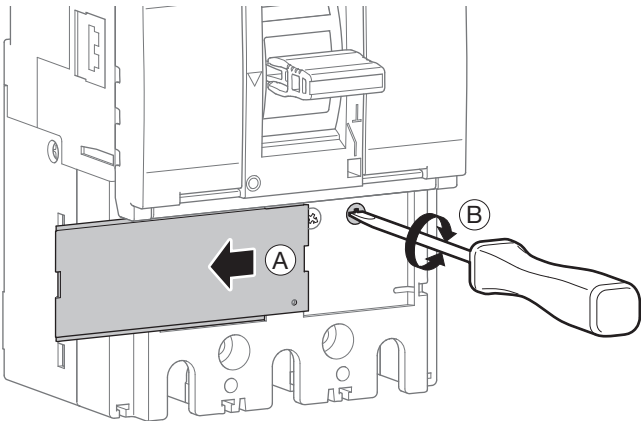
Auxiliaries**Auxiliaries for MCCBs and trip-free switches****Mounting combination for auxiliaries and releases**

MCCBs

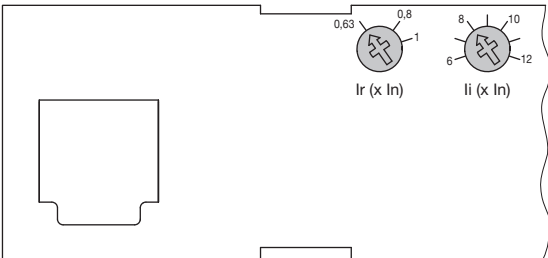


		220/240 V AC (kA)	380/415 V AC (kA)	660/690 V AC (kA)
h400/h630 HND	Icu	85	50	20
	Ics	85	50	15
h630 HED	Icu	100	70	20
	Ics	85	50	15
h630 HCD	Icm	–	9	–
	Icw	–	5 kA-0.3 s	–

Settings



Magnetic and thermal settings



Thermal adjustment from 0.63 to 1 x In

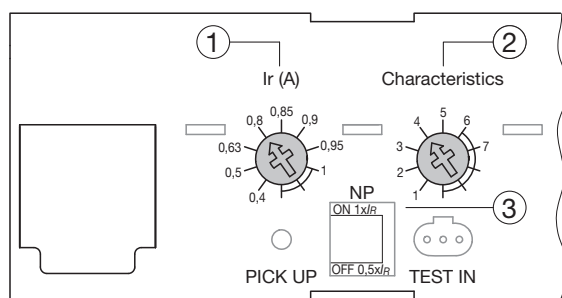
Magnetic adjustment from 6 to 12 x In

Electronic trip unit setting (LSI)

L - Long delay - protection against overloads: I_r and t_r settings

S - Short delay - protection against short circuits: I_{sd} and t_{sd} settings

I - Instantaneous - max. instantaneous threshold (< 10 ms) in case of short circuit: 2.5 to $10 \times I_r$ (250 - 400A) and 2.5 to $8 \times I_r$ (630A).

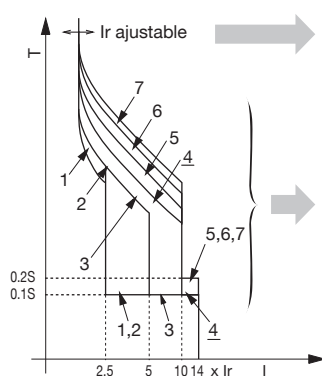


Neutral settings:

② Long delay current I_r setting

Other curve characteristics setting (t_r , I_{sd} , t_{sd})

Neutral protection against overloads setting



LSI	In A									
	250 A / 400 A					630 A				
	Long Time Delay		Short Time Delay		Inst	Long Time Delay		Short Time Delay		Inst
	$I_r (x I_n)$	$t_r (s)$	$I_{sd} (x I_r)$	$t_{sd} (s)$	$I_i (x I_r)$	$I_r (x I_n)$	$t_r (s)$	$I_{sd} (x I_r)$	$t_{sd} (s)$	$I_i (x I_r)$
② $I_r (x I_n)$	0.4	OK				OK				
	0.5	OK				OK				
	0.63	OK				OK				
	0.8	OK				OK				
	0.85	-				OK				
	0.9	OK				OK				
	0.95	OK				OK				
	1	OK				OK				
Characteristics	1	11s at 2 xlr	2.5	0.1	14 (max 13 x In)	11s at 2 xlr	2.5	0.1	14 (max 10 x In)	
	2	21s at 2 xlr				21s at 2 xlr				
	3		5				5			
	4	5 s at 6 xlr	10			5 s at 6 xlr	8			
	5	10 s at 6 xlr		0.2		10 s at 6 xlr		0.2		
	6	19 s at 6 xlr				16 s at 6 xlr				
	7	29 s at 6 xlr				-		-		
Neutral protection	0%									
	50%									
	100%									

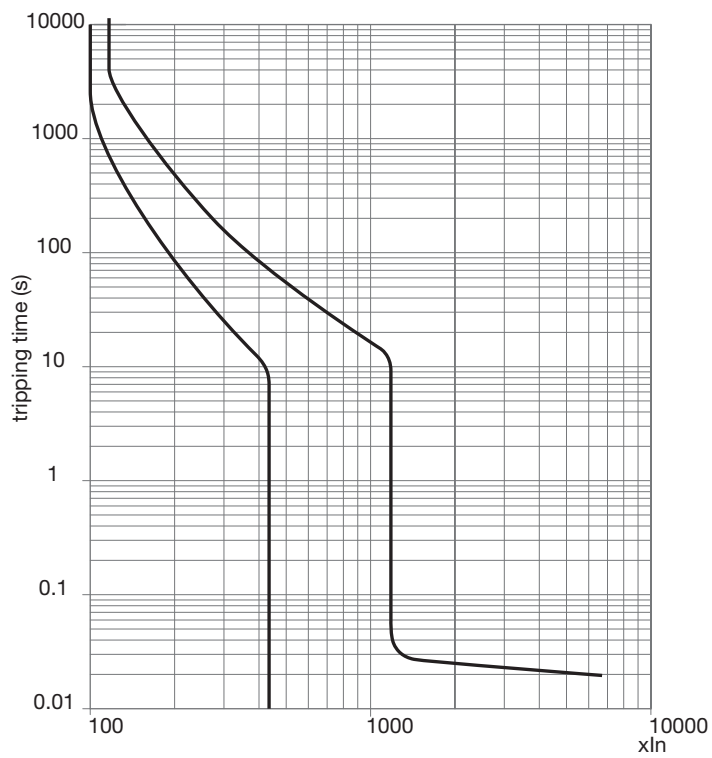
(*) Characteristic 1 : use for generators protection.

Characteristic 2 to 4 - standard protection : options allow coordination optimisation with other products.

Characteristic 5 to 7 - motor protection: use positions according to motor starting characteristics.

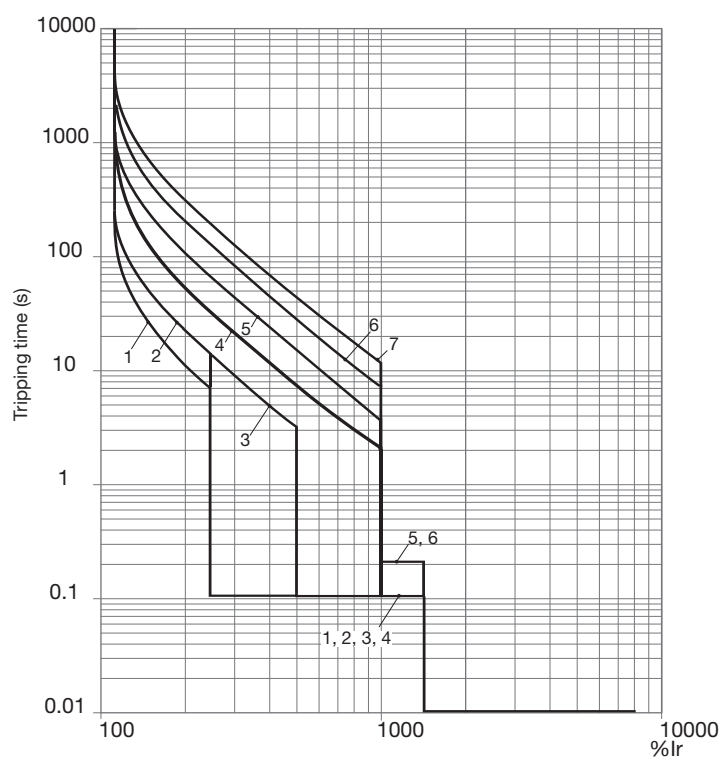
Tripping curve

MCCB h400 TM (250 and 400A)



Tripping curve

MCCB h630 LSI (250A and 400A)



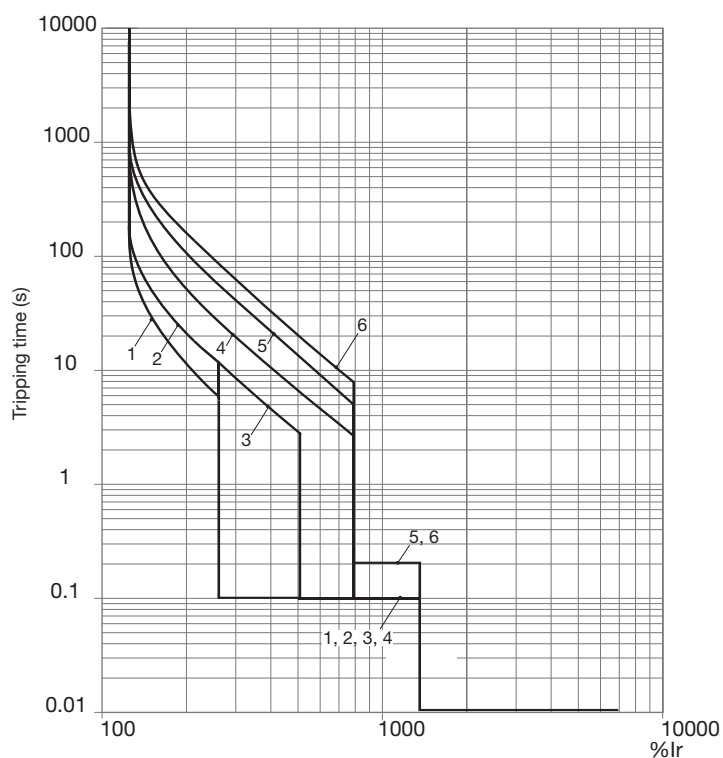
Electronic trip unit setting (LSI)

MCCB h630 LSI (250A and 400A)

I/R (A)											
LTD Pick-up current			IR	x/n	0.4	0.5	0.63	0.8	0.9	0.95	1
Characteristics				No.	1	2	3	4	5	6	7
Standard	LTD	tR	(s)	11	21	21	5	10	19	29	
				200% x I R				600% x I R			
	STD	Isd	x/R	2.5			5	10			
		tsd	(s)	0.1					0.2		
		INST	li	x/R	14 (max : 13 x In)						
Optional	N	IN	x/n	0 - 0.5 - 1							
		tN	(s)	tN=tR							

Tripping curve

MCCB h630 LSI (630A electronic)



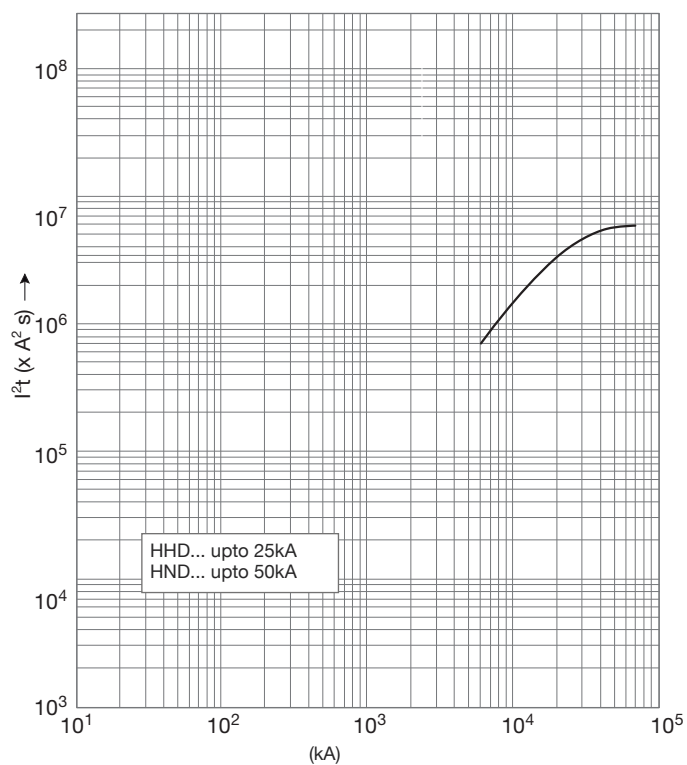
Electronic trip unit setting (LSI)

MCCB h630 LSI (630A electronic)

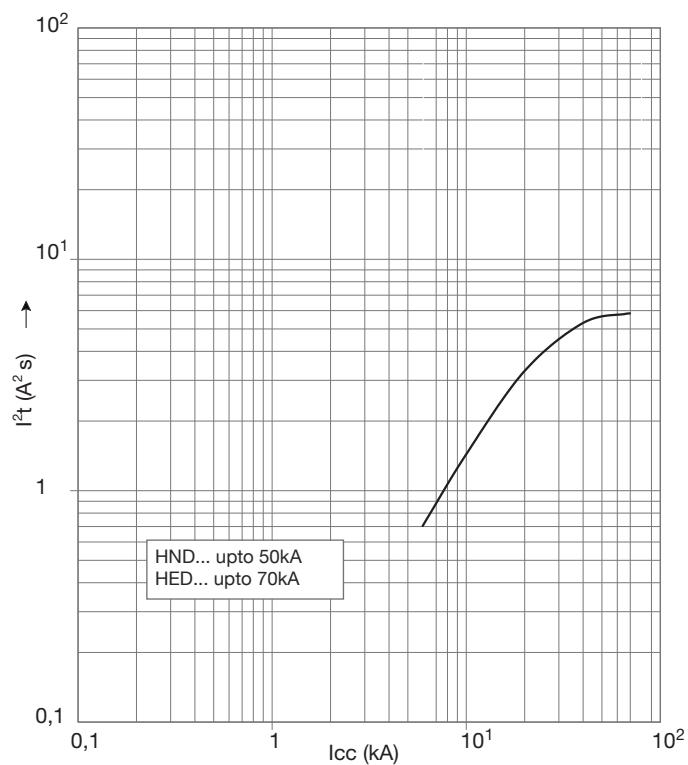
I/R (A)												
LTD Pick-up current			IR	x/n	0.4	0.5	0.63	0.8	0.85	0.9	0.95	1
Characteristics				No.	1	2	3	4	5	6		
Standard	LTD	tR	(s)	11	21	21	5	10	16			
				200% x I R				600% x I R				
	STD	lsd	x/R	2.5			5	8				
		tsd	(s)	0,1				0.2				
		INST	li	x/R	14 (max : 13 x ln)							
Optional	N	IN	x/n	0 - 0.5 - 1								
		tN	(s)	tN=tR								

Thermal constraint curve at 400V (Let-through energy)

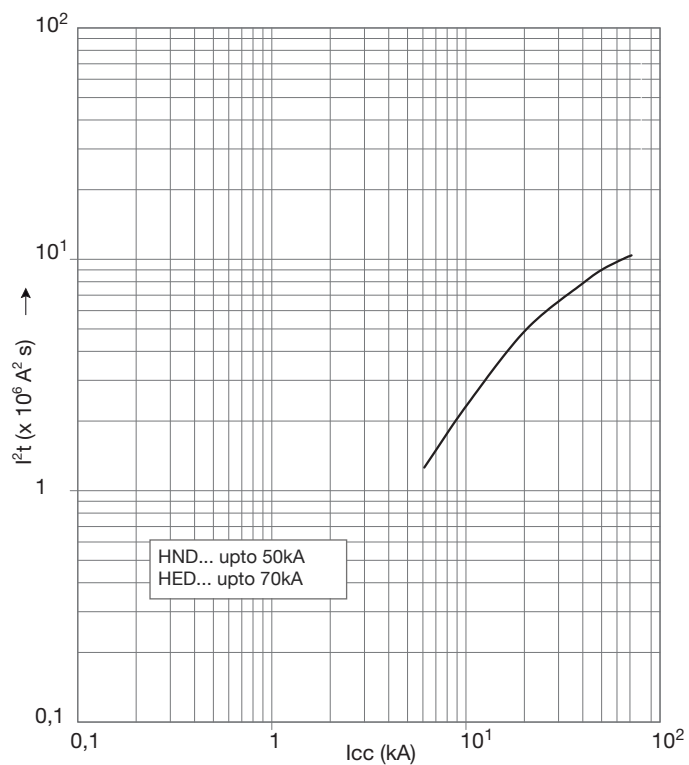
MCCB h400 TM (250A and 400A)



MCCB h630 LSI (250A and 400A)

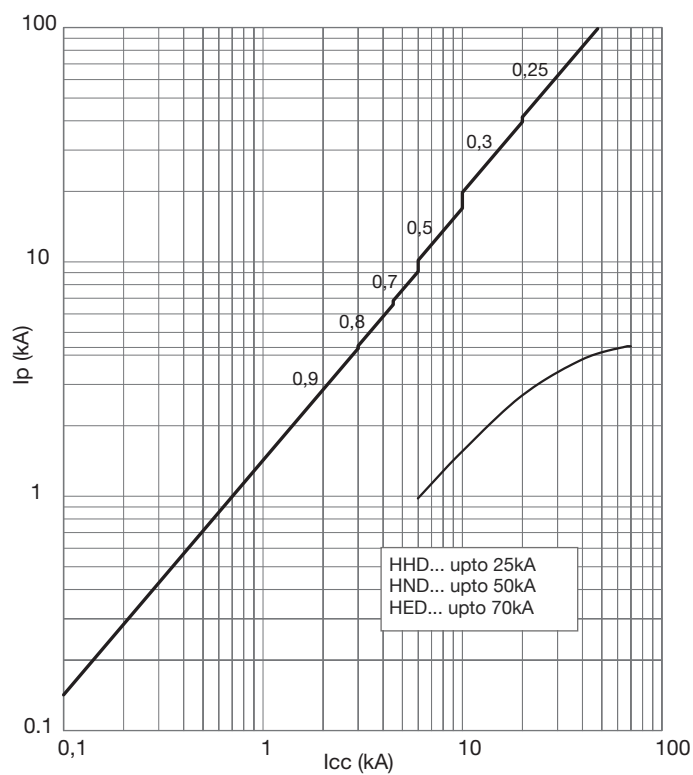


MCCB h630 LSI (630A)

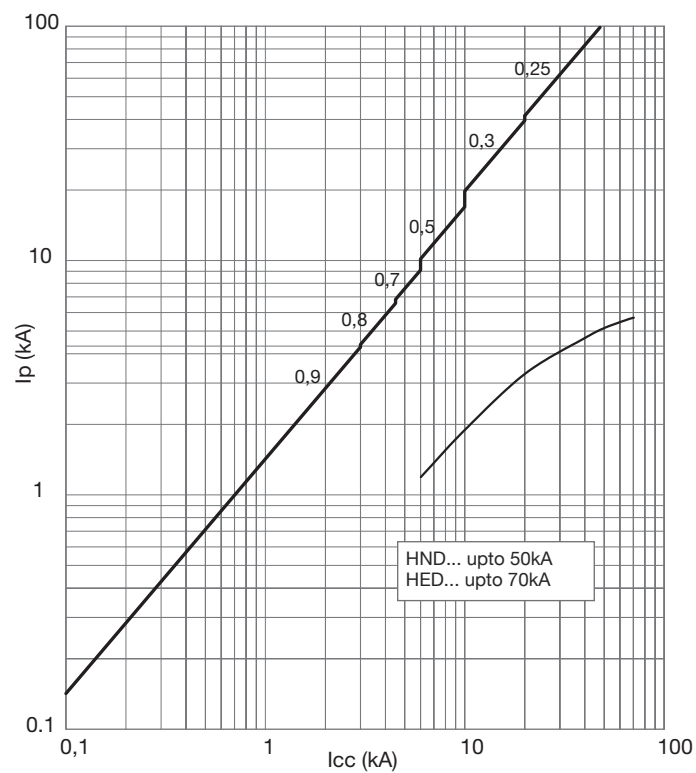


Current limiting curve at 400V (Let-through peak current)

MCCB h630 LSI (250A and 400A)
MCCB h400 TM

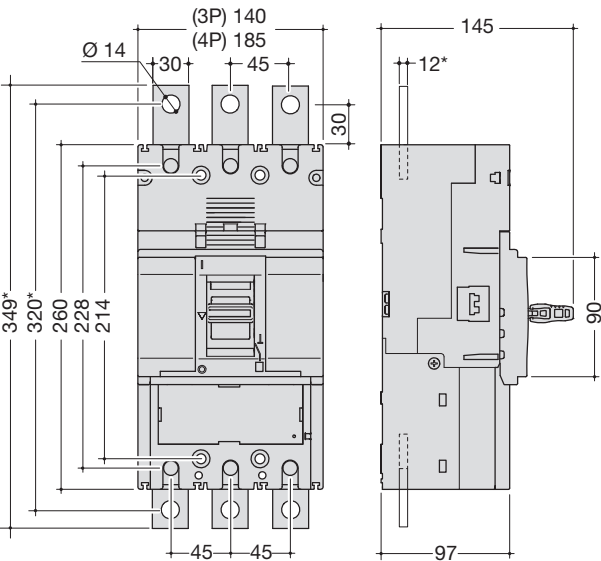


MCCB h630 LSI (630A)



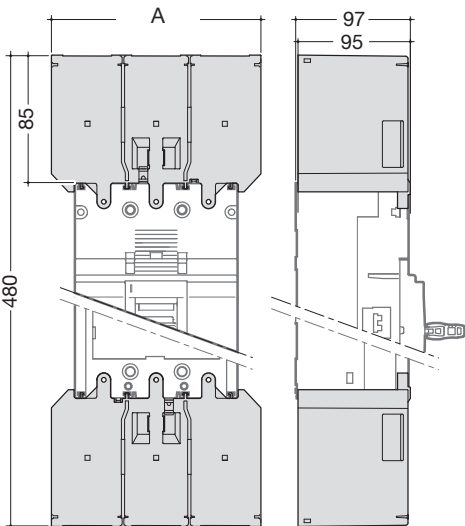
Dimensions

MCCBs



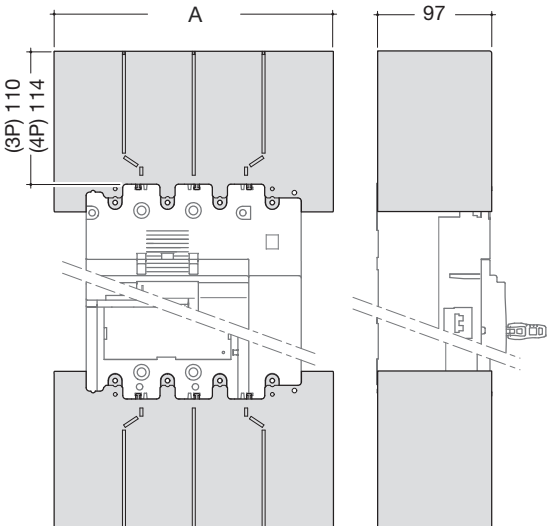
	A (mm)	B (mm)	C (mm)
3P	140	45	214
4P	185	45	214

Terminal covers for extended straight connections



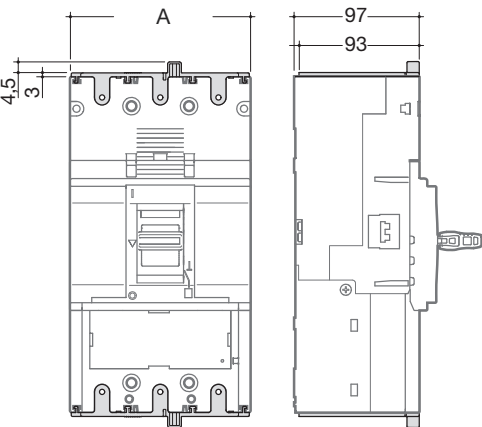
	A (mm)	B (mm)	C (mm)	D (mm)
3P	140	85	97	94.5
4P	185	85	97	94.5

Terminal covers for extended spreader connections



	A (mm)	B (mm)	C (mm)
3P	180	110	97
4P	240	114	98

Terminal covers for rear connections and collar terminal

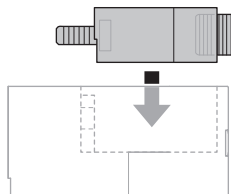
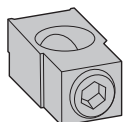


	A (mm)	B (mm)	B' (mm)	C (mm)	D (mm)
3P	140	3	4.5	97	93
4P	185	3	4.5	97	93

Connection

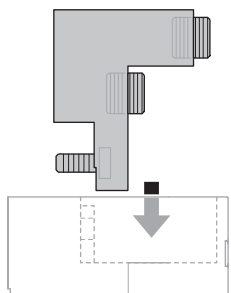
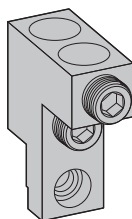
Connection for aluminium / copper conductors (h400 TM, h630 LSI)

HYD005 (3P) - HYD006H (4P)

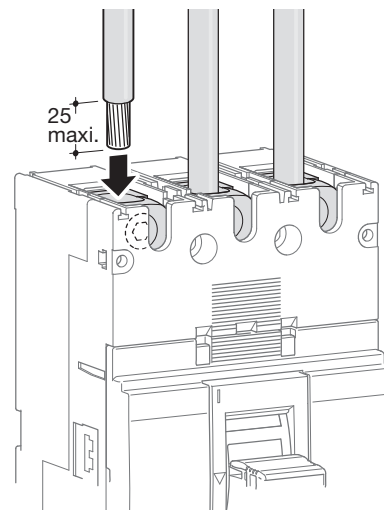


	max. 1x240 mm ²
10	25 Nm

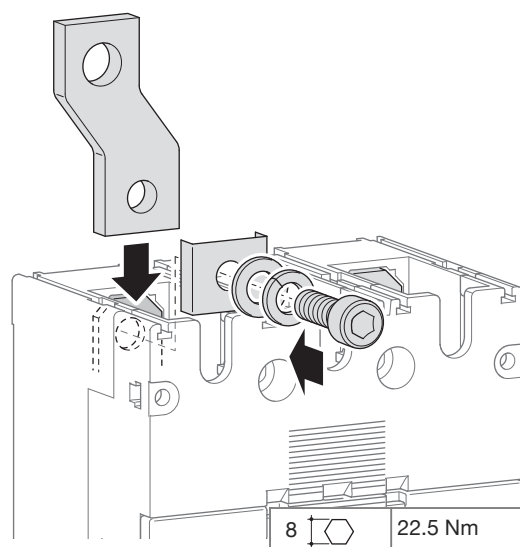
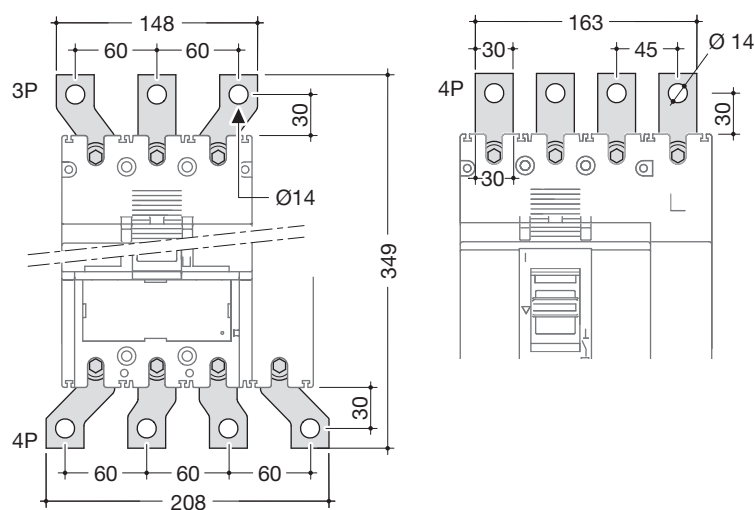
HYD007 (3P) - HYD008H (4P)



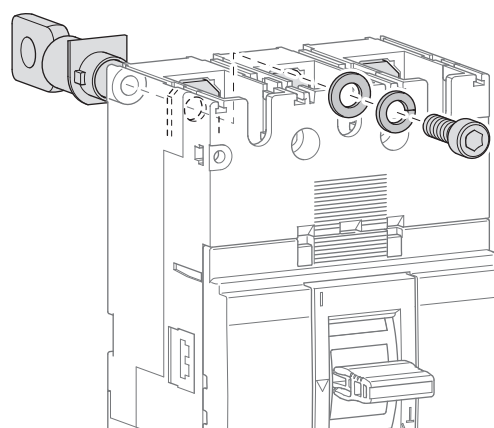
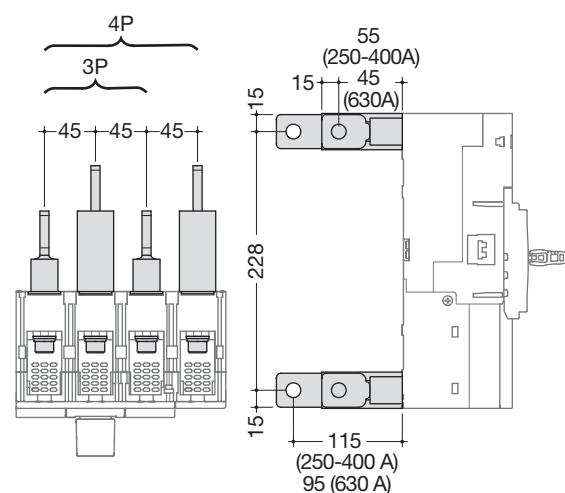
	max. 2x240 mm ²
10	25 Nm



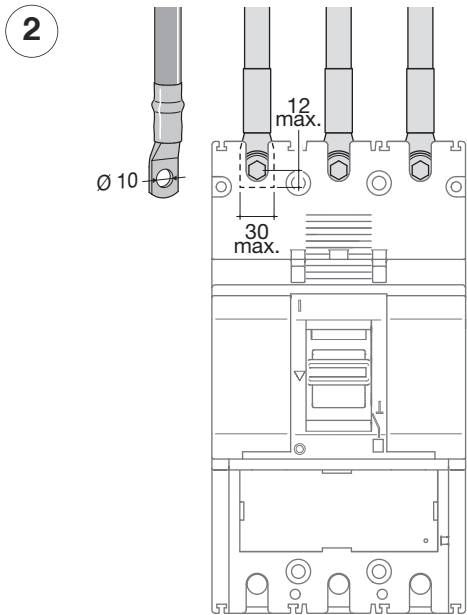
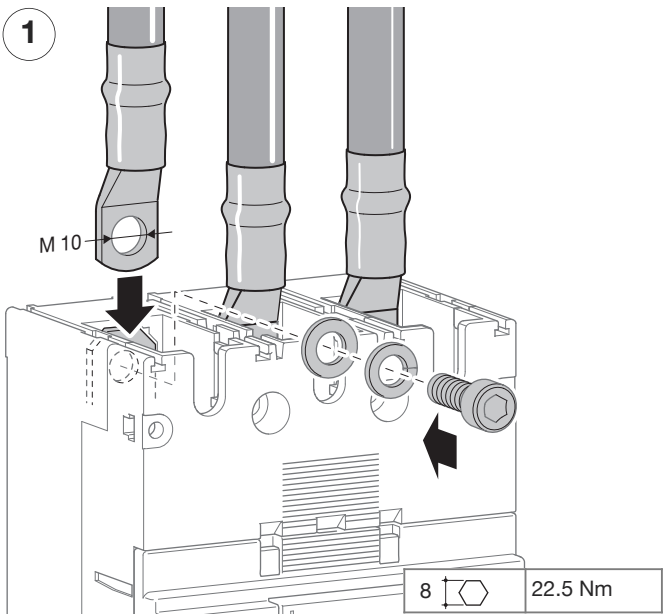
Extended straight and spreader connections



Rear connections

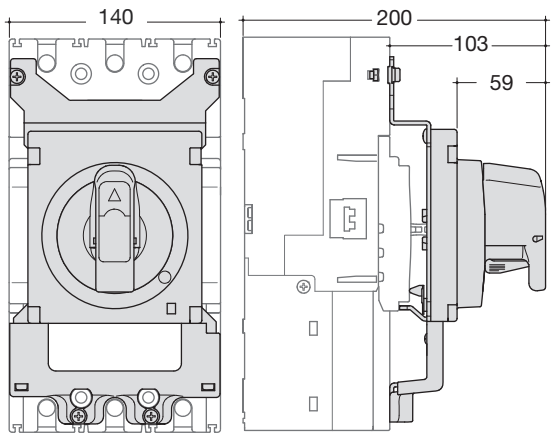


Connection with end lugs

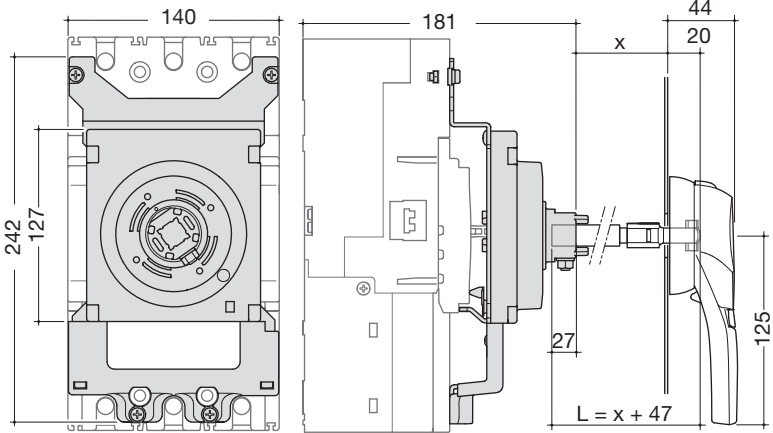


Accessories

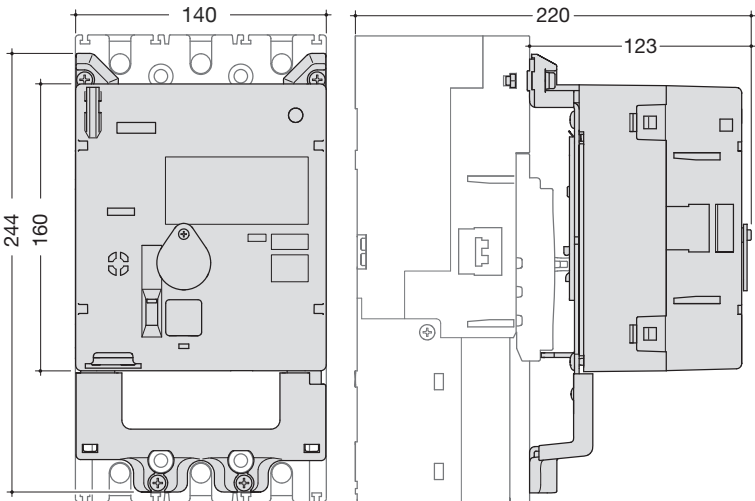
Direct rotary handle



Extended rotary handle



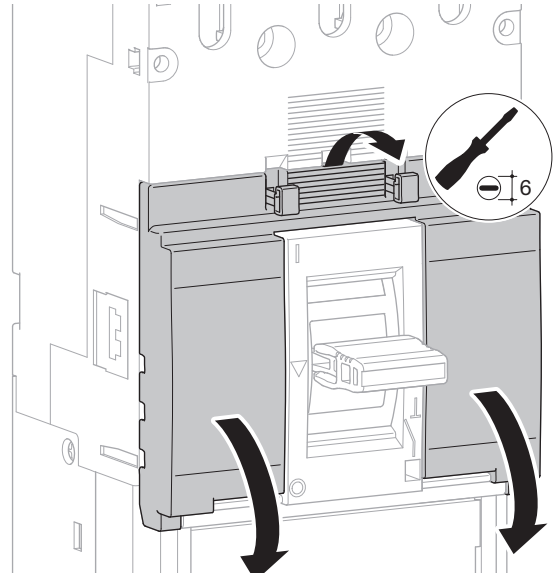
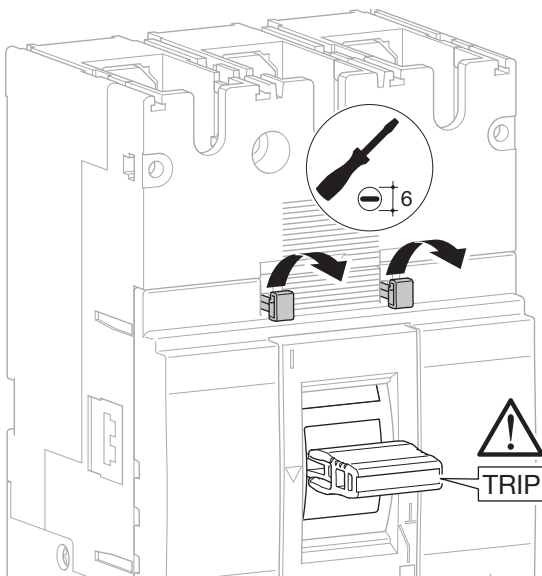
Motor operator



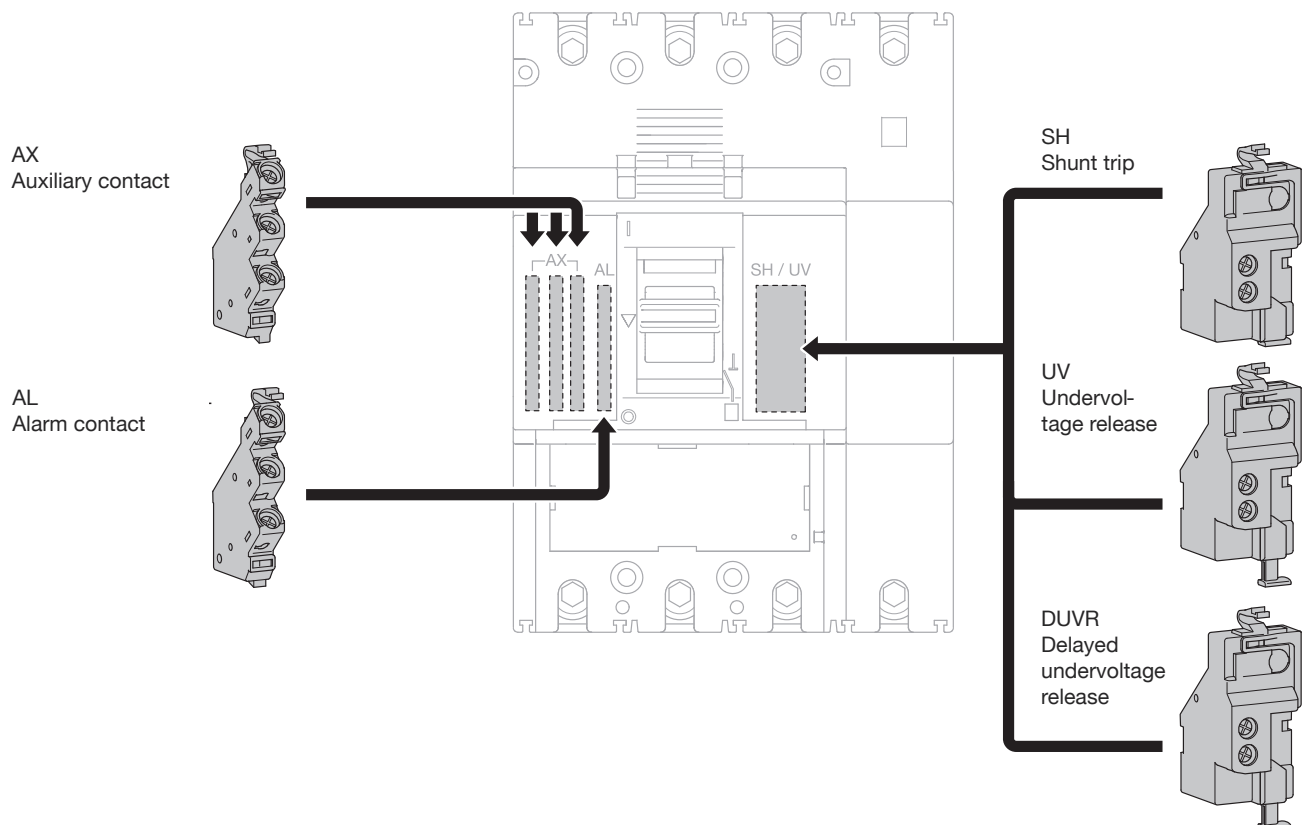
		HXD040H	HXD042H
Operating voltage		24-48V DC	100-240V AC
Operating current/starting current peak value (A)	24V DC	-/9.2 (ON) 4.3/9.8 (OFF, RESET)	-
	48V DC	-/3.8 (ON) 2.0/5.2 (OFF, RESET)	-
	100-110V AC	-	-/1.9 (ON) 1.3/3.8 (OFF, RESET)
	200-240V AC	-	-/3.3 (ON) 0.9/3.8 (OFF, RESET)
Operating time (s)	(ON)	0.1s	
	(OFF)	1.5 s	
	(RESET)	1.5 s	
Power supply required		300VA min.	
Dielectric properties (1 min)		1000V AC	1500V AC

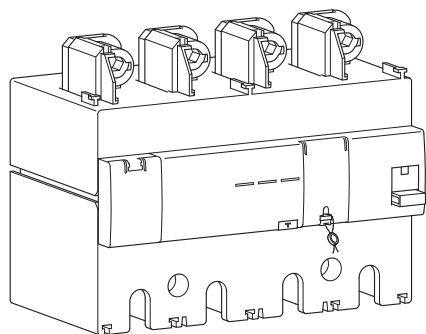
Auxiliaries

Auxiliaries for MCCBs and free tripping switches



Mounting combination for auxiliaries and releases





When associated with MCCB, the add-on block provides an earth fault protection and protects against electrical shocks by direct or indirect contacts.

The add-on blocks are protected against nuisance tripping caused by transient voltages. It's able to detect sinusoidal alternating currents and residual pulsating direct currents (A type ). It also avoids miss tripping (HI type - High Immunity).

Characteristics

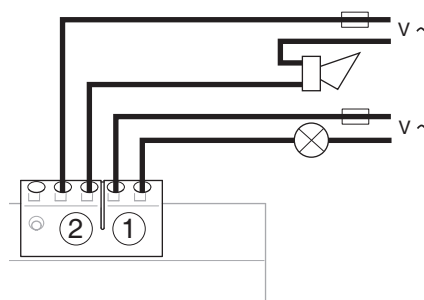
Reset button :
Signals add-on block tripping and must be acknowledged before switching on the installation.

Test button for differential functioning :
Allows to check the electrical operating of the MCCB / Add-on block association.

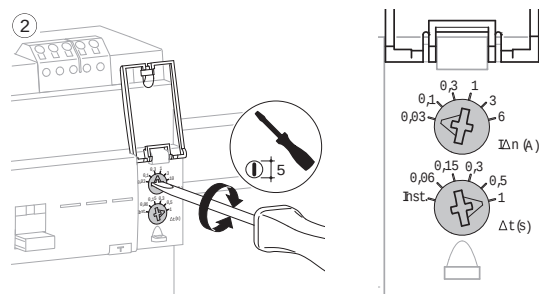
Mechanical test button :
Allows to check the mechanical operating of the MCCB / Add-on block association.

LED signaling default current level in the installation:
25% (orange) and 50% (red) $I_{\Delta n}$; green light to signal correct operating.

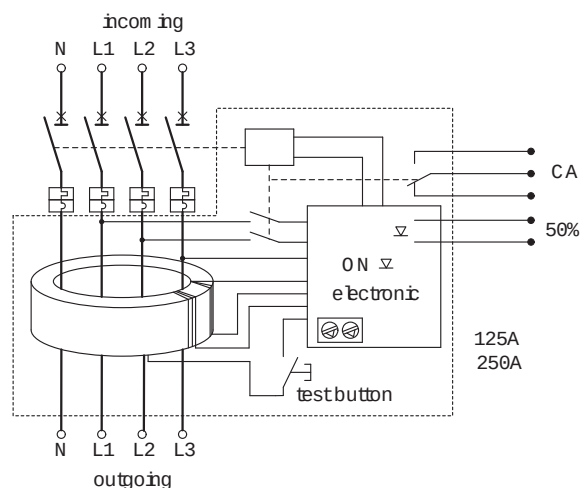
Remote tripping and advanced warning (50% $I_{\Delta n}$) signaling thanks to these contacts:



Earth leakage current ($I_{\Delta n}$) and delay (Δt) setting

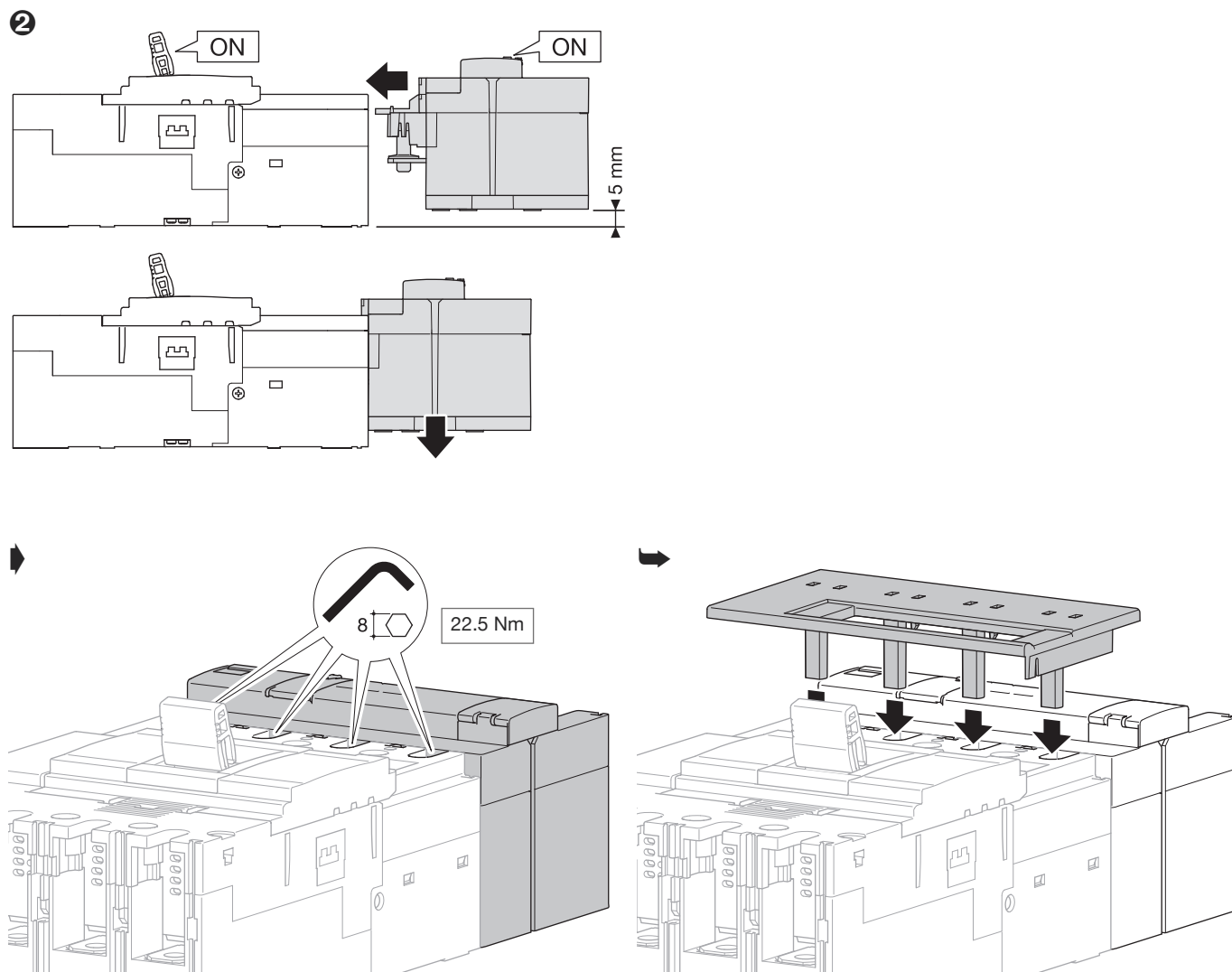


Add-on block operating

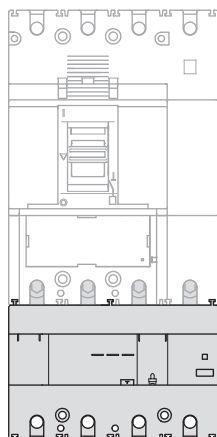


S (Δt)	A ($I_{\Delta n}$)						
		0.03	0.1	0.3	1	3	6
	Inst.	OK	OK	OK	OK	OK	OK
	0.06	no	OK	OK	OK	OK	OK
	0.15	no	OK	OK	OK	OK	OK
	0.3	no	OK	OK	OK	OK	OK
	0.5	no	OK	OK	OK	OK	OK
	1	no	OK	OK	OK	OK	OK

Add-on block mounting

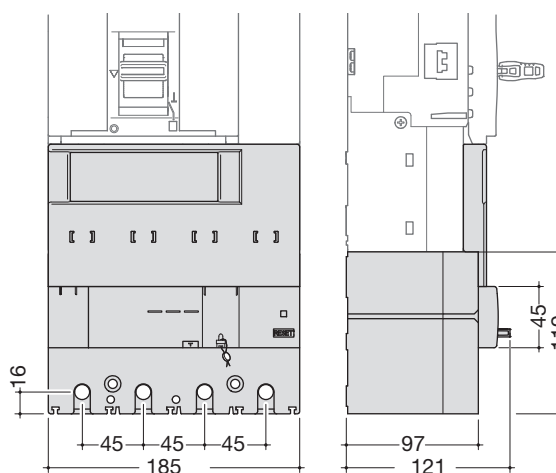


Association / Compatibility



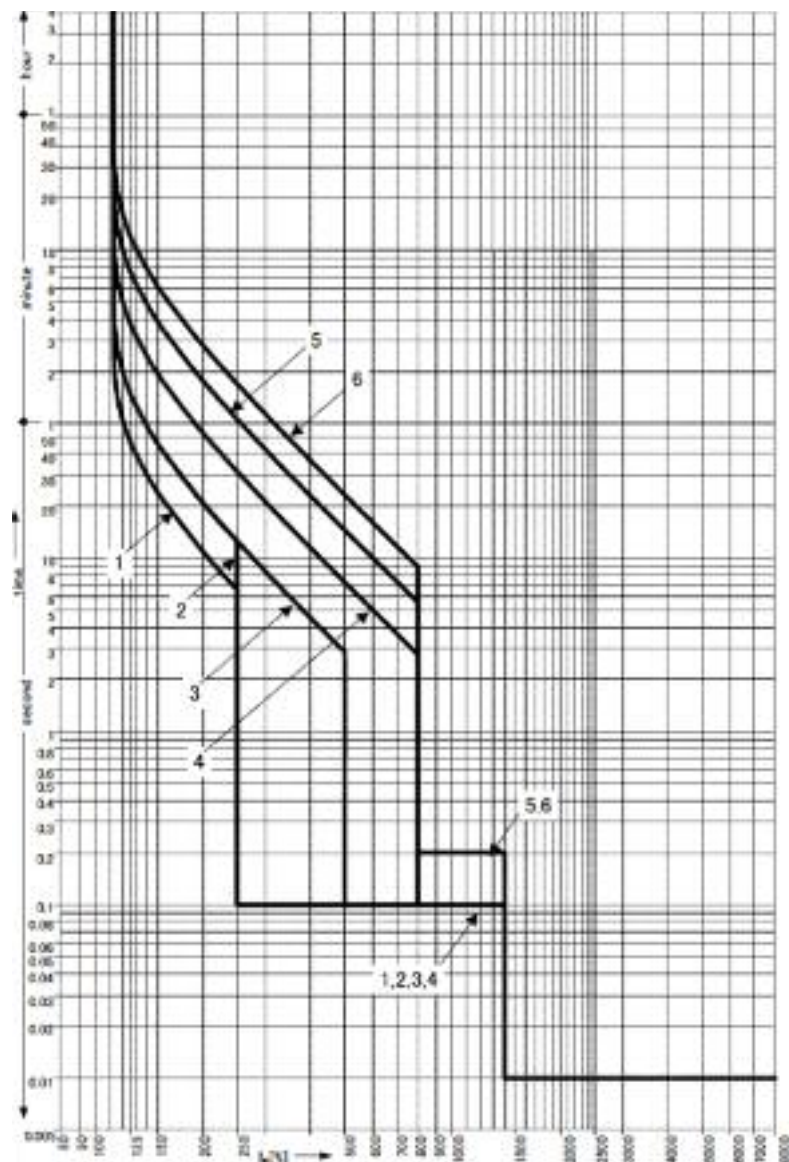
250 - 400A	630A x 0.8
HBD401H 400A	HBD631H 500A (le: 630A x 0.8)

Dimensions



IR (A)											
LTD Pick-up current			IR	xIn	0.4	0.5	0.63	0.8	0.9	0.95	1
Characteristics				No.	1	2	3	4	5	6	7
Standard	LTD	tR	(s)	11	21	21	5	10	19	29	
				200% x I R				600% x I R			
	STD	lsd	xIR	2.5			5	10			
		tsd	(s)	0.1						0.2	
	INST	li	xIR	14 (max : 12 x In)							
Optional	NP	IN	xIR	0.5 or 1 or NON (IN x 105% NT, IN x 120% T)							
		tN	(s)	IN=tR							

MCCB h1000 LSI (1000A)

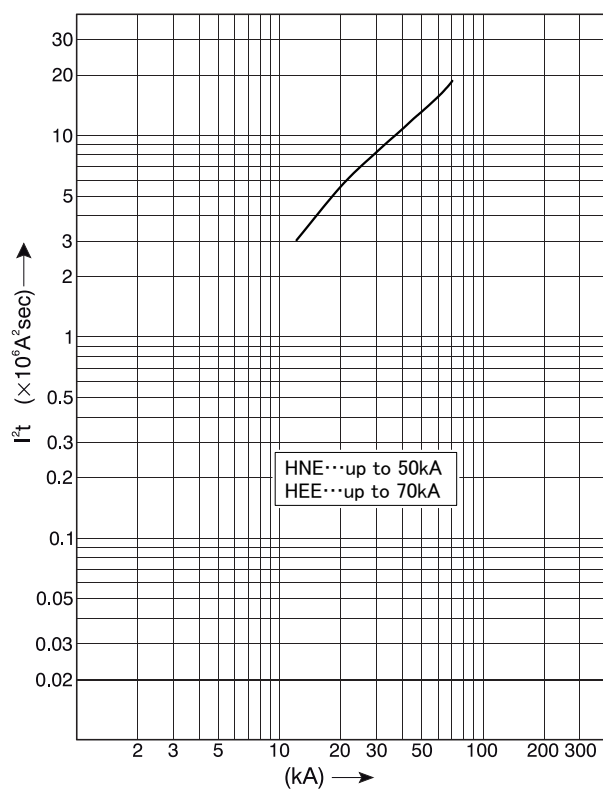


MCCBs 1000A electronic

IR (A)											
LTD Pick-up current			IR	xIn	0.4	0.5	0.63	0.8	0.9	0.95	1
Characteristics				No.	1	2	3	4	5	6	
Standard	LTD	tR	(s)	11	21	21	5	10	16		
				200% x I R				600% x I R			
	STD	lsd	xIR	2.5			5	8			
		tsd	(s)	0.1						0.2	
		INST	li	xIR	14 (max : 10 x In)						
Optional	NP	IN	xIn	0.8							
		tN	(s)	IN=tR							

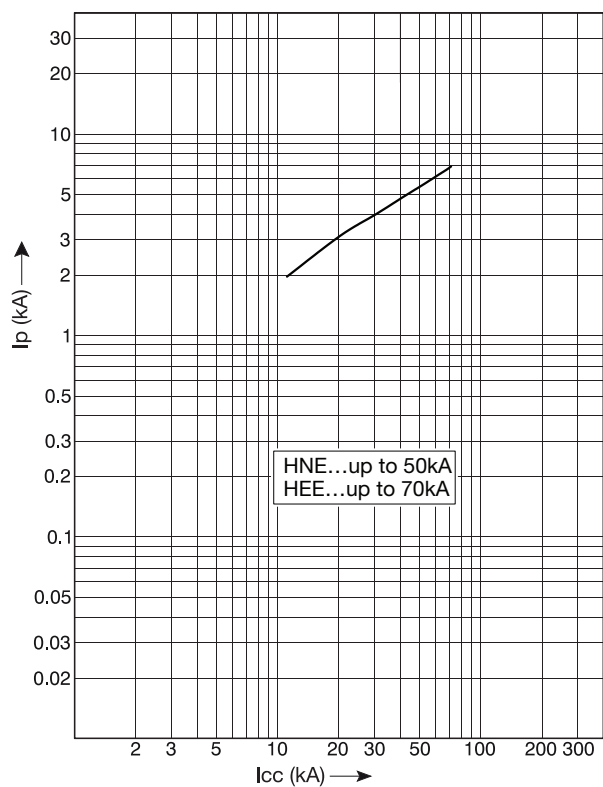
Thermal constraint curve at 400V (Let-through energy)

MCCB h1000



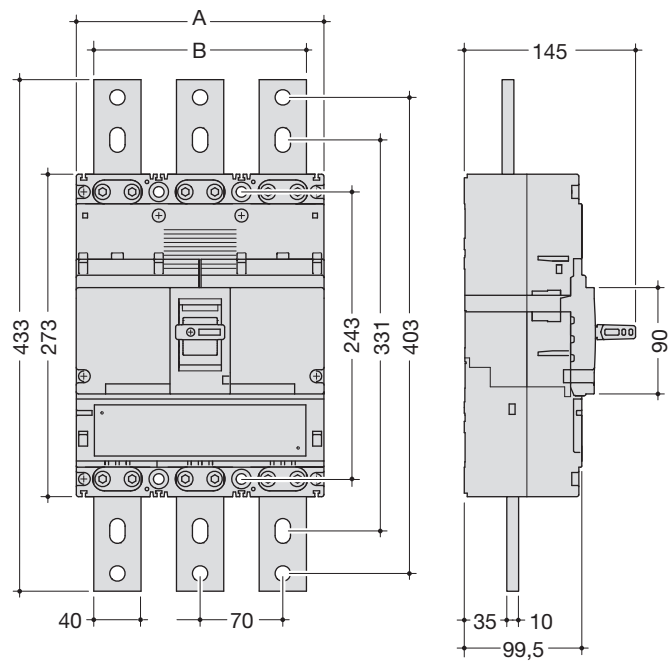
Current limiting curve at 400V (Let-through peak current)

MCCB h1000



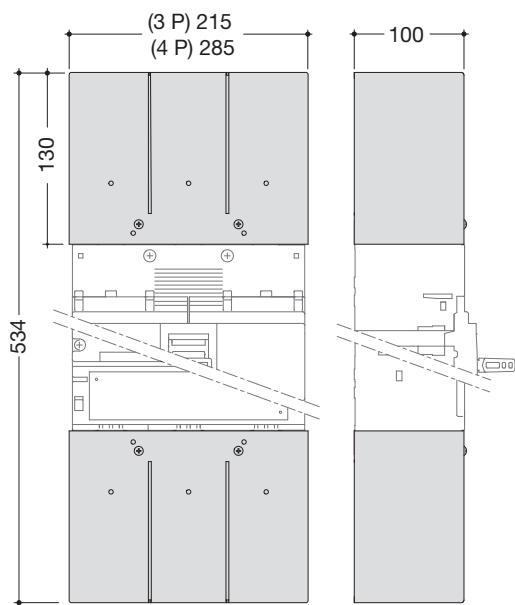
Dimensions

MCCBs

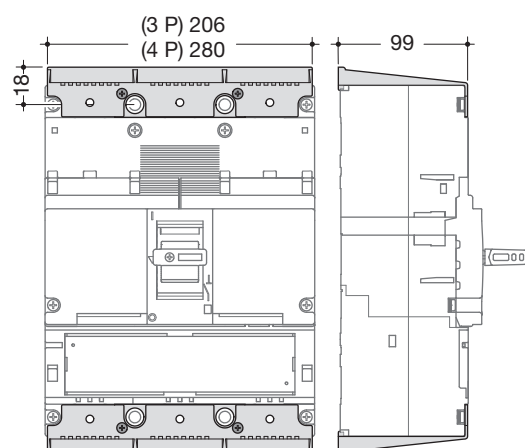


	A (mm)	B (mm)
3P	210	180
4P	280	250

Terminal covers for extended straight connections

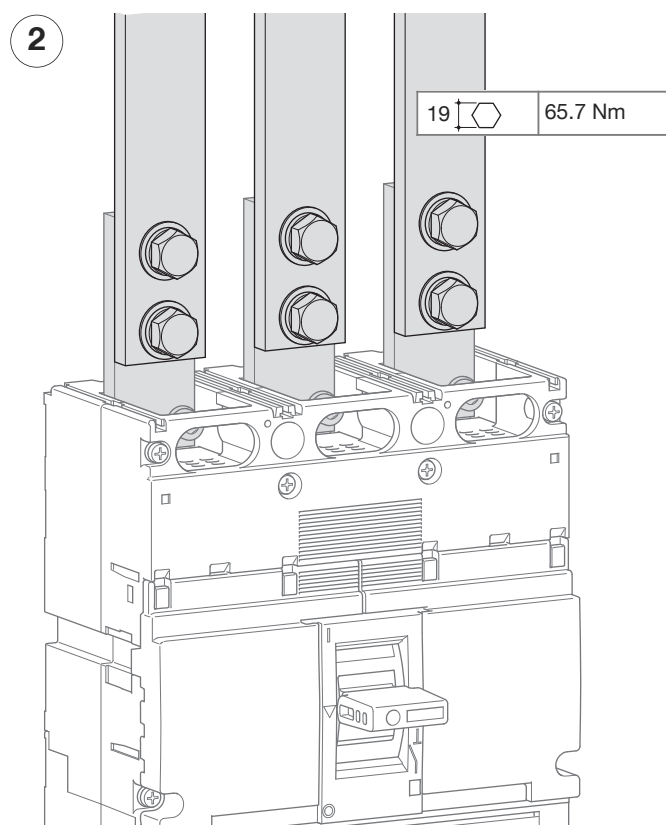
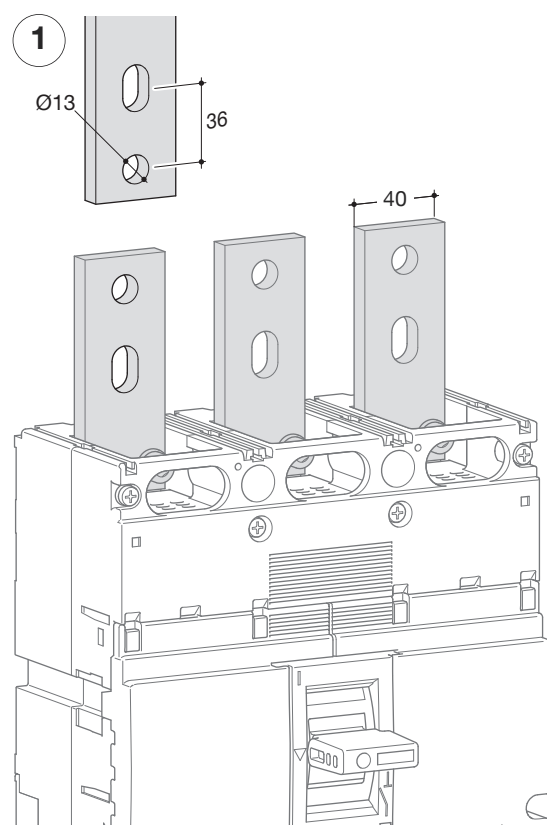


Terminal covers for rear connections



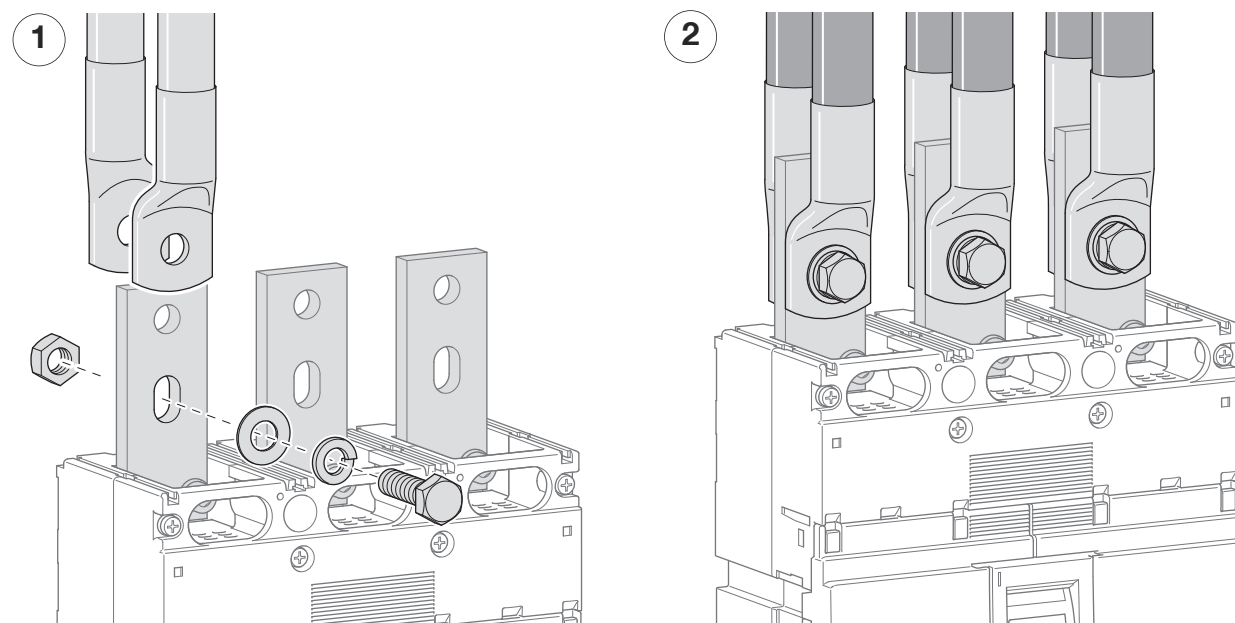
Connection

Extended straight connections

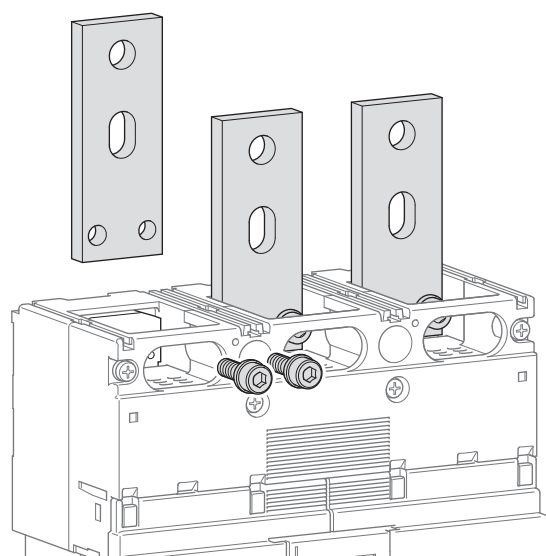


Direct cable connection on terminal
Copper with conductor max. width: 50 mm

Connection with end lugs

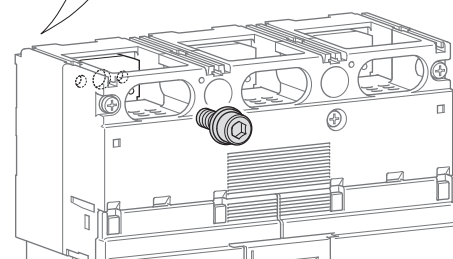
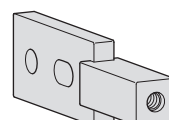
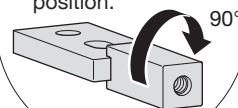


Rear connections

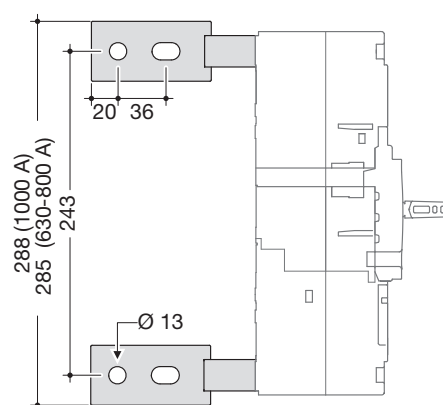
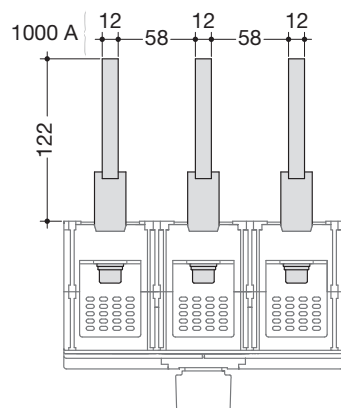


1000A:
vertical only.

630-800A:
vertical or horizontal
position.

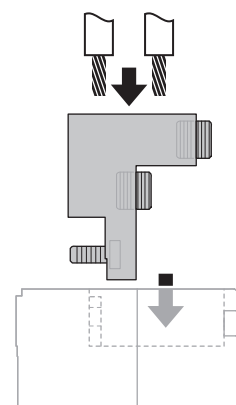
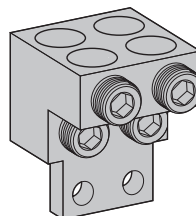
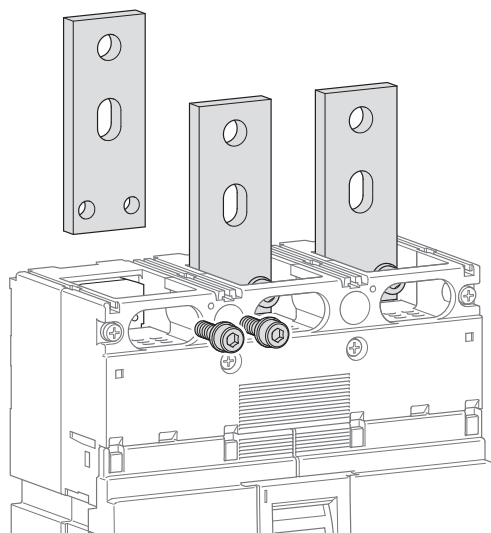


630-800 A | 10 60 10 60 10



Connection for aluminium / copper conductors (h1000)

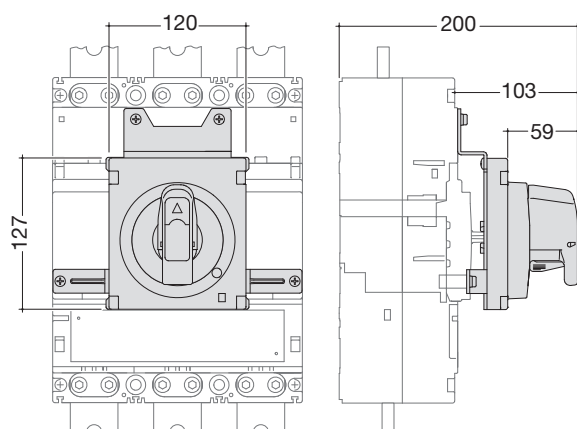
HYE007 (3P) - HYE008H (4P)



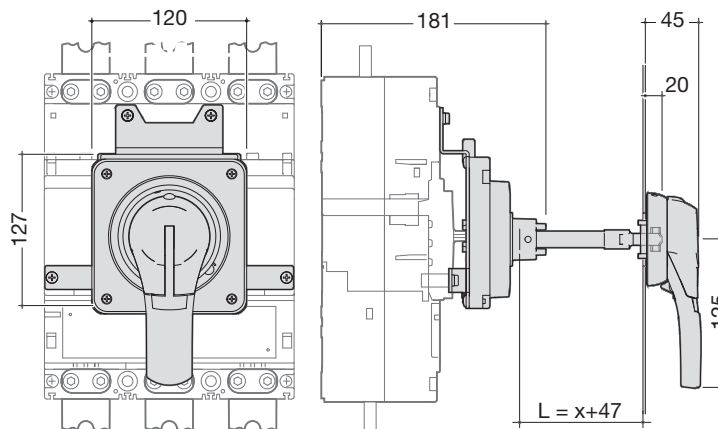
	max. 4x240 mm ²
10	25 Nm

Accessories

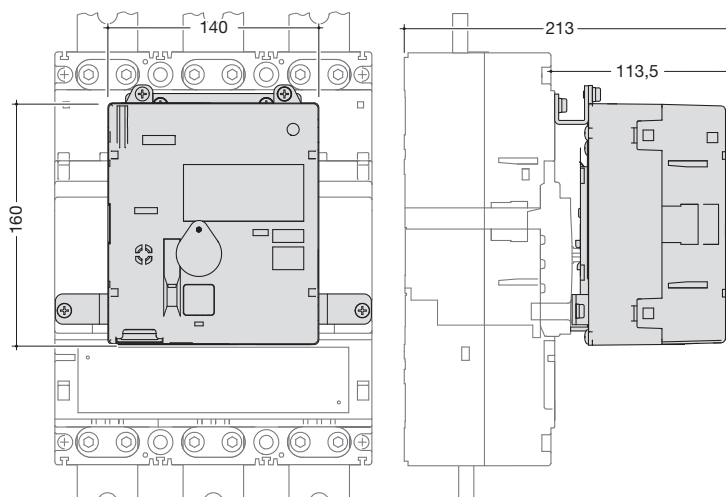
Direct rotary handle



Extended rotary handle



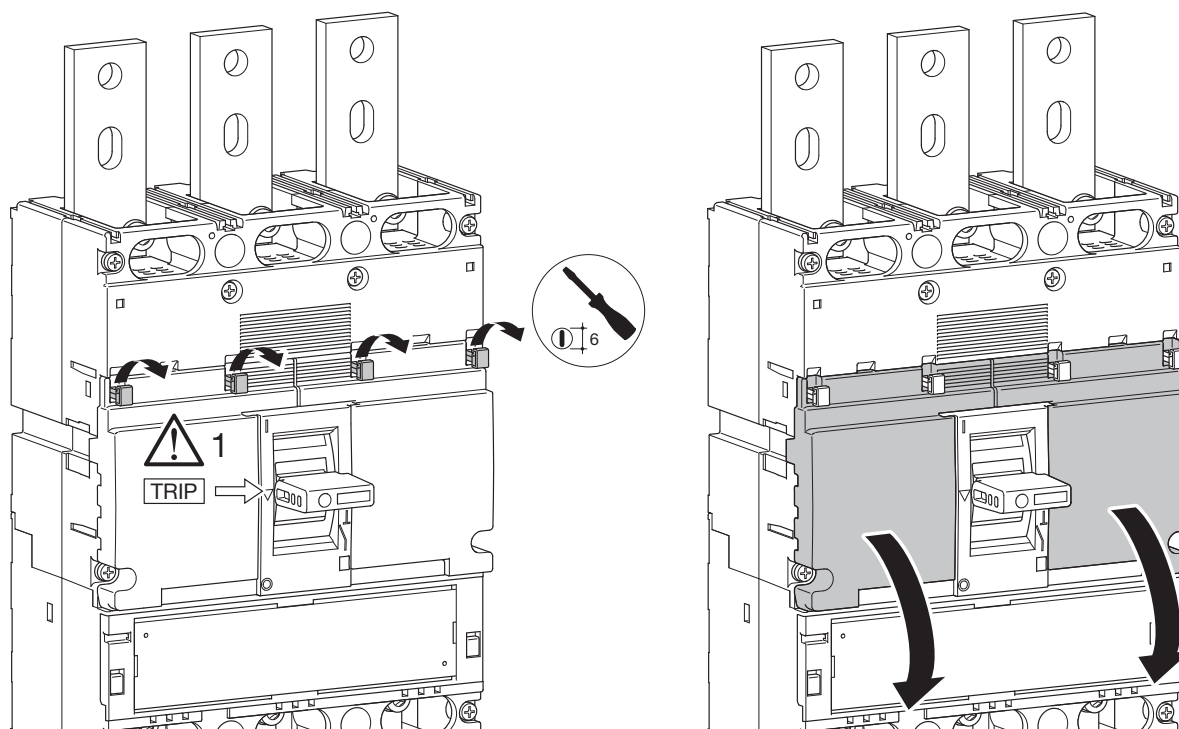
Motor operator



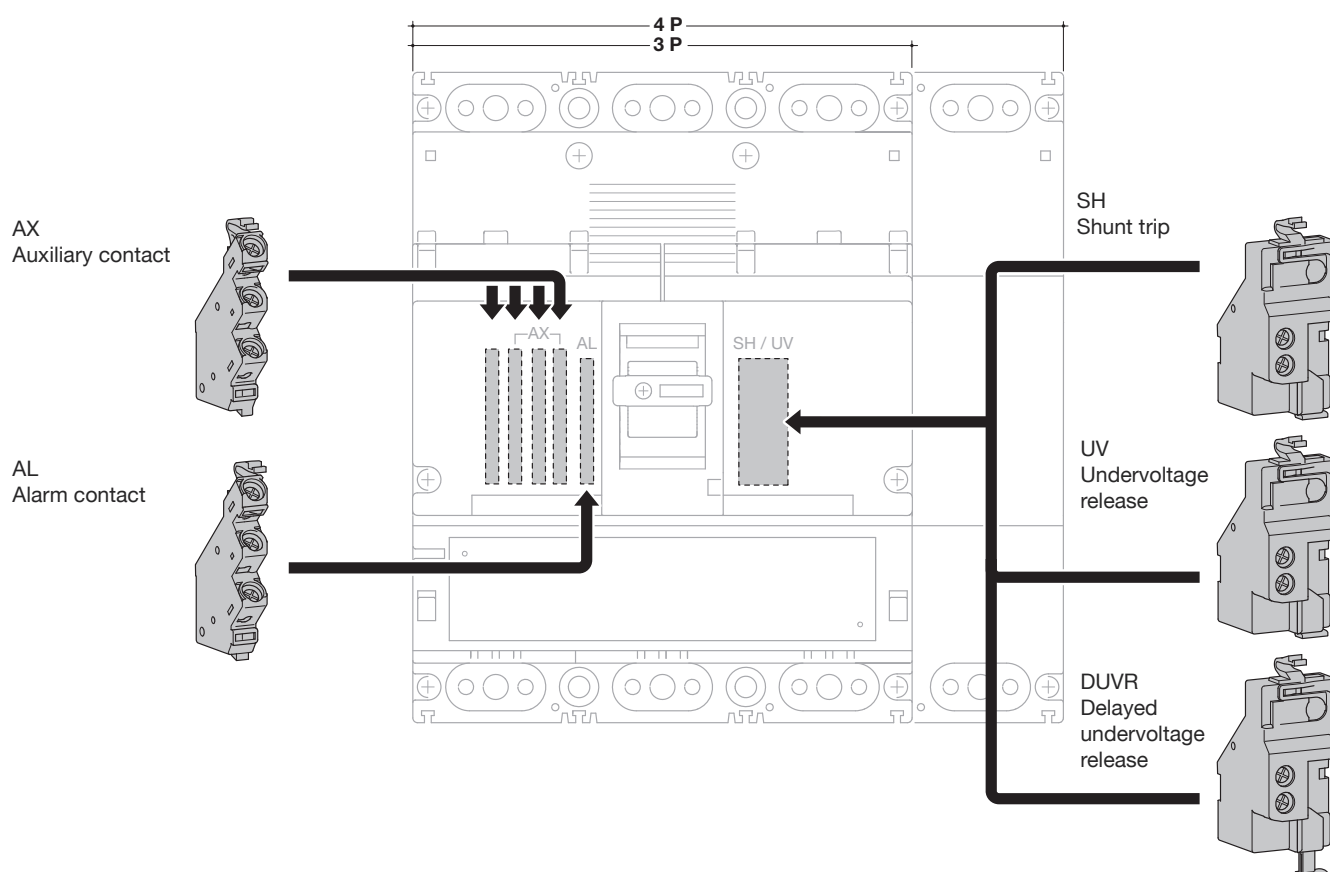
		HXE040H	HXE042H
Operating voltage		24-48V DC	100-240V AC
Operating current/starting current peak value (A)	24V DC	-/12 (ON) 6/11.5 (OFF, RESET)	-
	48V DC	-/7 (ON) 3.2/6.5 (OFF, RESET)	-
	100-110V AC	-	-/2.2 (ON) 1.7/3.5 (OFF, RESET)
	200-240V AC	-	-/2.2 (ON) 1.3/3.5 (OFF, RESET)
Operating time (s)	(ON)	0.1s	
	(OFF)	1.5 s	
	(RESET)	1.5 s	
Power supply required		300VA min.	
Dielectric properties (1 min)		1000V AC	1500V AC

Auxiliaries

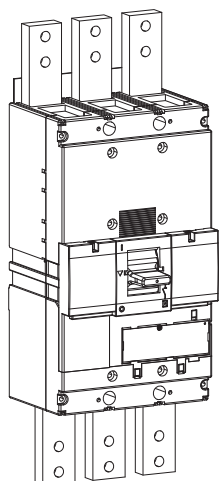
Auxiliaries for MCCBs and free tripping switches



Mounting combination for auxiliaries and releases

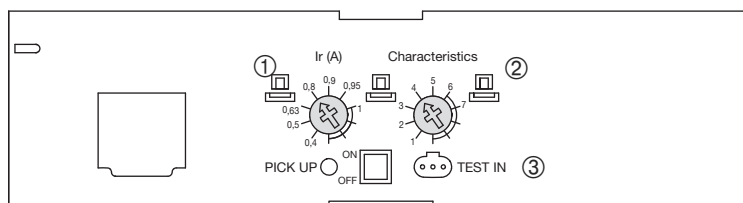
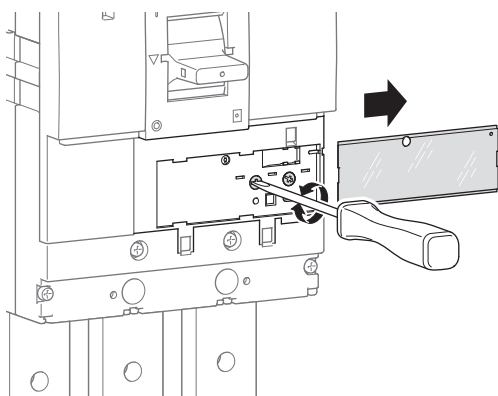


MCCBs



		220/240 V AC (kA)	380/415 V AC (kA)	660/690 V AC (kA)
HNF	Icu	100	50	25
	Ics	75	50	25
HEF	Icu	100	70	45
	Ics	75	50	34
HCF	Icm		45 kA	
	Icw		20 kA-0.3 s	

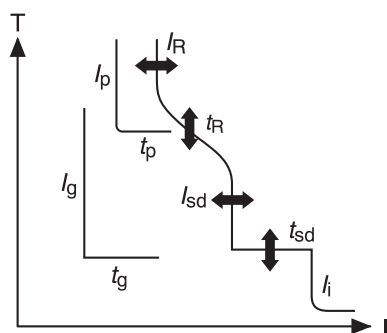
Electronic trip unit settings (LSI)



L - Long delay - protection against overloads: Ir and tr settings

S - Short delay - protection against short circuits: Isd and tsd settings

I - Instantaneous - max. instantaneous threshold (< 10 ms) in case of short circuit: 2,5 to 10 x Ir.



	① Ir(A)	② Im	③ N
LSI	0.4 - 1 In	2.5 - 10 Ir	0% 50% 100 %

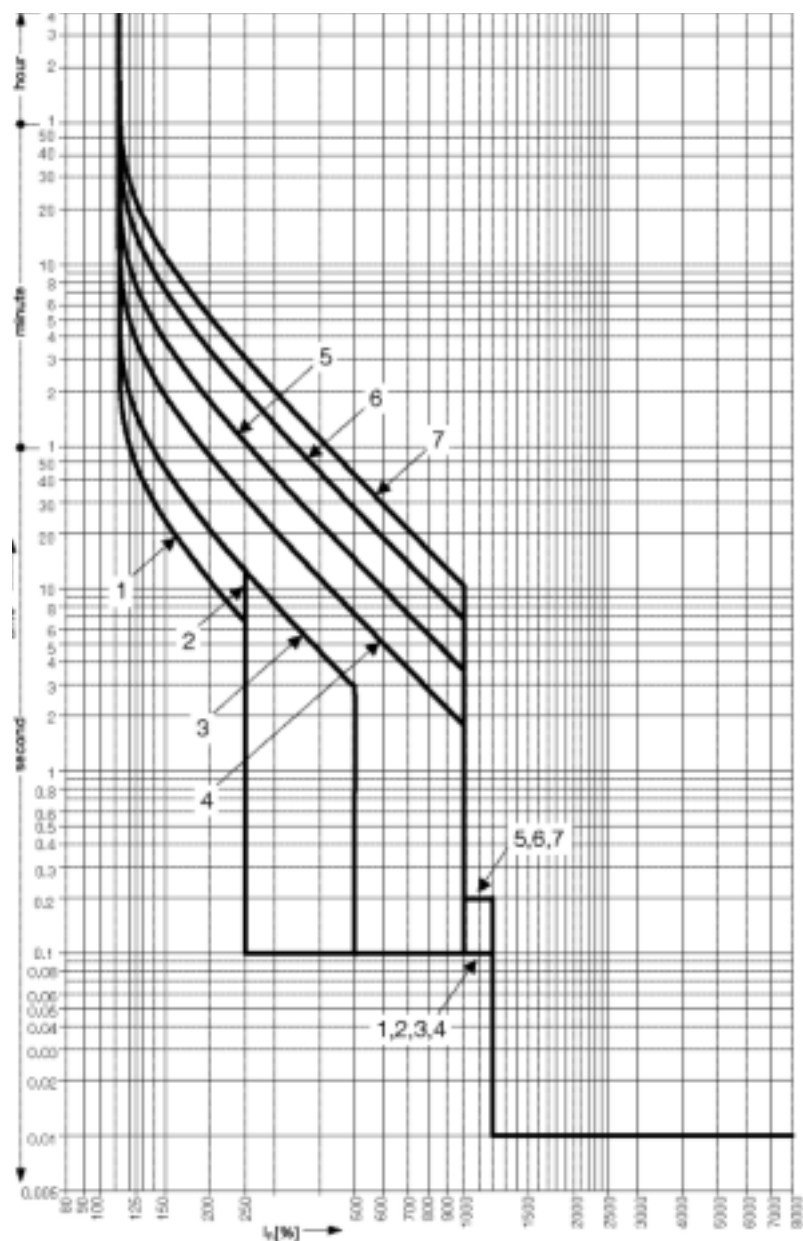
LSI		In A			
		1250 - 1600 A			
		Long Time Delay		Short Time Delay	
		Inst			
		Ir (x In)	tr (s)	isd (xlr)	tsd (s)
② Ir (x In)	0.4	OK			
	0.5	OK			
	0.63	OK			
	0.8	OK			
	0.9	OK			
	0.95	OK			
	1	OK			
Characteristics*	1		11s at 2 xlr	2.5	0.1
	2		21s at 2 xlr		
	3			5	
	4		5 s at 6 xlr	10	
	5		10 s at 6 xlr		0.2
	6		19 s at 6 xlr		
	7		29 s at 6 xlr		
Neutral protection		0% 50% 100%			

(*) Characteristic 1 : use for generators protection.

Characteristic 2 to 4 - standard protection : options allow coordination optimisation with other products.

Characteristic 5 to 7 - motor protection: use positions according to motor starting characteristics.

MCCB h1600 LSI

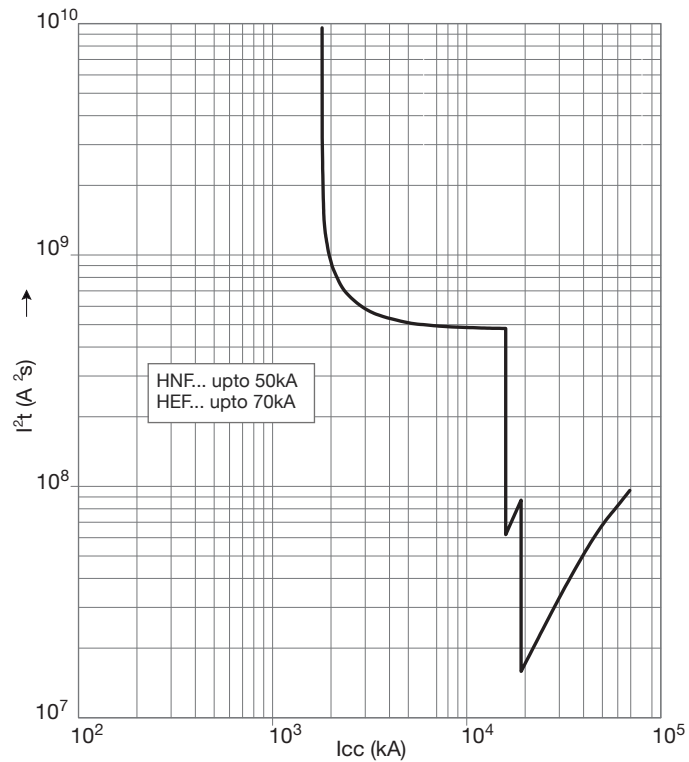


MCCBs 1250A and 1600A electronic

/R (A)											
LTD Pick-up current			IR	x/n	0.4	0.5	0.63	0.8	0.9	0.95	1
Characteristics			No.	1	2	3	4	5	6	7	
Standard	LTD	tR	(s)	11	21	21	5	10	19	29	
				200% x I R				600% x I R			
	STD	lsd	x/R	2.5		5	10				
		tsd	(s)	0.1						0.2	
	INST	li	x/R	14 (max : 12 x ln)							
Optional	NP	IN	x/R	0,5 or 1 or NON (/N x 105% NT, /N x 120% T)							
		tN	(s)	/N=tR							

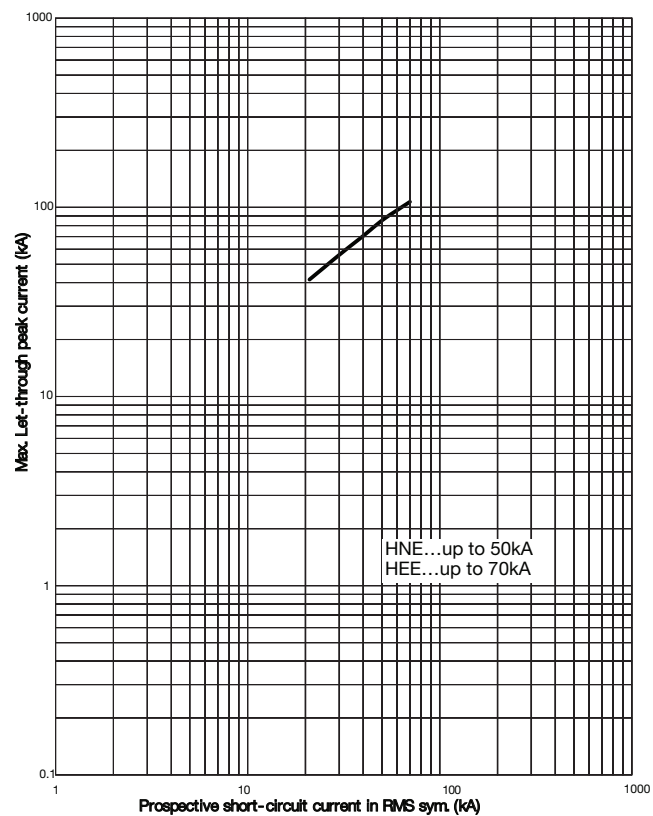
Thermal constraint curve at 400V (Let-through energy)

MCCB h1600



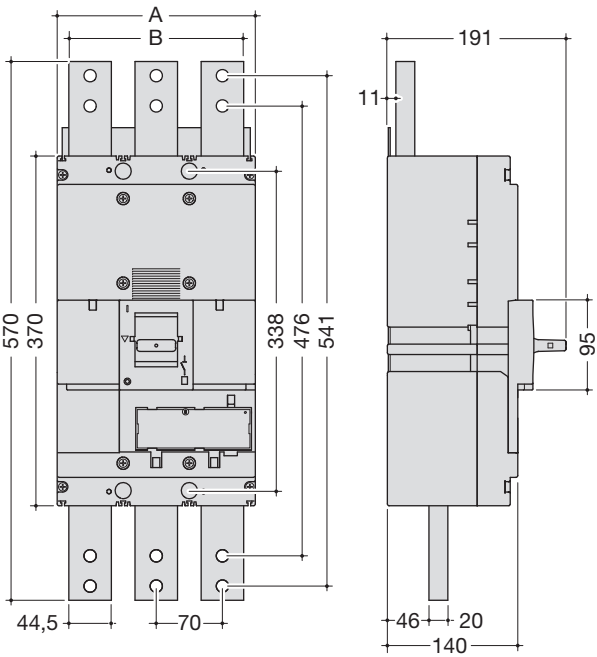
Current limiting curve at 400V (Let-through peak current)

MCCB h1600



Dimensions

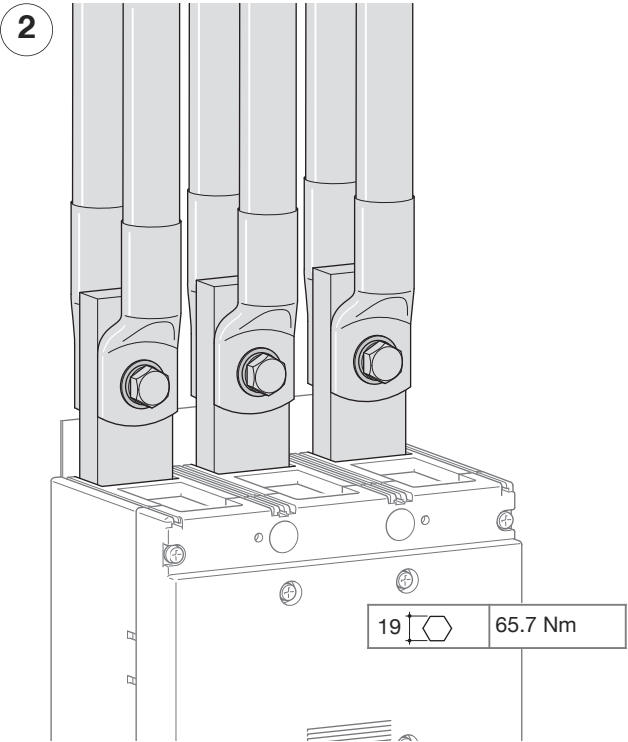
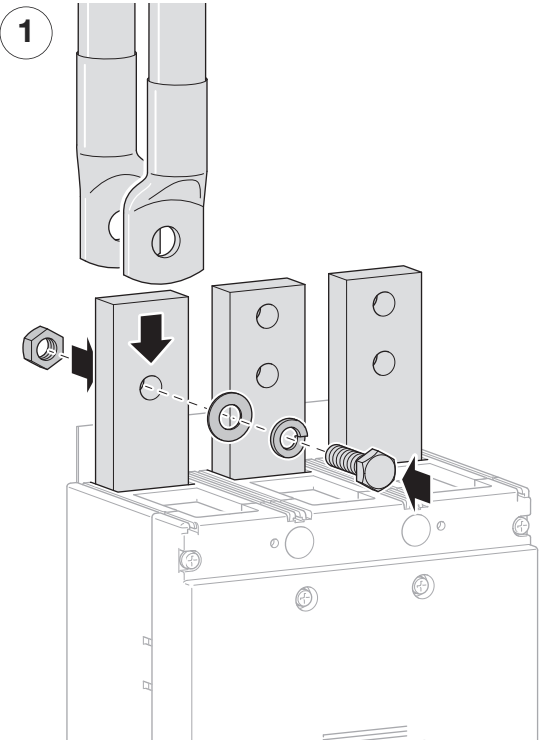
MCCBs



	A (mm)	B (mm)
3P	210	185
4P	280	255

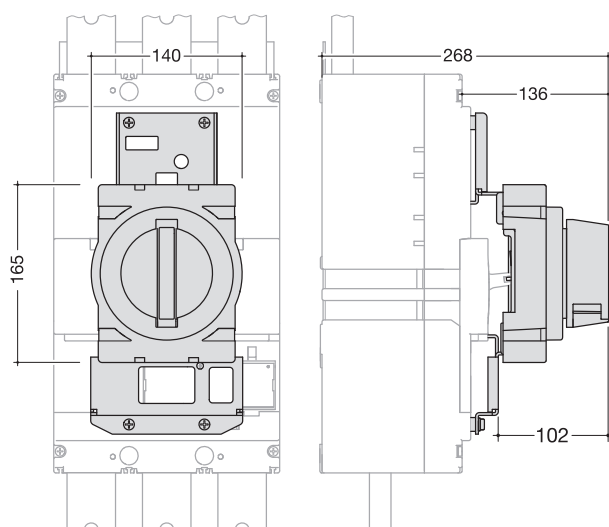
Connection

Connection with end lugs

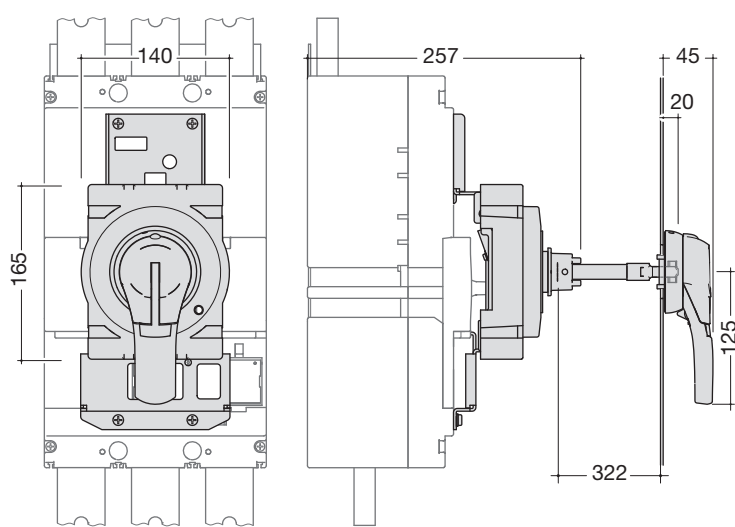


Accessories

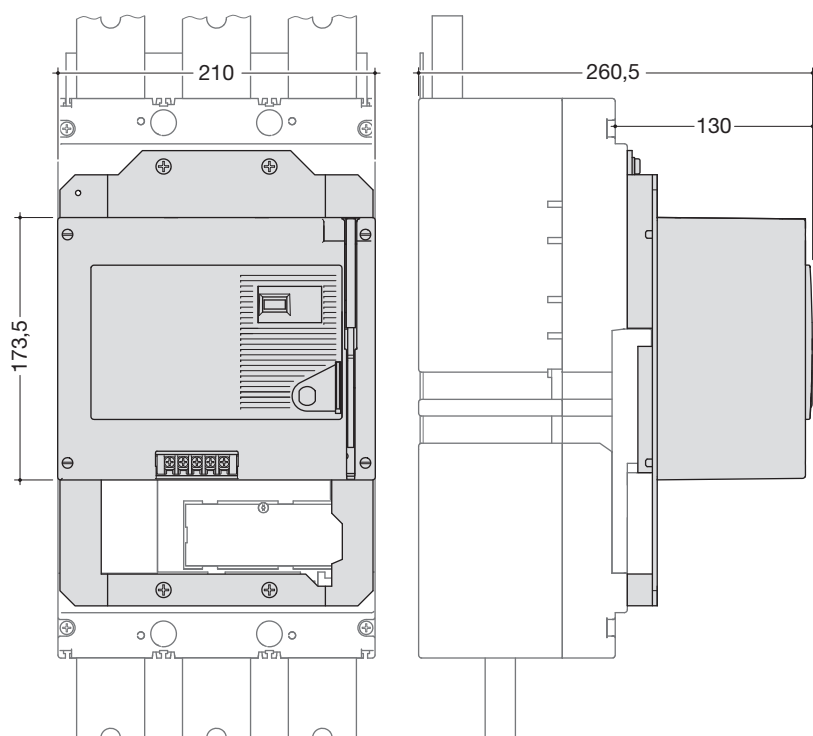
Direct rotary handle



Extended rotary handle



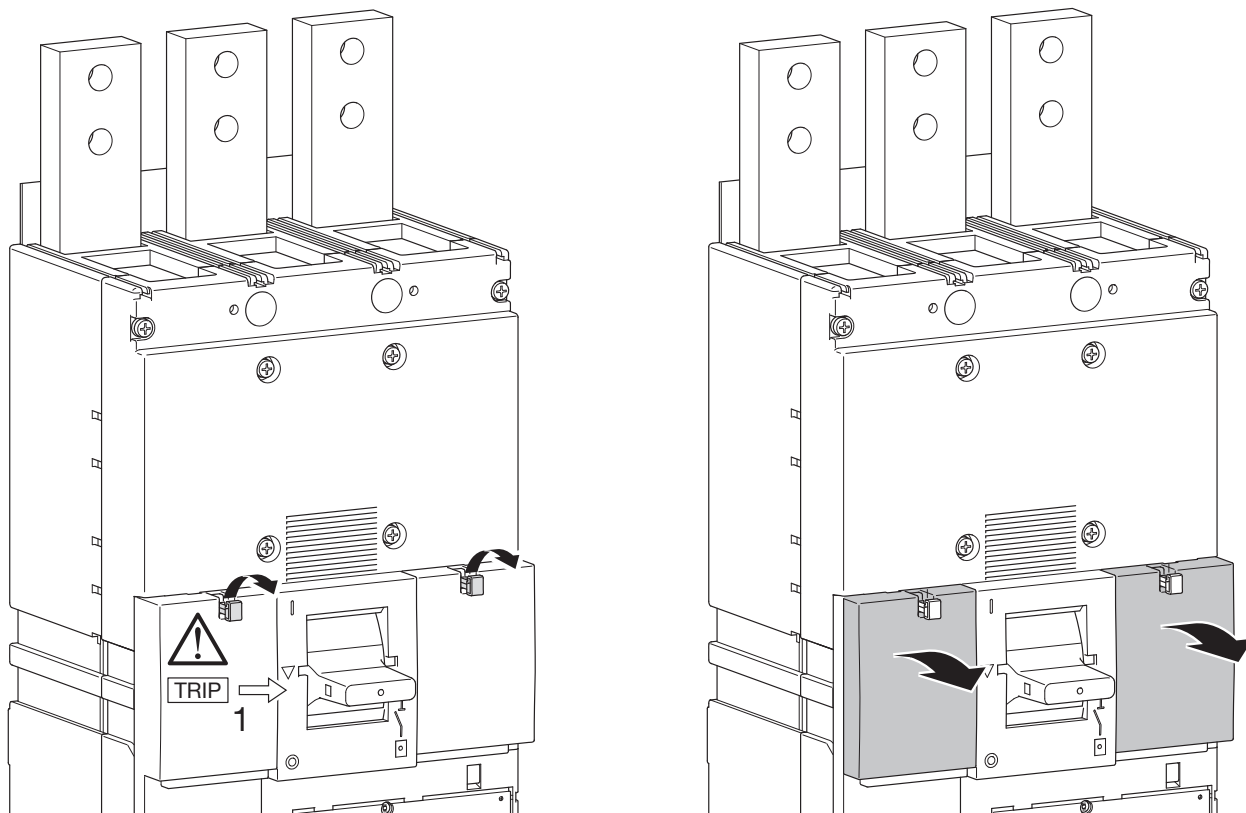
Motor operator



		HXF040H	HXF042H
Operating voltage		24V DC	200-230V AC
Operating current / starting current peak value (A)	24V DC	-/4.5 (ON) 4.0/12.0 (OFF, RESET)	-
	200-230V AC	-	-/1.2 (ON) 1.0/3.2 (OFF, RESET)
Operating time (s)	(ON)	0,06s	
	(OFF)	3s	
	(RESET)	3s	
Power supply required		300VA min.	
Dielectric properties (1 min)		500V AC	1500V AC

Auxiliaries

Auxiliaries for MCCBs and free tripping switches



Mounting combination for auxiliaries and releases

