

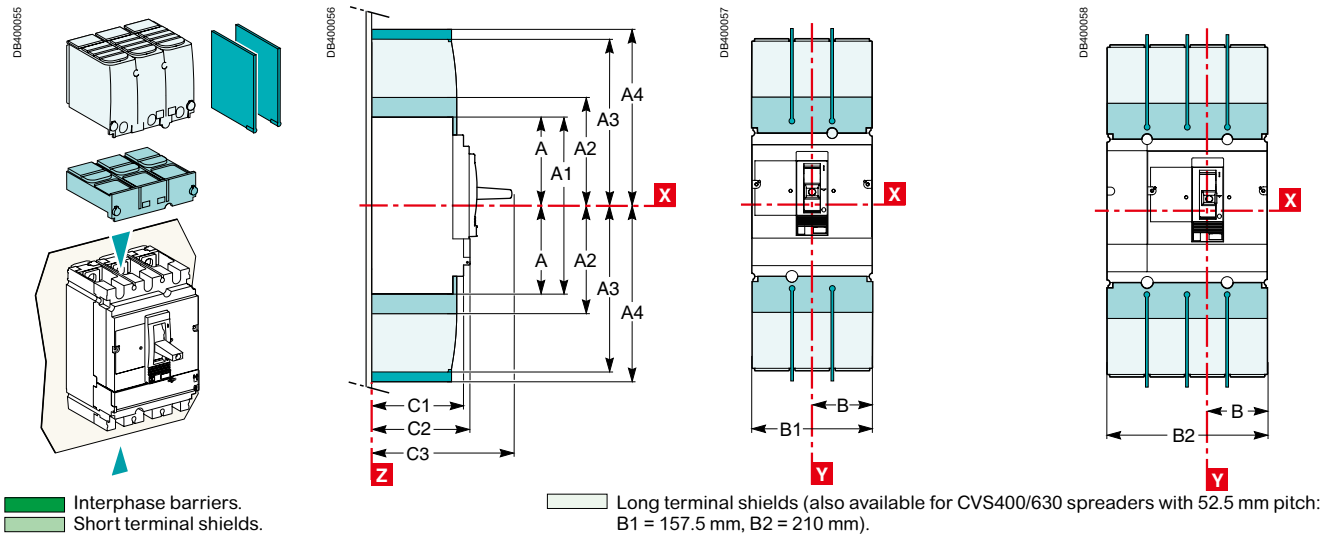
Dimensions and connection



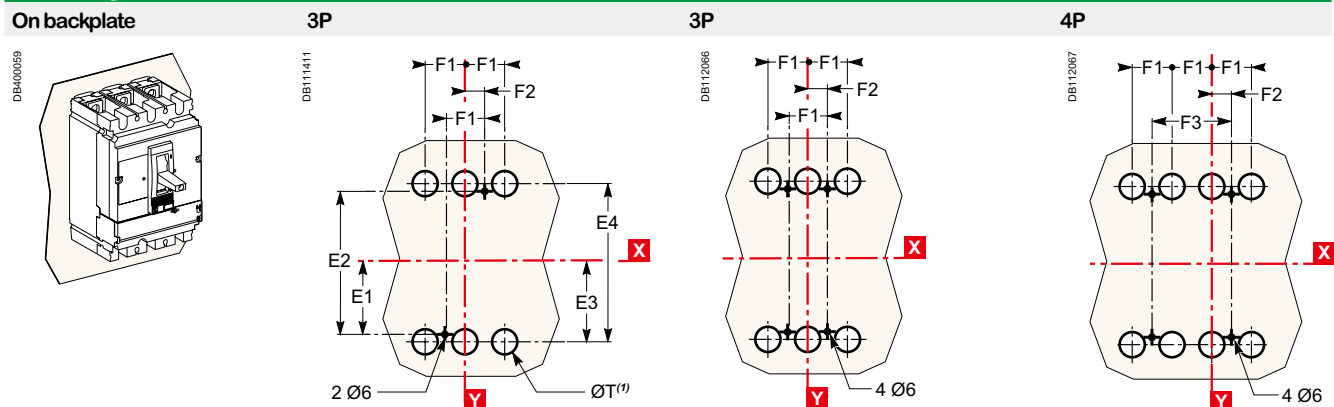
Dimensions and connection

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Dimensions

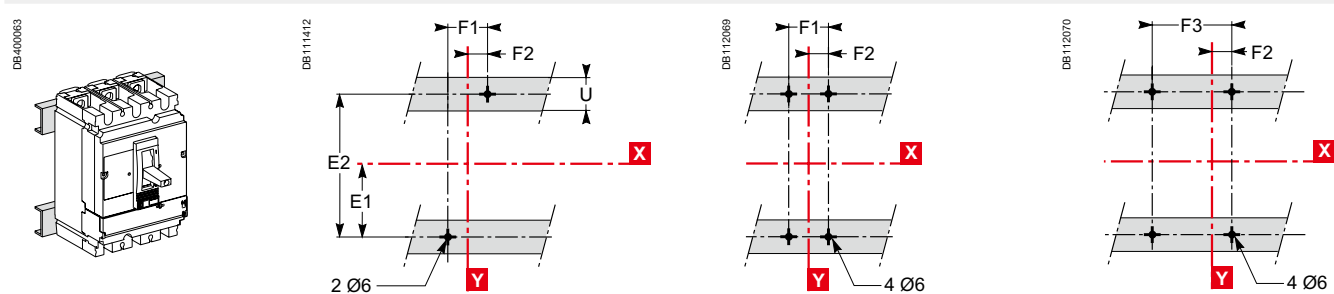


Mounting

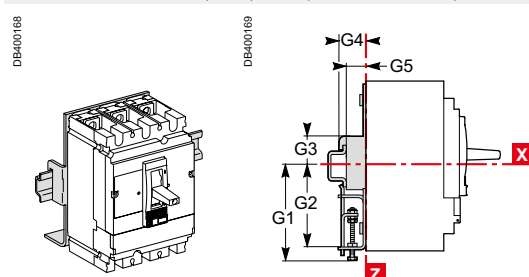


(1) The ØT holes are required for rear connection only.

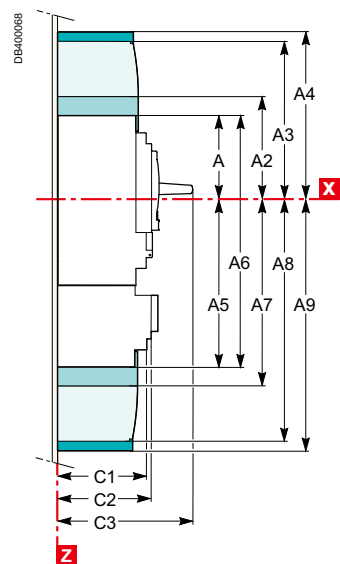
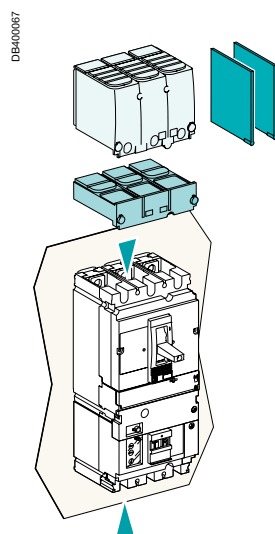
On rails



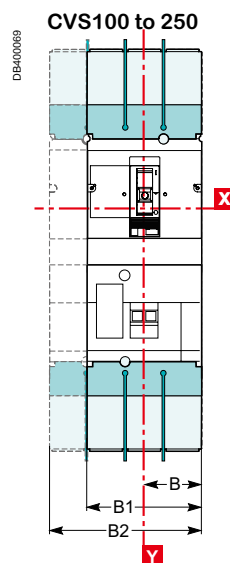
On DIN rail with adaptor plate (CVS100 to 250)



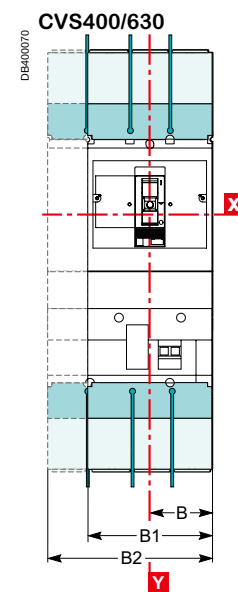
Dimensions



3/4P



3/4P



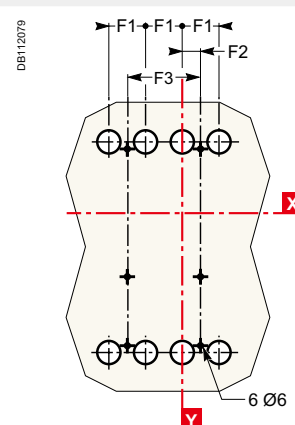
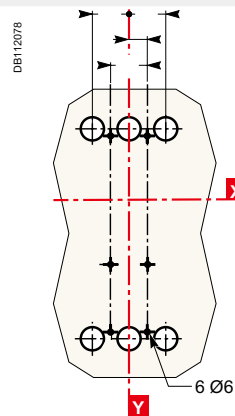
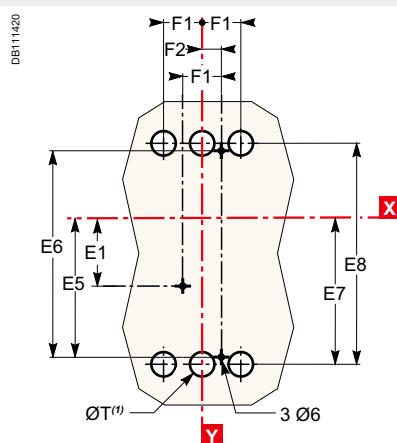
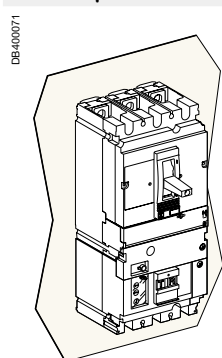
Mounting

CVS100 to 250

CVS400/630

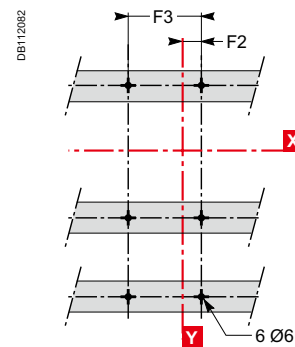
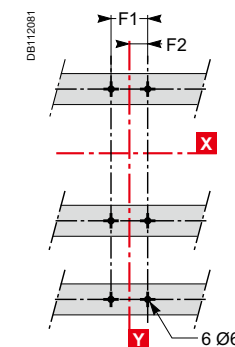
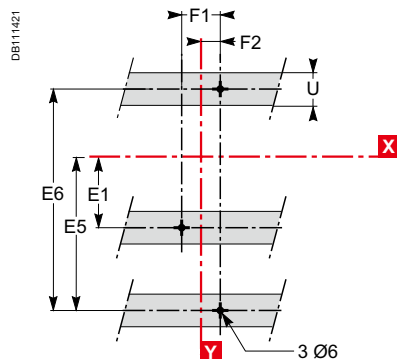
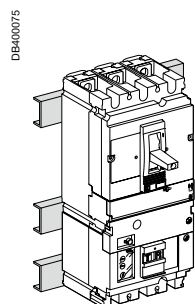
CVS100 to 630

On backplate



(1) The ØT holes are required for rear connection only.

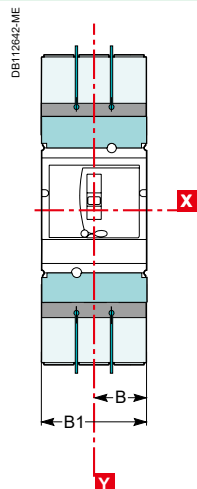
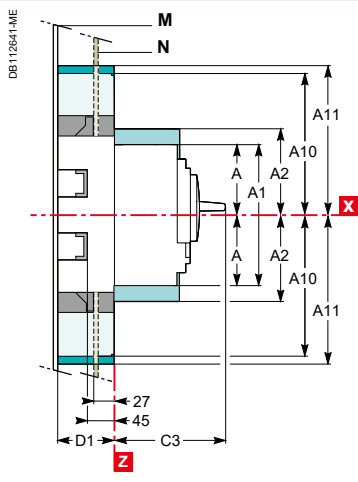
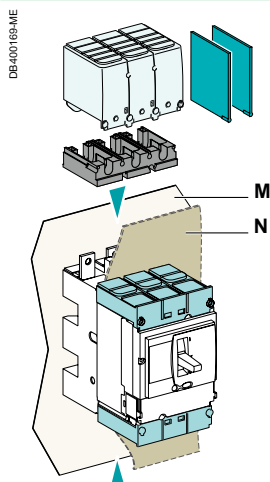
On rails



Type	A	A1	A2	A3	A4	A5	A6	A7	A8	A9	B	B1	B2	C1	C2	C3	E1
CVS100 to 250	80.5	161	94	145	178.5	155.5	236	169	220	253.5	52.5	105	140	81	86	126	62.5
CVS400/630	127.5	255	142.5	200	237	227.5	355	242.5	300	337	70	140	185	95.5	110	168	100
Type	E2	E3	E4	E5	E6	E7	E8	F1	F2	F3	G1	G2	G3	G4	G5	ØT	U
CVS100 to 250	125	70	140	137.5	200	145	215	35	17.5	70	95	75	13.5	23	17.5	24	≤32
CVS400/630	200	113.5	227	200	300	213.5	327	45	22.5	90	-	-	-	-	-	32	≤35

Mounting

3P



Interphase barriers.
Short terminal shields.

Long terminal shields (also available for CVS400/630 spreaders with 52.5 mm pitch:
B1 = 157.5 mm, B2 = 210 mm).

Adapter for base, required to mount long terminal shields or interphase barriers.

Mounting

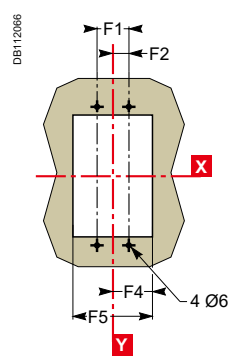
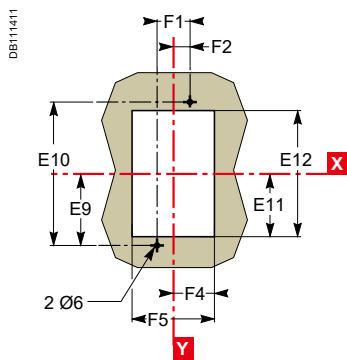
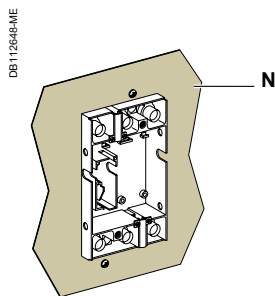
Through front panel (N)

3P

3P

CVS100 to 250

CVS400 to 630

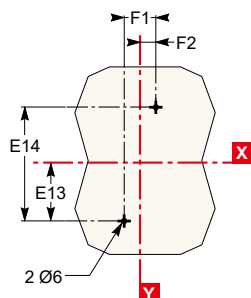
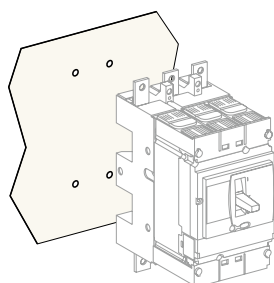


Mounting

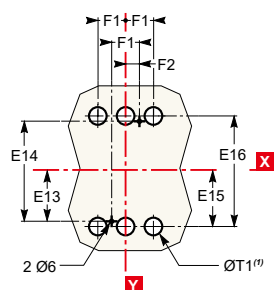
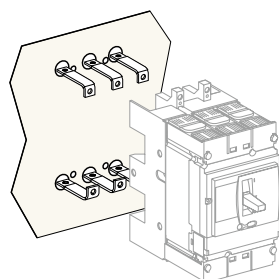
On backplate (M)

3P

Front connection (an insulating screen is supplied with the base and must be fitted between the base and the backplate)

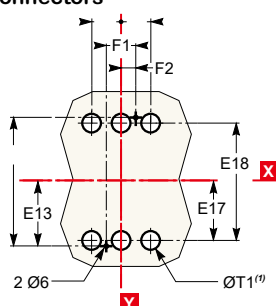
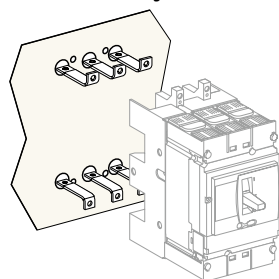


Connection by exterior-mounted rear connectors



(1) The ØT1 holes are required for rear connection only (for two-pole circuit breakers, the middle holes are not required).

Connection by interior-mounted rear connectors

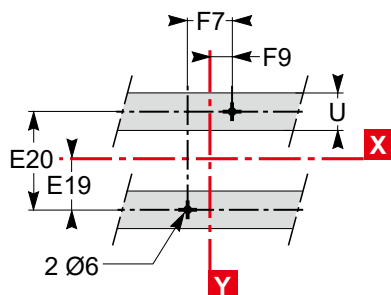
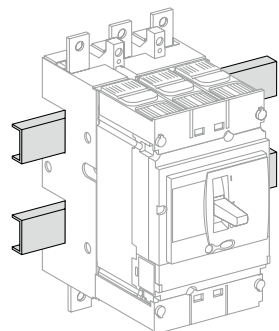


(1) The ØT1 holes are required for rear connection only (for two-pole circuit breakers, the middle holes are not required).

Mounting

On rail

3P



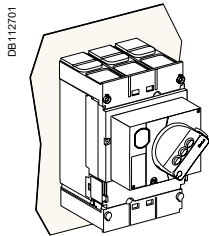
Type	A	A1	A2	A3	A4	A5	A6	A7	A8	A9	B	B1	B2	C1	C2	C3	E1
CVS100 to 250	80.5	161	94	145	178.5	155.5	236	169	220	253.5	52.5	105	140	81	86	126	62.5
CVS400/630	127.5	255	142.5	200	237	227.5	355	242.5	300	337	70	140	185	95.5	110	168	100
Type	E2	E3	E4	E5	E6	E7	E8	F1	F2	F3	G1	G2	G3	G4	G5	ØT	U
CVS100 to 250	125	70	140	137.5	200	145	215	35	17.5	70	95	75	13.5	23	17.5	24	≤32
CVS400/630	200	113.5	227	200	300	213.5	327	45	22.5	90	-	-	-	-	-	32	≤36

Dimensions

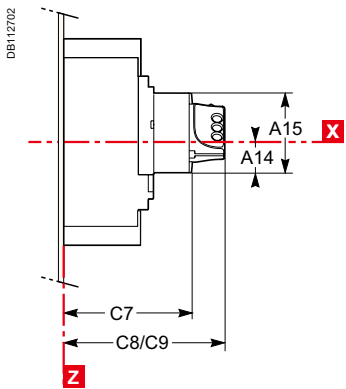
3P

4P

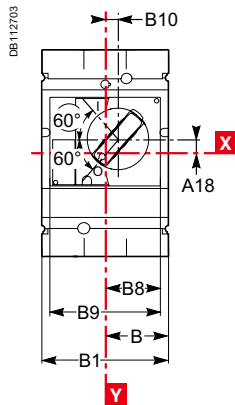
Fixed circuit breaker



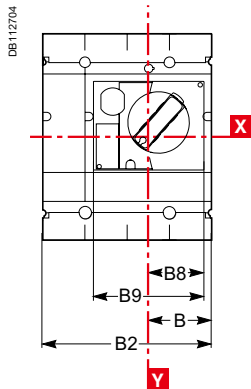
DE112701



DE112702



DE112703



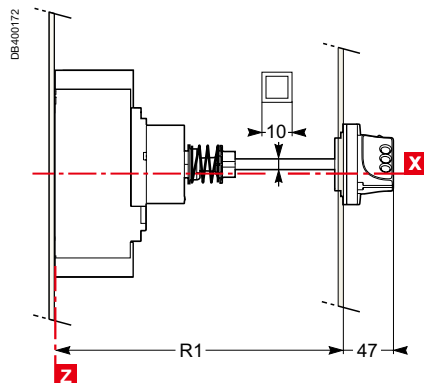
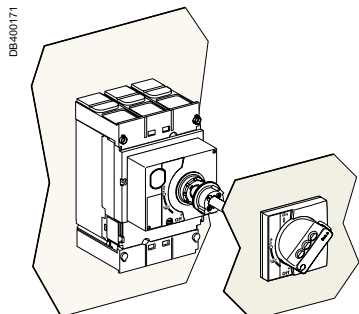
DE112704

C8: without keylock
C9: with keylock

Type	A14	A15	A18	B8	B9	B10	C7	C8	C9
CVS100 to 250	27.5	73	9	45.5	91	9.25	121	155	164
CVS400/630	40	123	24.6	61.5	123	5	145	179	188

Dimensions

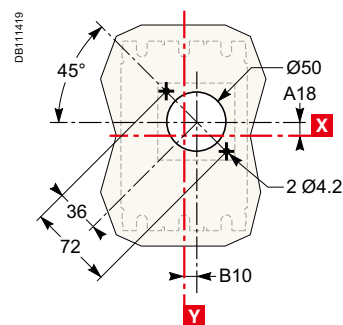
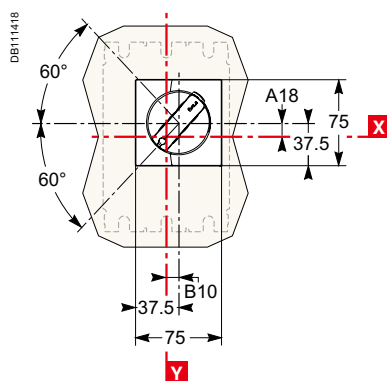
Fixed circuit breaker



Cutout for shaft (mm)

Type	R1
CVS100/160/250	min. 171 max. 600
CVS400/630	min. 195 max. 600

Dimensions and front-panel cutout

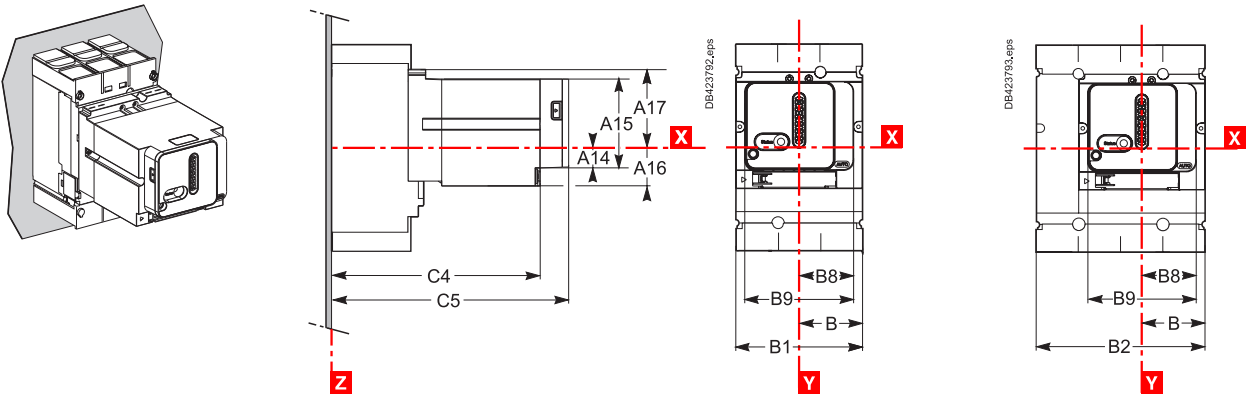


Type	A18	B10
CVS100 to 250	9	9.25
CVS400/630	24.6	5

Dimensions

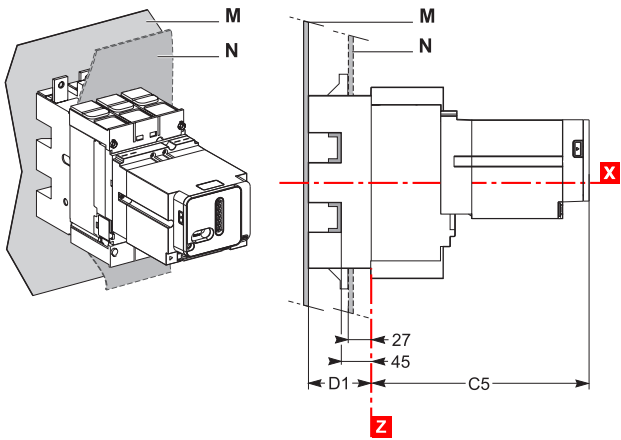
3P4P

Fixed circuit breaker



Dimensions

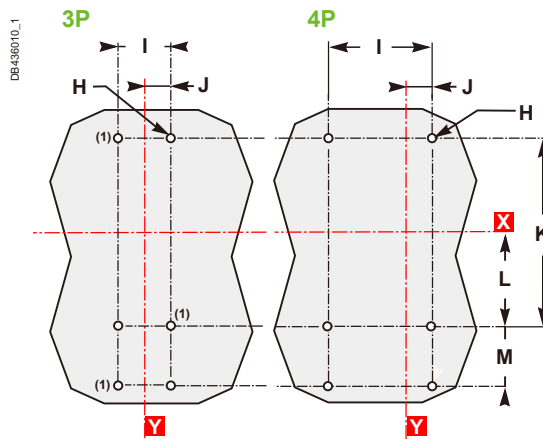
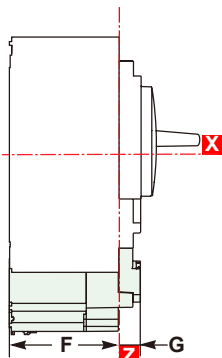
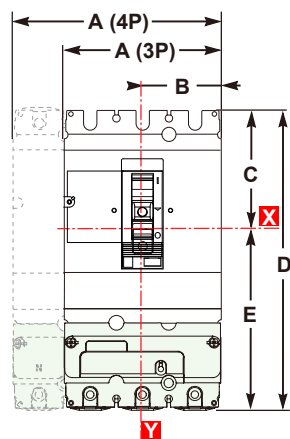
Plug-in circuit breaker



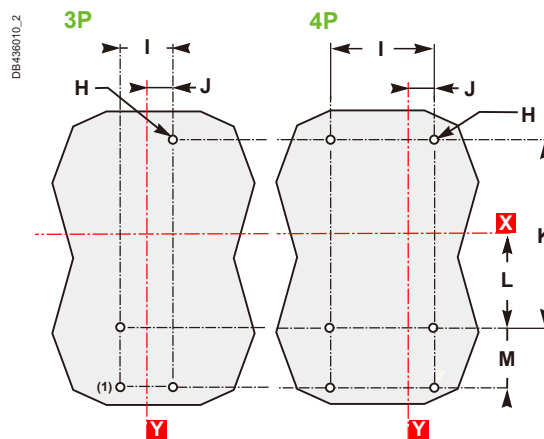
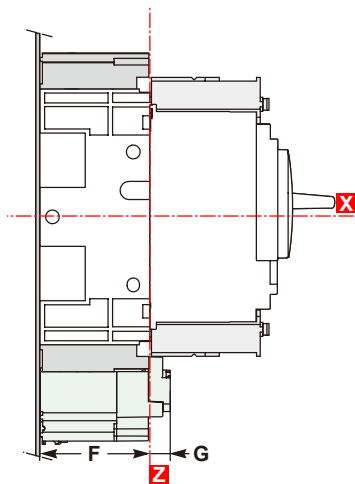
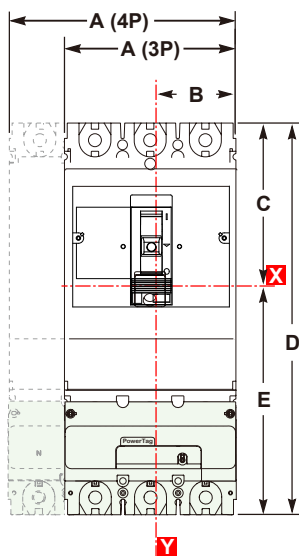
Type	A14	A15	A16	A17	B	B1	B2	B8	B9	C4	C5	D1
CVS100 to 250	19	73.5	33.5	55	52.5	105	140	45	90	180.5	204	75
CVS400/630	29.5	119.5	50	90	70	140	185	65	130	228.5	264	100

Dimensions

PowerLogic PowerTag Energy



(1) Only for PowerTag M630

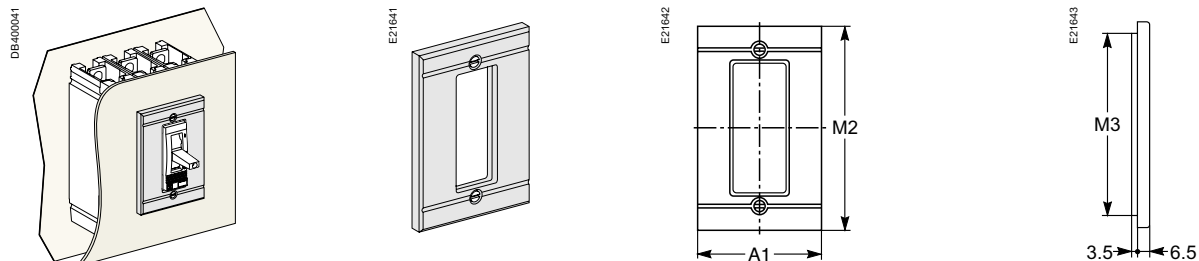


(1) Only for PowerTag M630

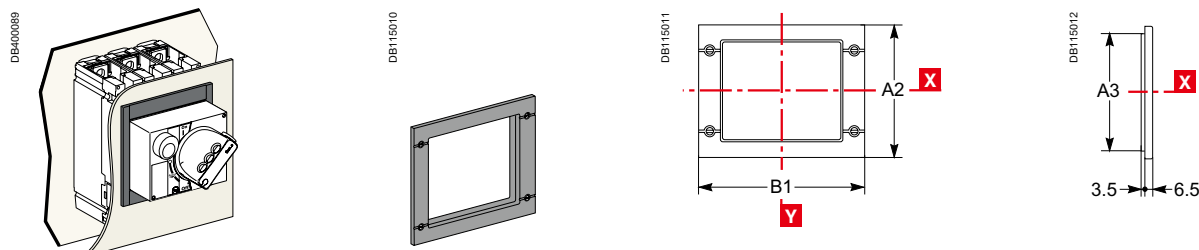
mm	A		B	C	D	E	F	G	H		I	J	K		L	M
in	3P	4P							3P	4P	3P	4P	3P	4P		
CVS100-250	105 4.13	140 5.51	52.5 2.06	80.5 3.17	201 7.91	120.5 4.74	72 2.83	14 0.55	3 Ø6 3 Ø0.23	6 Ø6 6 Ø0.23	35 1.34	70 2.75	17.5 0.68	17.5 0.68	125 4.92	62.5 2.46
CVS400-630	140 5.51	185 7.28	70 2.75	127.5 5.02	320 12.59	192.5 7.57	96 3.78	14 0.55	6 Ø6 6 Ø0.23	6 Ø6 6 Ø0.23	45 1.77	90 3.5	22.5 0.88	22.5 0.88	200 7.87	100 3.93
CVS100-250 with plug-in base	105 4.13	140 5.51	52.5 2.06	109 4.29	260 10.23	151 5.94	72 2.83	14 0.55	3 Ø6 3 Ø0.23	6 Ø6 6 Ø0.23	35 1.34	70 2.75	17.5 0.68	17.5 0.68	155 6.10	77.5 3.05
CVS400-630 with plug-in base	140 5.51	185 7.28	70 2.75	153 6.02	406 15.98	253 9.96	100 3.93	14 0.55	4 Ø6 4 Ø0.23	6 Ø6 6 Ø0.23	45 1.77	90 3.5	22.5 0.88	22.5 0.88	250 9.84	125 4.92

IP40 front-panel escutcheons

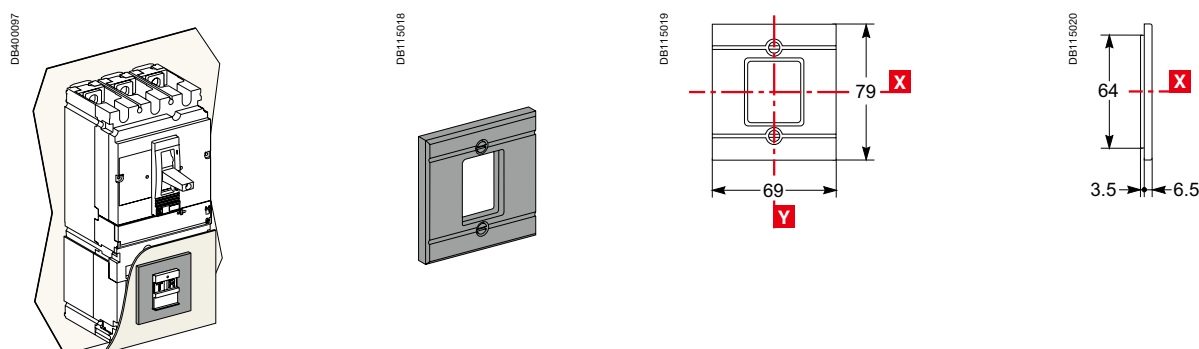
For toggle



For rotary handle or module and protection collar



For Vigi



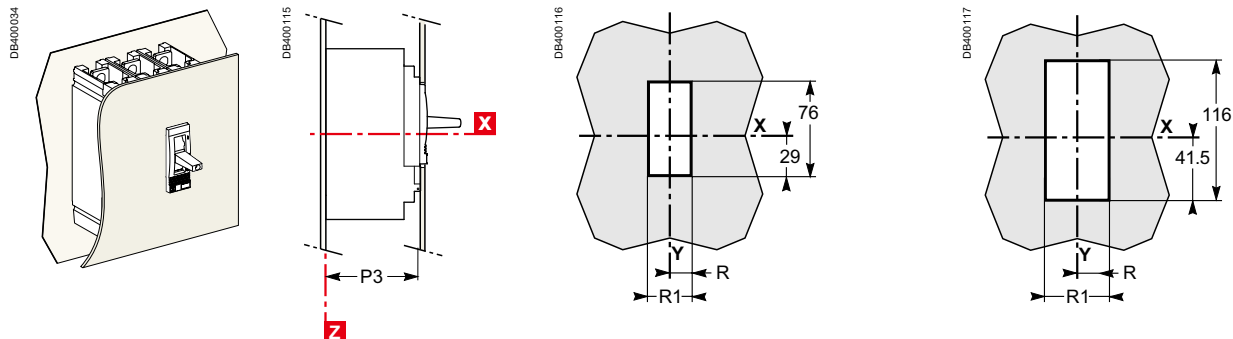
Type	A1	A2	A3	B1	M2	M3
CVS100 to 250	91	114	101	157	115	102
CVS400/630	123	164	151	189	155	142

Bare sheet metal

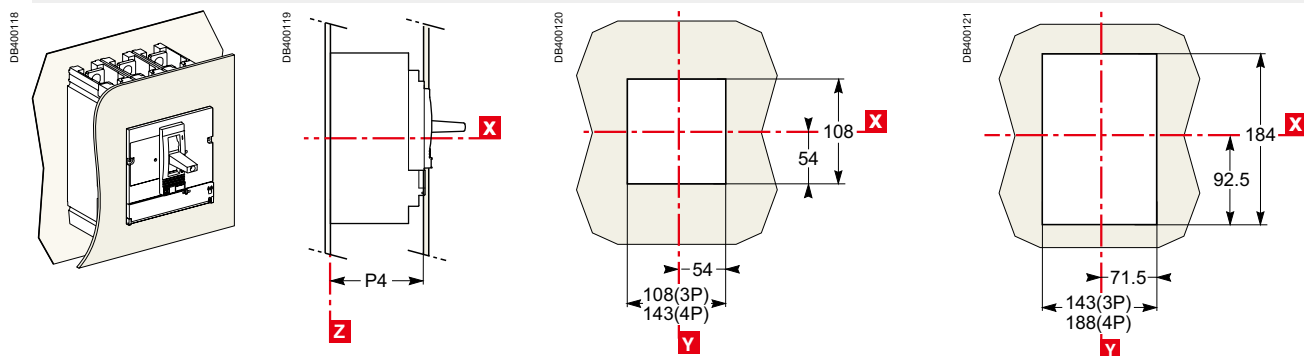
CVS100 to 250

CVS400/630

For toggle



For toggle with access to trip unit



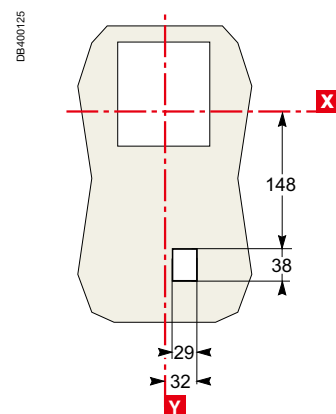
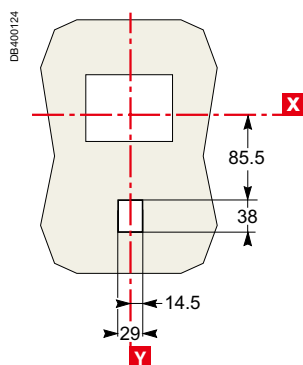
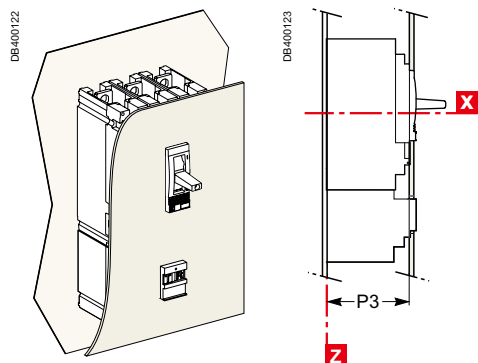
Type	P3	P4	R	R1
CVS100 to 250	88	83	14.5	29
CVS400/630	112	107	31.5	63

Bare sheet metal

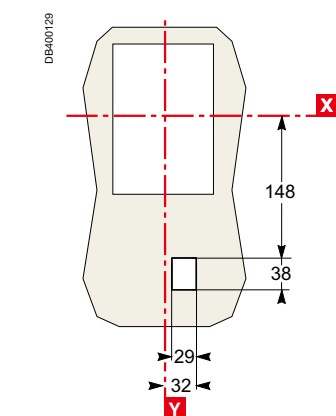
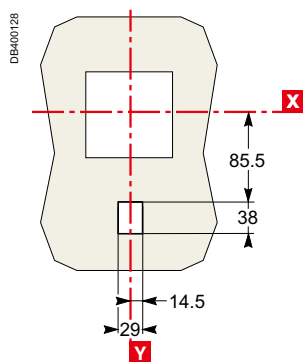
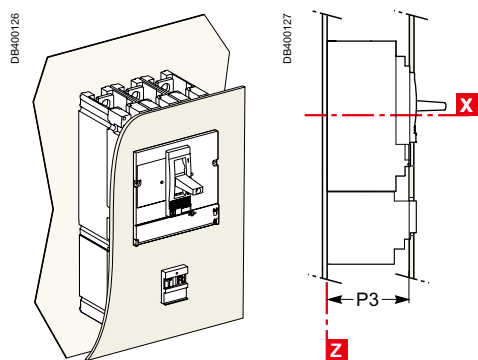
CVS100 to 250

CVS400/630

For toggle



For toggle with access to trip unit

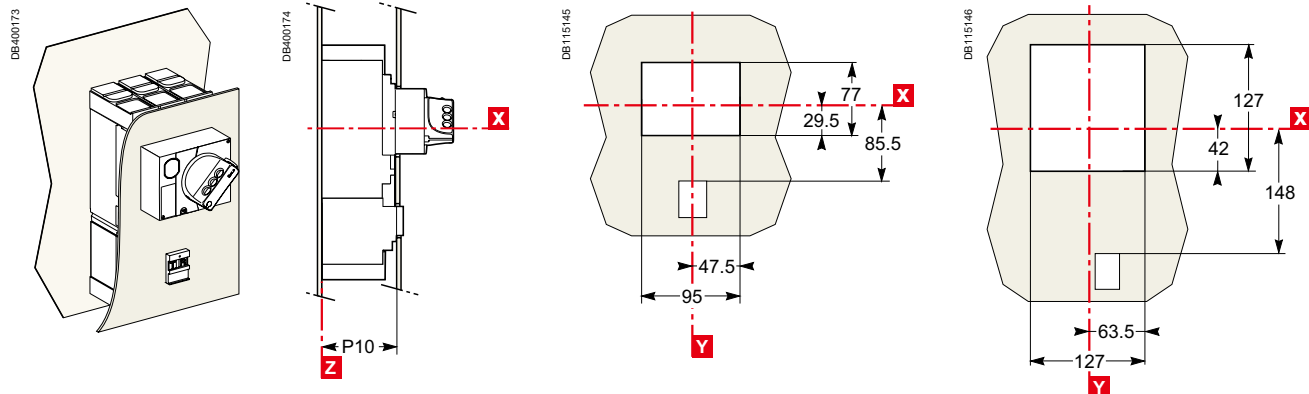


Fixed circuit breakers

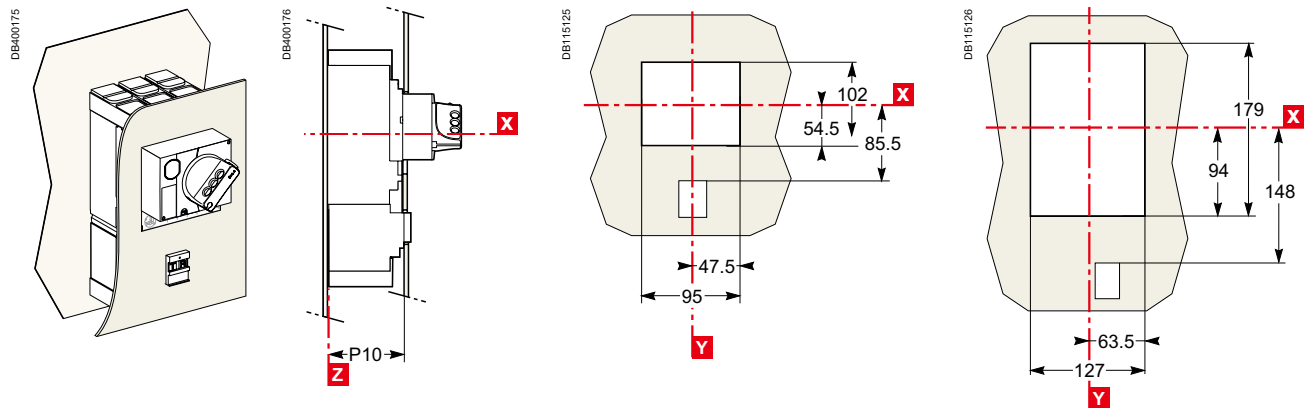
CVS100 to 250

CVS400/630

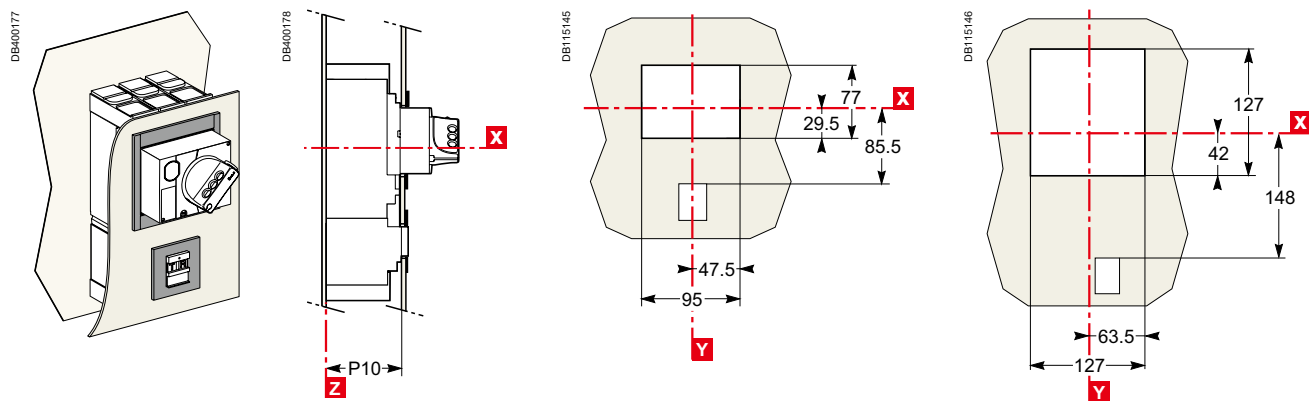
Bare sheet metal



Bare sheet metal with access to the trip unit



With IP30 front-panel escutcheon

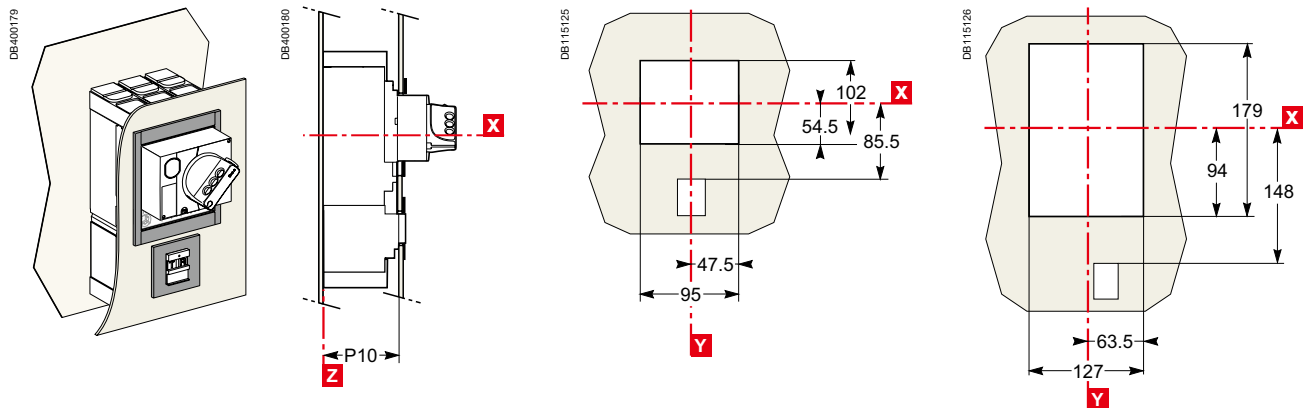


Fixed circuit breakers (cont.)

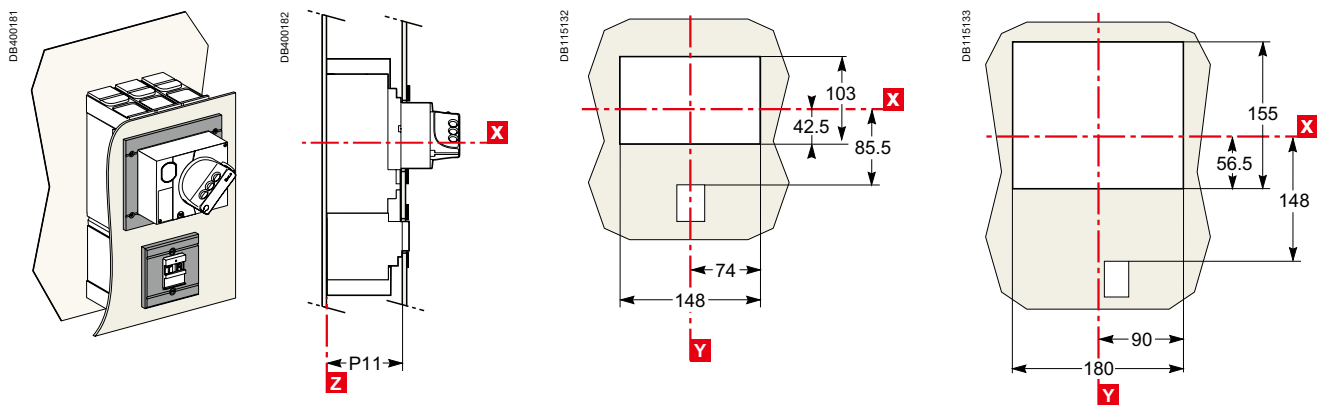
CVS100 to 250

CVS400/630

With IP30 front-panel escutcheon with access to the trip unit



With IP40 front-panel escutcheon

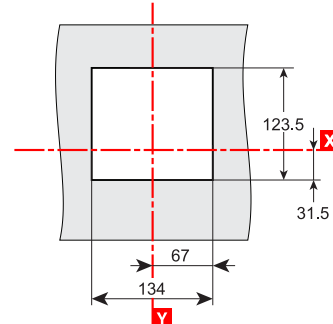
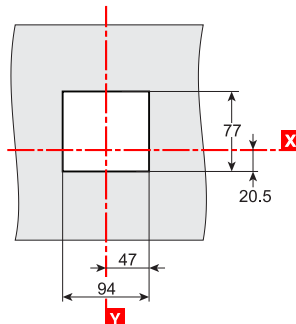
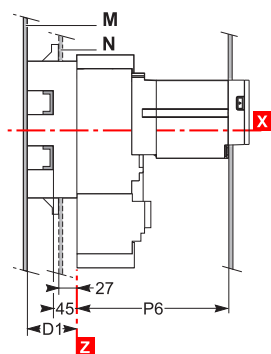
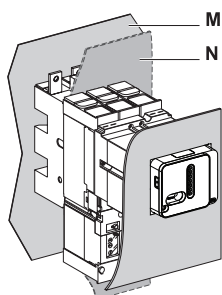


Type	P10	P11	P12
CVS100 to 250	89	90	123
CVS400/630	112	113	147

Fixed / Plug-in circuit breakers

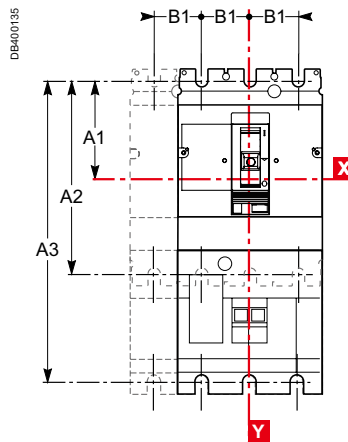
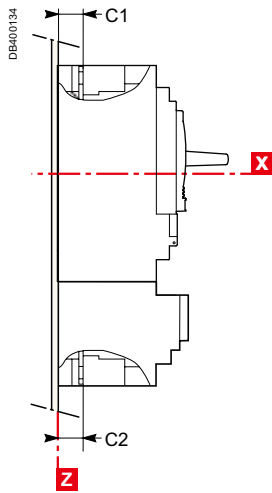
CVS100 to 250

CVS400/630



Type	D1	P6
CVS100 to 250	75	182.5
CVS400/630	100	230.5

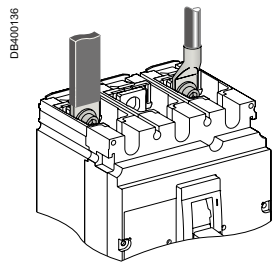
Connection locations



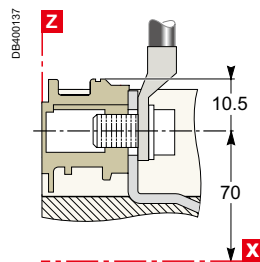
Type	A1	A2	B1	C1	C2
CVS100/160	70	140	35	19.5	19.5
CVS250	70	140	35	21.5	19.5
CVS400/630	113.5	227	45	26	26

Type	A1	A3	B1	C1	C2
CVS100/160 + Vigi	70	215	35	19.5	21.5
CVS250 + Vigi	70	215	35	21.5	21.5
CVS400/630 + Vigi	113.5	327	45	26	26

Front connection without accessories

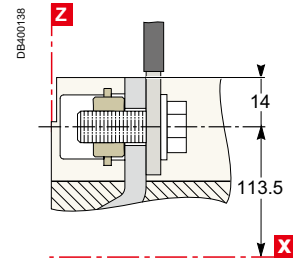


CVS100 to 250



Cables with lugs/bars

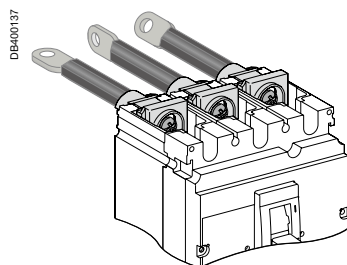
CVS400/630



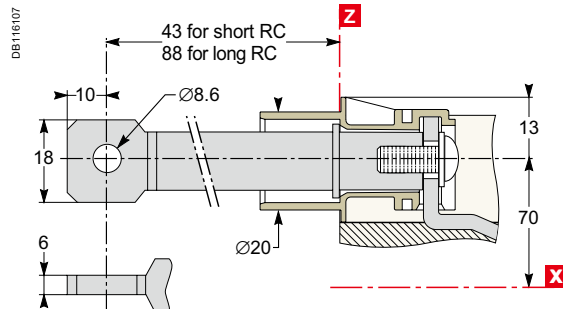
Bars/cables with lugs

Connection with accessories

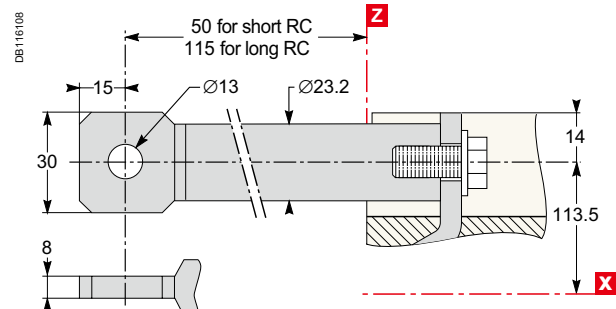
Long and short rear connectors



CVS100 to 250

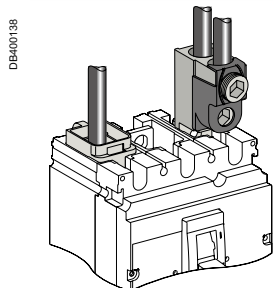


CVS400/630



Connection with accessories (cont.)

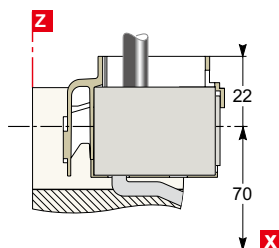
Bare-cable connectors



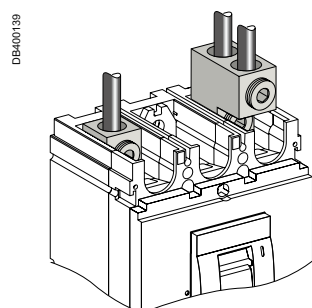
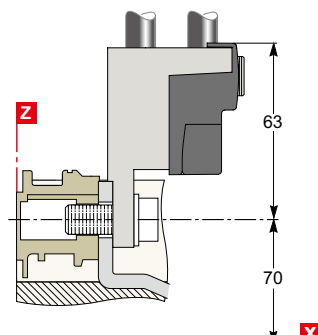
DB400138

CVS100 to 250

DB115461



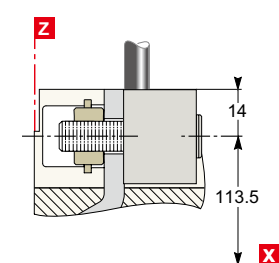
DB115462



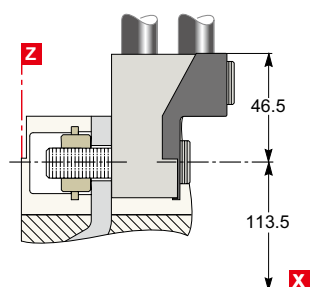
DB400139

CVS400/630

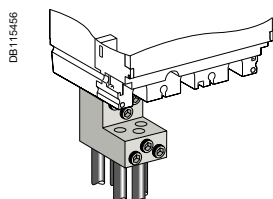
DB115454



DB115455

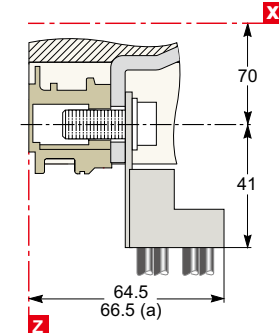


Distribution connectors (for CVS100 to 250 only)



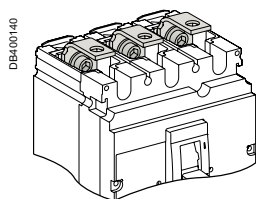
DB115456

DB115457



(a) Vigi module or CVS250.

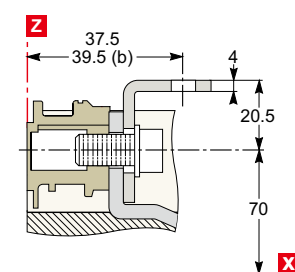
Right-angle terminal extensions (upstream only)



DB400140

CVS100 to 250

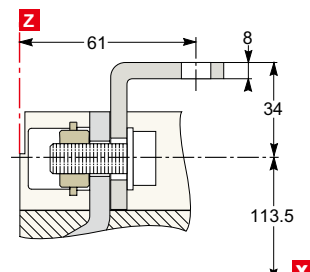
DB115459



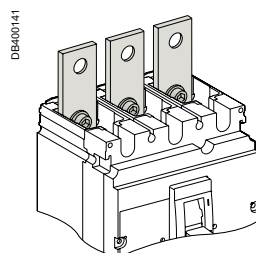
(b) CVS250.

CVS400/630

DB115460

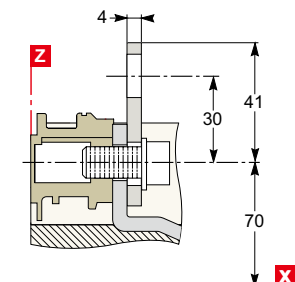


Straight terminal extensions (for CVS100 to 250 only)



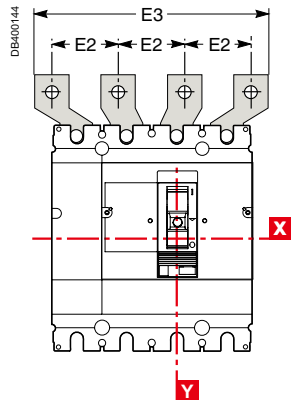
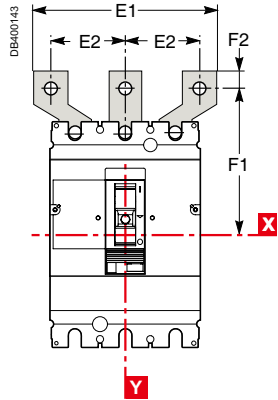
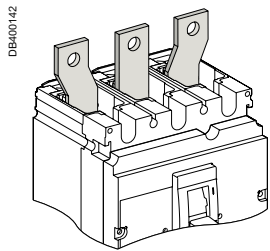
DB400141

DB115462

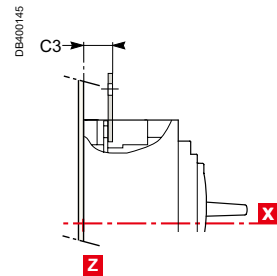


Connection with accessories (cont.)

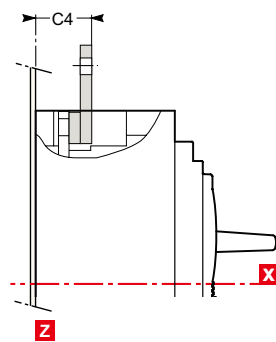
Spreaders	3P	4P	
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CVS100 to 250

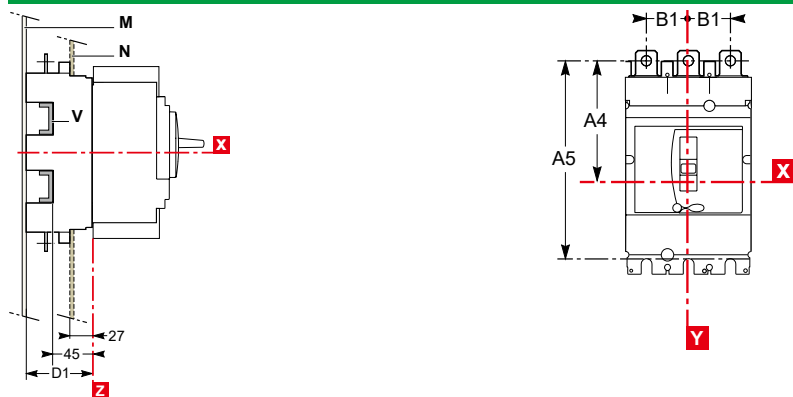


CVS400/630



Type	C3	C4	E1	E2	E3	F1	F2
CVS100 to 250	23.5	-	114	45	159	100	11
CVS400/630	-	44	135	52.5	187.5	152.5	15
			170	70	240	166	15

Connection locations



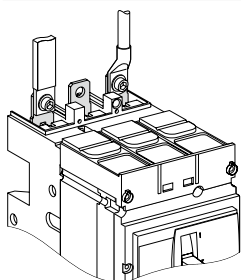
Type	A4	A5	B1	D1
CVS100 to 250	100	200	35	75
CVS400/630	156.5	313	45	100

Note:

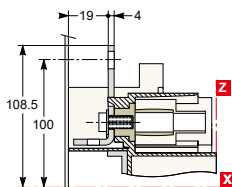
- for mounting on a backplate, the insulating screen supplied with the plug-in base must be installed.

Connection without accessories

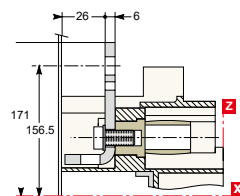
Front connection: mounting on backplate (M) or rails (V)



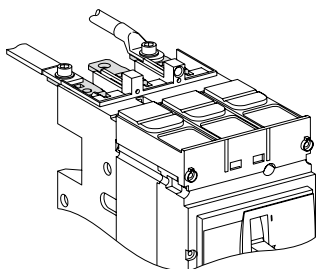
CVS100 to 250



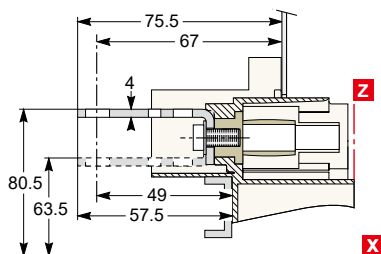
CVS400 to 630



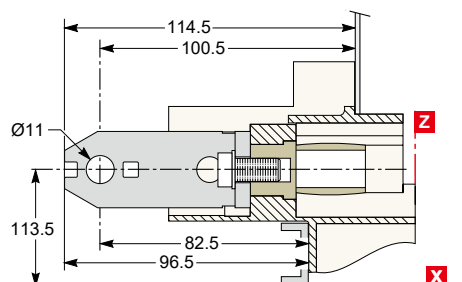
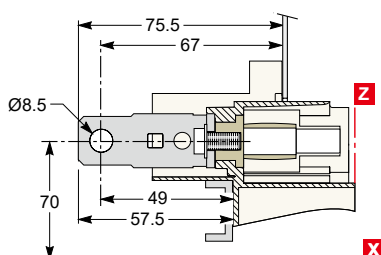
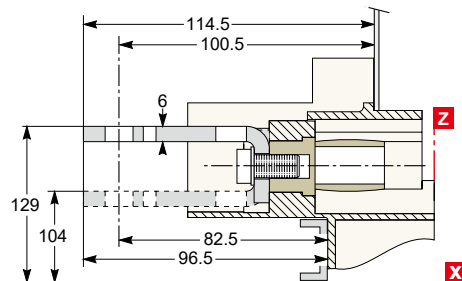
Rear connection: mounting through front panel (N) or on rails (V)



CVS100 to 250

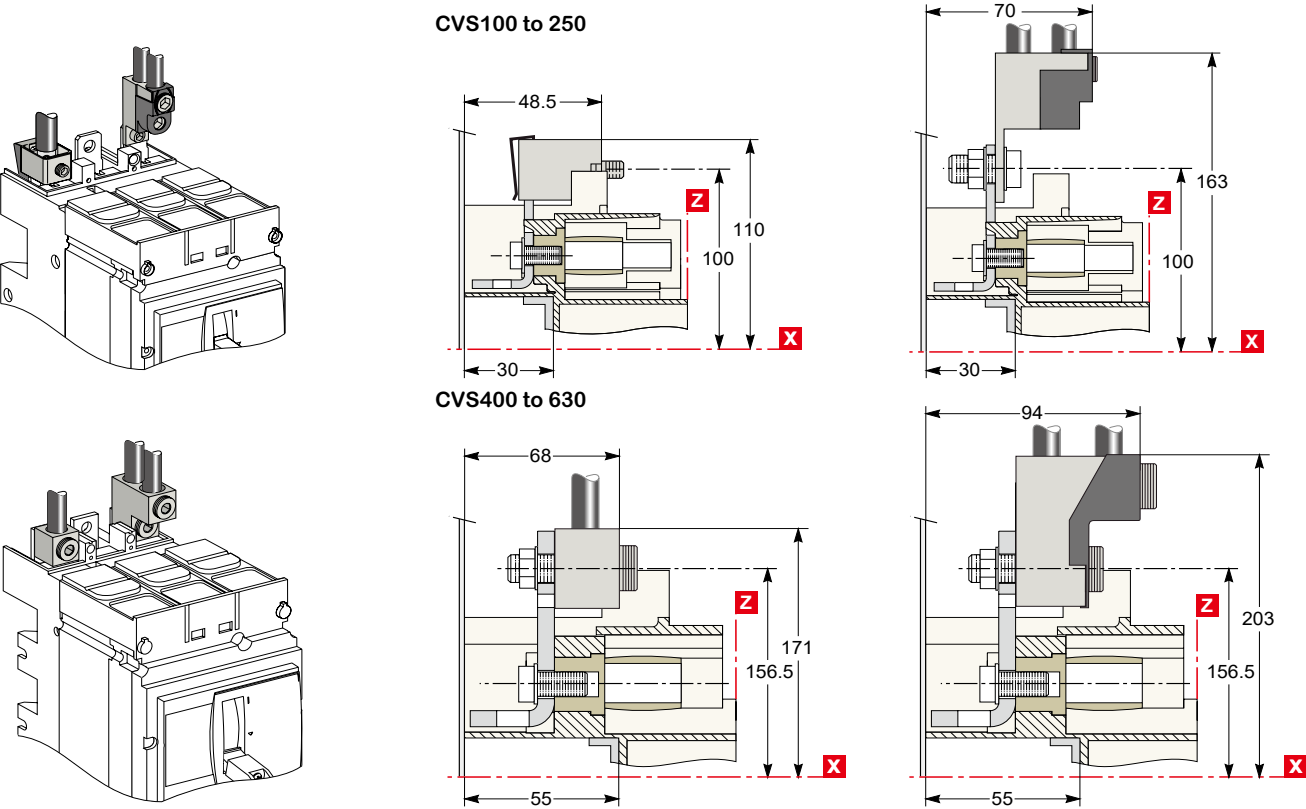


CVS400 to 630

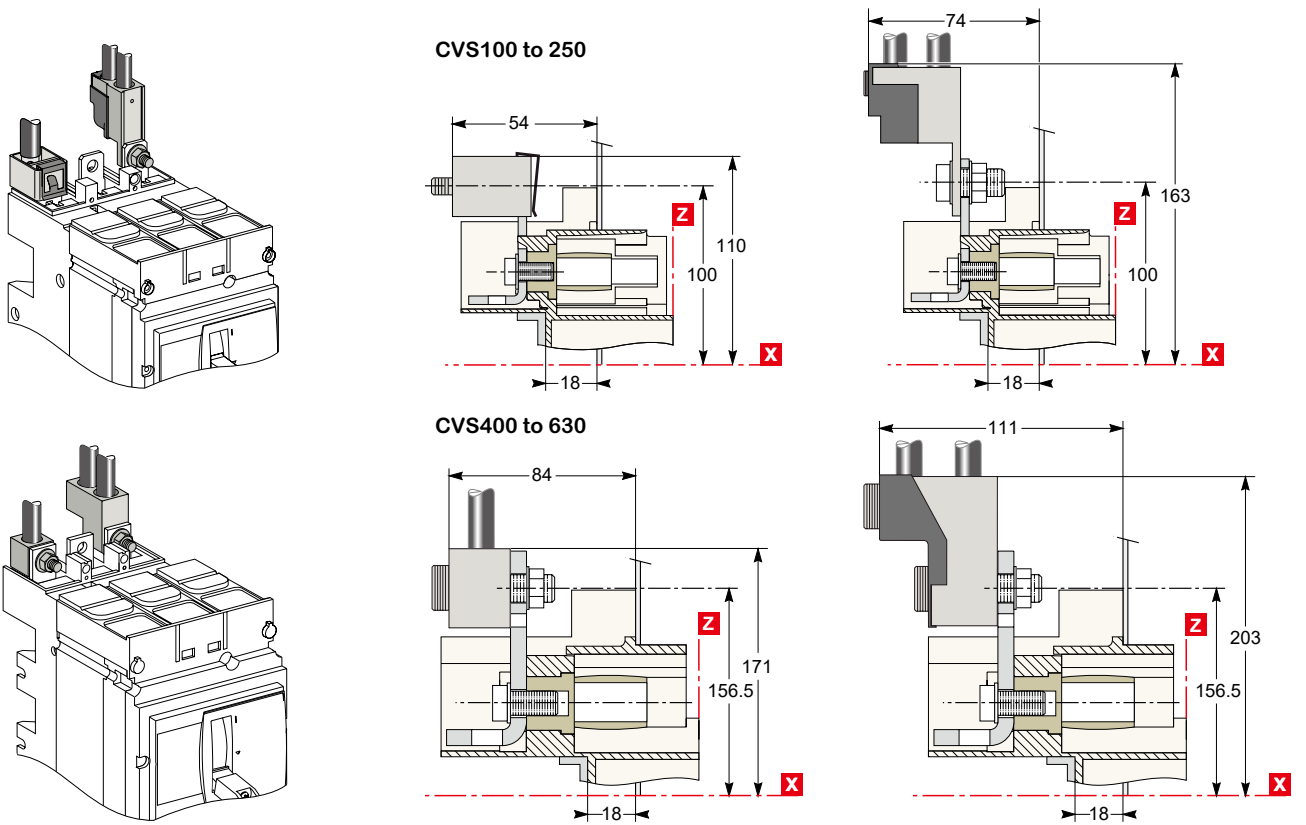


Connection without accessories

Bare-cable connections: mounting on backplate (M) or rails (V)

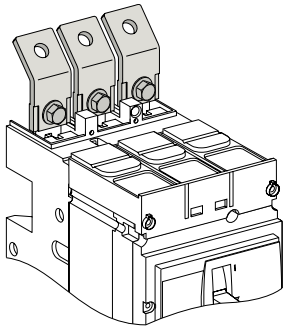


Bare-cable connections: mounting through front panel (N) or on rails (V)

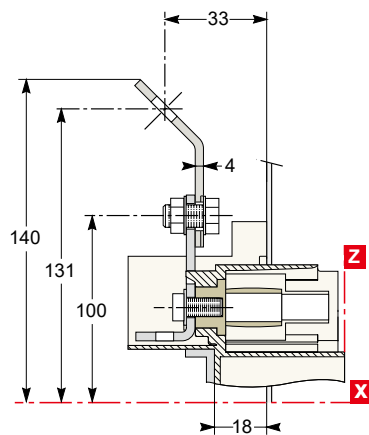


Connection without accessories (cont.)

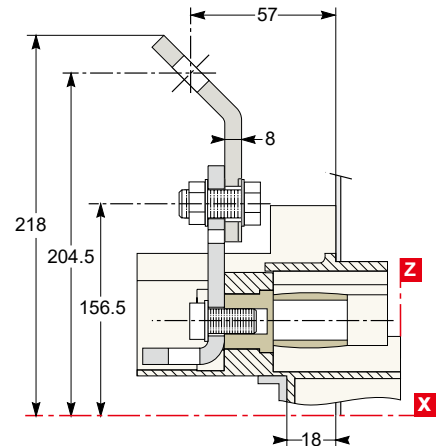
45° extensions: mounting through front panel (N) or on rails (V)



CVS100 to 250

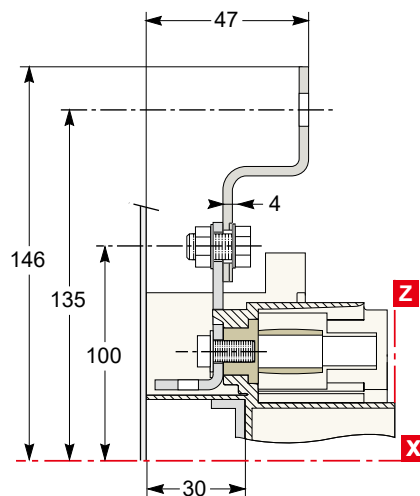
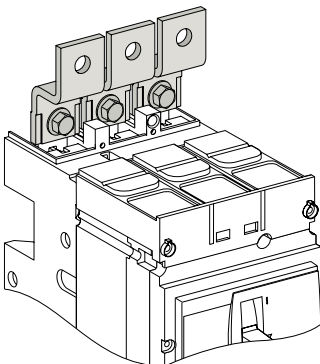


CVS400 to 630



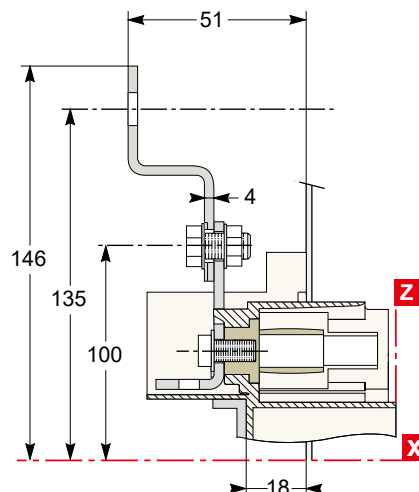
Double-L extensions: mounting on backplate (M) or rails (V)

CVS100 to 250



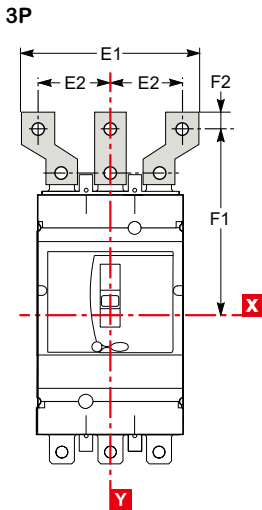
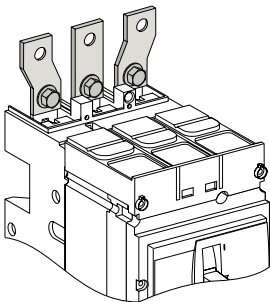
Double-L extensions: mounting through front panel (N) or on rails (V)

CVS100 to 250

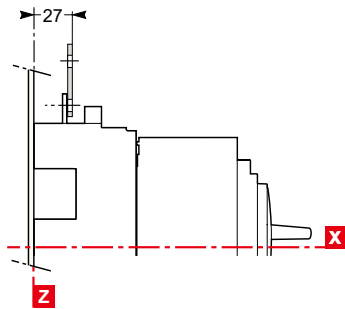


Connection without accessories (cont.)

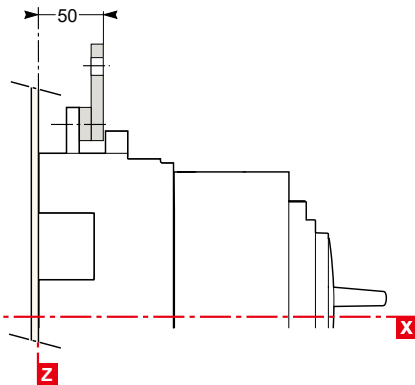
Spreaders: mounting on backplate (M) or rails (V)



CVS100 to 250



CVS400 to 630



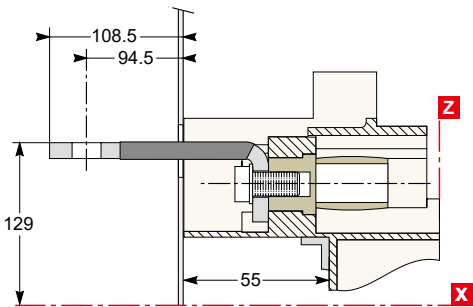
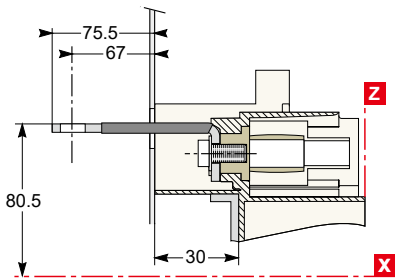
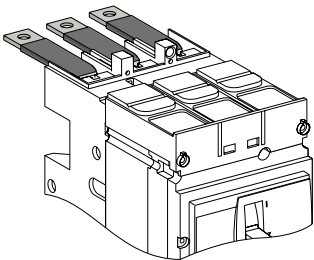
Type	E1	E2	E3	F1	F2
CVS100 to 250	114	45	159	130	11
CVS400/630	135	52.5	187.5	195.5	15
	170	70	240	209	15

Long insulated rear connectors: mounting on backplate (M) or rails (V)

Exterior-mounted rear connectors

CVS100 to 250

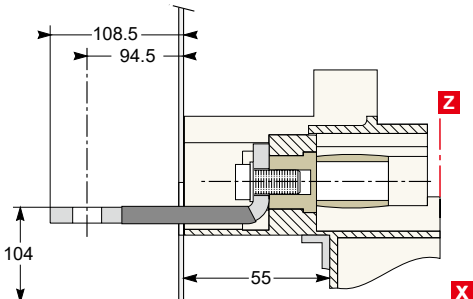
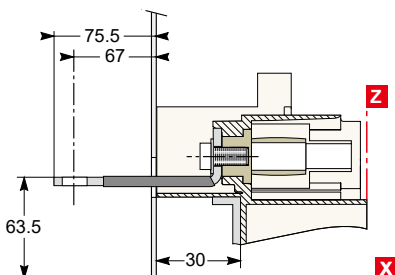
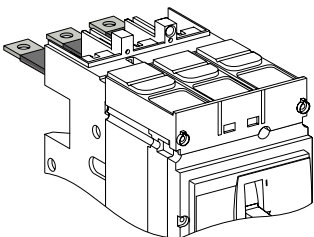
CVS400 to 630



Interior-mounted rear connectors

CVS100 to 250

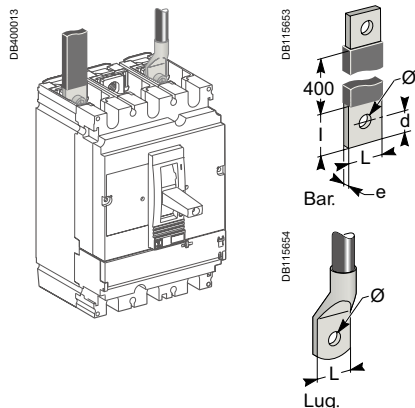
CVS400 to 630



Long, insulated connectors are mandatory.

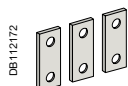
Power connections

Connection of insulated bars or cables with lugs to **EasyPact** and **Vigi CVS100 to 630**



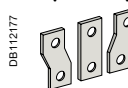
Accessories for CVS100 to 250

Straight terminal extensions



Tinned copper

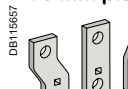
Spreaders: separate parts



Tinned copper

Accessories for CVS400 and 630

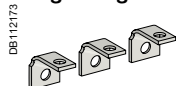
Spreaders made up of separate parts for 52.5 and 70 mm pitch



Tinned copper

Accessories for CVS100 to 630

Right-angle terminal extensions



Tinned copper
To be mounted on upstream side.

Direct connection to CVS100 to 630

Dimensions		CVS100	CVS160/250	CVS400/630
Bars	L (mm)	≤ 25	≤ 25	≤ 32
	l (mm)	d + 10	d + 10	d + 15
	d (mm)	≤ 10	≤ 10	≤ 15
	e (mm)	≤ 6	≤ 6	3 ≤ e ≤ 10
	Ø (mm)	6.5	8.5	10.5
	L (mm)	≤ 25	≤ 25	≤ 32
Lugs	Ø (mm)	6.5	8.5	10.5
	Ø (mm)	6.5	8.5	10.5
Torque (Nm) ⁽¹⁾		10	15	50
Torque (Nm) ⁽²⁾		5/5	5/5	20/11

(1) Tightening torque on the circuit breaker for lugs or bars.

(2) Tightening torque on fixed devices for rear connectors.

Connection with accessories to CVS100 to 250 (IEC 228)

Pole pitch			
Without spreaders		35 mm	
With spreaders		45 mm	
Dimensions		With spreaders or terminal extensions	
		CVS100	CVS160/250
Bars	L (mm)	≤ 25	≤ 25
	l (mm)	20 ≤ l ≤ 25	20 ≤ l ≤ 25
	d (mm)	≤ 10	≤ 10
	e (mm)	≤ 6	≤ 6
	Ø (mm)	6.5	8.5
	Ø (mm)	6.5	8.5
Lugs	L (mm)	≤ 25	≤ 25
	Ø (mm)	6.5	8.5
Torque (Nm) ⁽¹⁾		10	15

(1) Tightening torque on the circuit breaker for spreaders or terminal extensions.

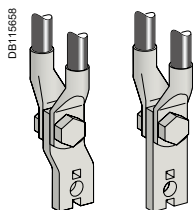
Spreaders and straight, right-angle, 45°, double-L and edgewise terminal extensions are supplied with flexible interphase barriers.

Connection with accessories to CVS400 and 630 (IEC 228)

Pole pitch			
Without spreaders		45 mm	
With spreaders		52.5 or 70 mm	
Dimensions		With spreaders	With terminal extensions
Bars	L (mm)	≤ 40	≤ 32
	l (mm)	d + 15	30 ≤ l ≤ 34
	d (mm)	≤ 20	≤ 15
	e (mm)	3 ≤ e ≤ 10	3 ≤ e ≤ 10
	Ø (mm)	12.5	10.5
	Ø (mm)	12.5	10.5
Lugs	L (mm)	≤ 40	≤ 32
	Ø (mm)	12.5	10.5
Torque (Nm) ⁽¹⁾		50	50

(1) Tightening torque on the circuit breaker for spreaders or terminal extensions.

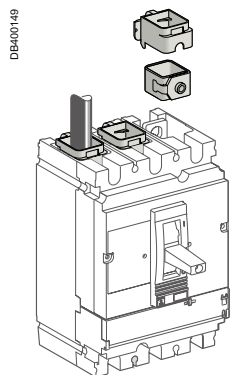
Spreaders and right-angle, 45° and edgewise terminal extensions are supplied with flexible interphase barriers.



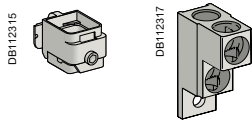
Mounting detail: 2 cables with lugs.

Power connections

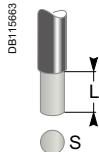
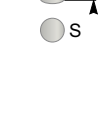
Connection of bare cables to EasyPact and Vigi CVS100 to 630



Connection for CVS100 to 250



1-cable connector 2-cable connector

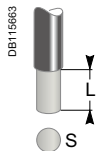
	1-cable connector	Steel ≤ 160 A		Aluminium ≤ 250 A	
	L (mm)	25	25		
	S (mm²) Cu/Al	1.5 to 95 ⁽¹⁾	25 to 50	70 to 95	120 to 185 150 max. flex.
	Torque (Nm)	12	20	26	26
	2-cable connector				
	L (mm)	25 or 50			
	S (mm²) Cu/Al	2 x 50 to 2 x 120			
	Torque (Nm)	22			

(1) For flexible cables from 1.5 to 4 mm², connection with crimped or self-crimping ferrules.

Connection to CVS400 and 630



1-cable connector 2-cable connector

		1-cable connector	2-cable connector
	L (mm)	30	30 or 60
	S (mm²) Cu/Al	35 to 300 rigid 240 max. flex.	2 x 35 to 2 x 240 rigid 240 max. flex.
	Torque (Nm)	31	31

Conductor materials and electrodynamic stresses

EasyPact CVS circuit breakers can be connected indifferently with bare-copper, tinned-copper and tinned-aluminium conductors (flexible or rigid bars, cables). In the event of a short-circuit, thermal and electrodynamic stresses will be exerted on the conductors. They must therefore be correctly sized and held in place by supports.

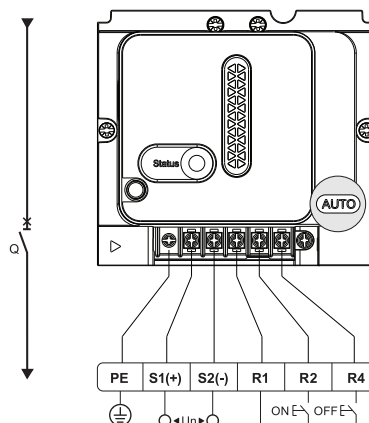
Electrical connection points on switchgear devices (switch-disconnectors, contactors, circuit breakers, etc.) should not be used for mechanical support. Any partition between upstream and downstream connections of the device must be made of non-magnetic material.

The diagram is shown with circuits de-energized with all devices open

After tripping initiated by the “Push to trip” button or by the undervoltage (MN) release or the shunt (MX) release, device reset can be automatic, remote or manual.

Following tripping due to an electrical fault, device reset can be remote or manual.

Connection for CVS100 to 630



Symbols

Q:	circuit breaker
PE:	Earth
S1(+):	power supply - AC/DC(+)
S1(-):	power supply - AC/DC(-)
R1:	remote control common terminal
R2:	remote closing order terminal
R4:	remote opening order terminal