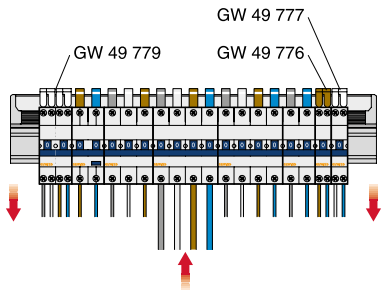
GWFIX 100 - QUICK BUSBAR FOR MODULAR DEVICES

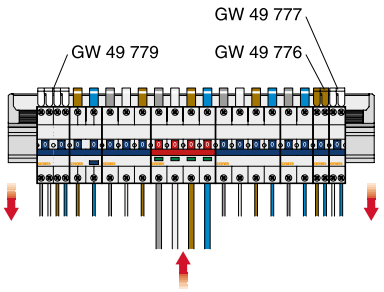
TECHNICAL DATA			
Rated operational voltage (Ue):		**(V)**	400 AC
Rated insulation voltage (Ui):		**(V)**	500 AC
Rated impulse withstand voltage (Uimp):		**(kV)**	6 - 1.2/50 µs
Rated frequency:		**(Hz)**	50 / 60
Rated current (In):	**central power supply**	**(A)**	100
	lateral power supply	**(A)**	80
Maximum installable circuit breaker size:		**(A)**	100
Conditioned short-circuit current (Icc)		**(kA)**	
with modular circuit breaker:	**MTC 45 - MDC 45**		4.5 - 400V
	MT60 - MTC 60 - MDC 60		6 - 400V
	MT100 - MTC 100 - MDC 100		10 - 400V
	MT 250		25 - 400V
Degree of protection:			IP20
Characteristics of the insulation material:			self-extinguishing thermoplastic V1 (UL94)
Characteristics of the conductor material:			electrolytic copper
Width:		**(no. modules/mm)**	12/400 18 24/600 36/850

EXAMPLES OF CONNECTIONS

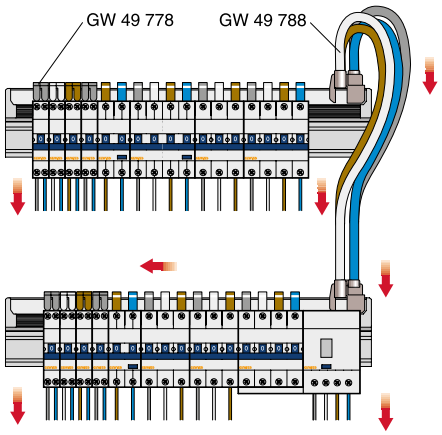
With automatic circuit breaker and power supply from below



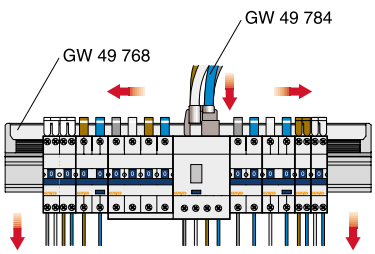
With modular switch disconnector and power supply from below



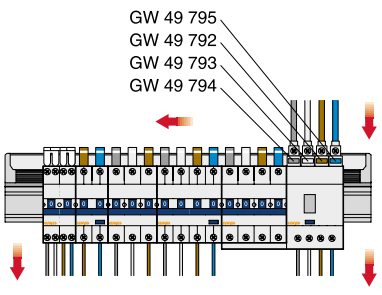
Lower busbar power supply by means of parallel module



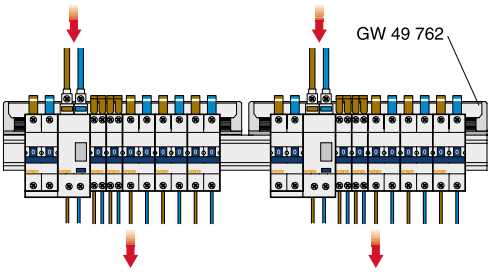
Busbar power supply by means of power supply cable terminal placed centrally
In 100A max



Busbar power supply by means of feeder module (supplied without cables) placed laterally
In 80A max



Power supply of two different single-phase circuits by means of feeder module (supplied without cables)



GWFIX 250 - QUICK BUSBAR FOR MODULAR DEVICES

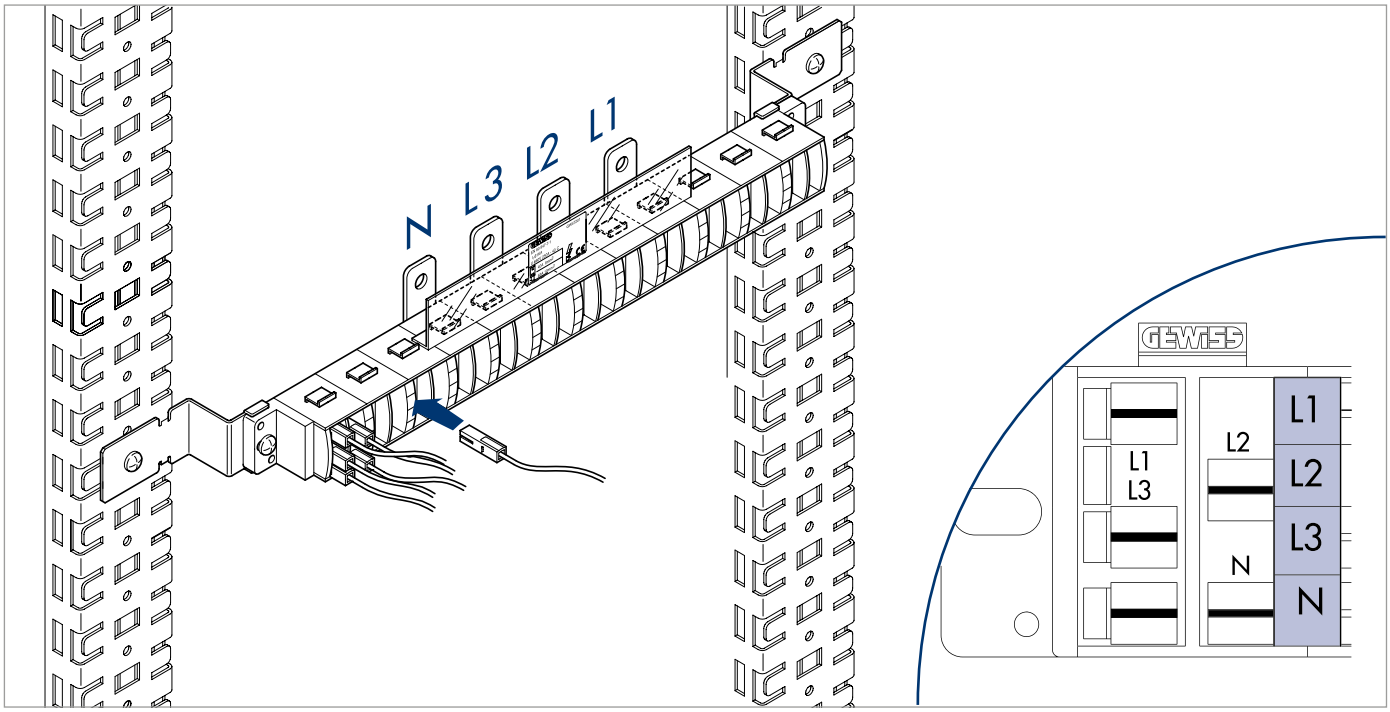
TECHNICAL DATA			
Rated operational voltage (Ue):	500V AC	Rated conditional short-circuit current (Icc):	4.5 ÷ 25 kA - 400V
Rated insulation voltage (Ui):	500V AC	Degree of protection:	IP20
Rated impulse withstand voltage (Uimp):	6 kV 1.2/50 µs	Characteristic of the insulating material:	self-extinguishing thermoplastic V1 (UL94)
Rated frequency:	50/60Hz	Characteristics of the conductor material:	electrolytic copper
Rated current central power supply (In):	250A	Width (no. modules):	24 / 36
Brief rated current (Icw):	10 kA (1s)	Suitable for installation with panels with windows (200mm height)	
Peak rated current (Ipk):	61 kA	Connection of quick type connector with mechanical coupling.	
Maximum branched current:	63A	Connector disconnection with tool.	

Type of conductors with terminal for quick coupling

Type	Capacity	Section	Colour	Length
H07 VK	40A	6mm²	Black	120mm
				500mm
			Blue	120mm
				500mm
	63A	10mm²	Black	120mm
				500mm
			Blue	120mm
				500mm

Notes: - length = 120mm: crimped terminal
- length = 500mm: terminal without stripping

Quick coupling terminal and phase identification



GWFIX 400 - QUICK BUSBAR FOR MODULAR AND MOULDED-CASE DEVICES

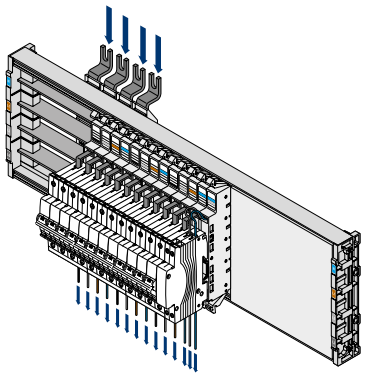
TECHNICAL DATA

Rated operational voltage (Ue):		690V AC
Rated insulation voltage (Ui):		1000V AC
Rated impulse withstand voltage (Uimp):		8 kV - 1.2/50 µs
Rated frequency:		50/60Hz
Rated current	central supply:	400A
	lateral supply:	320A
Brief allowed current (Icw):		25 kA
Peak rated current (Ipk):		52.5 kA - 400V
Maximum branched current:		250A
Rated conditional short-circuit current (Icc)	MTX 160c:	36 kA - 400V
	MTX 160:	50 kA - 400V
	MTX 250:	50 kA - 400V

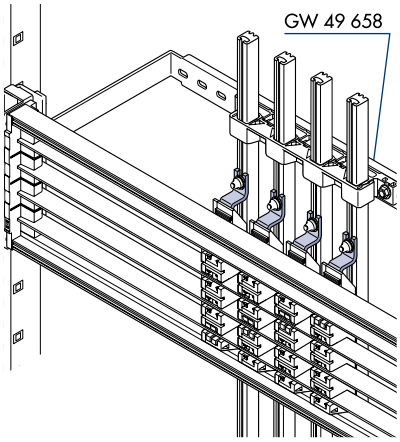
Degree of protection:		IP20
Characteristic of the insulating material:		self-extinguishing thermoplastic V1 (UL94)
Characteristics of the conductor material:		electrolytic copper
Section of the conductor material:		busbars 25x5mm
Width (No. modules):		24 / 36
Installable devices:	90 range	
	MTX 160c, MTX 160, MTX 250	
	also with add-on residual current devices	

EXAMPLES OF CONNECTIONS

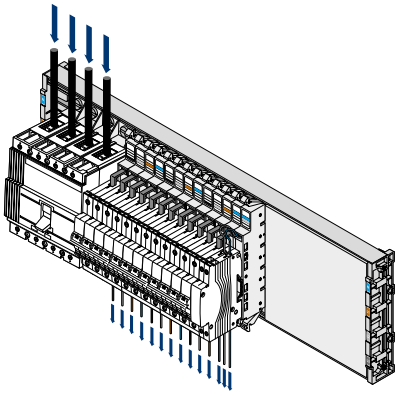
Direct power supply with power supply units



Direct connection with busbars

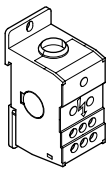


Power supply with main circuit breaker

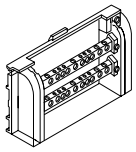


DISTRIBUTION SYSTEM FOR DISTRIBUTION BOARDS

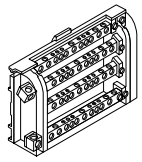
DISTRIBUTION TERMINAL BLOCKS



SINGLE-POLE MODULAR DISTRIBUTION TERMINAL BLOCK					
In (A)	Ipk (kA)	Icw (kA)	No. Modules EN 50022	Connection capacity per pole	
				Input No. holes per section (mm²)	Output No. holes per section (mm²)
160	30	10	2	1 x 10÷70	6 x 2.5÷16

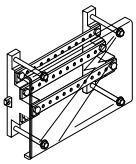


TWO-POLE MODULAR DISTRIBUTION TERMINAL BLOCK					
In (A)	Ipk (kA)	Icw (kA)	No. modules EN 50022	Connection capacity per pole	
				Input No. holes per section (mm²)	Output No. holes per section (mm²)
100	20	6	4	1 x 10÷25	(5 x 2.5÷6) + (1 x 10÷25)
125	18	6	8	1 x 16÷35	(11 x 2.5÷6) + (2 x 10÷25) + (1 x 16÷35)

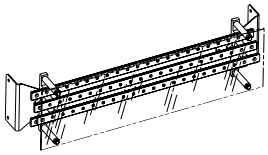


FOUR-POLE MODULAR DISTRIBUTION TERMINAL BLOCK					
In (A)	Ipk (kA)	Icw (kA)	No. modules EN 50022	Connection capacity per pole	
				Input No. holes per section (mm²)	Output No. holes per section (mm²)
100	20	6	4	1 x 10÷25	(5 x 2.5÷6) + (1 x 10÷25)
125	18	6	8	1 x 16÷35	(11 x 2.5÷6) + (2 x 10÷25) + (1 x 16÷35)
160	20	10	10	1 x 25÷50	(8 x 6÷16) + (2 x 10÷25) + (2 x 16÷25)

DIVIDERS



250A HORIZONTAL FOUR-POLE DIVIDER FOR DIN RAIL			
In (A)	No. modules EN 50022	Busbar section (mm)	Icw (kA)
250	16	20 x 5	17

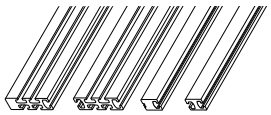


250A HORIZONTAL FOUR-POLE DIVIDER FOR CVX 1600 ENCLOSURES			
In (A)	No. modules EN 50022	Busbar section (mm)	Icw (kA)
250	24	20 x 5	20
	36		

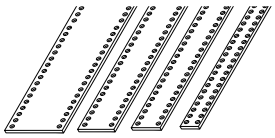
HORIZONTAL FOUR-POLE DIVIDER FOR CVX 630K - M BOARDS			
In (A)	No. modules EN 50022	Busbar section (mm)	Icw (kA)
250	24	20 x 5	20
	36		
400	24	25 x 6	20
	36		

For technical information contact the Technical Assistance Service or visit gewiss.com

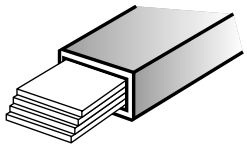
BUSBAR DISTRIBUTION SYSTEM



SHAPED BUSBARS - TECHNICAL DATA			
Rated operational voltage (Ue):	690V AC	Busbar material:	electrolytic copper 99.9% Cu-ETP
Rated insulation voltage (Ui):	1000V AC	Insulating material:	self-extinguishing polyamide V0 (UL 94)
Rated impulse withstand voltage (Uimp):	8 kV - 1.2/50 µs	Tightening torque: screws M8= 20Nm screws M10= 30Nm	
Rated frequency:	50/60Hz		
Rated current (In): 400, 800, 1250, 1600A		Operating ambient conditions constant: 25°C/83% - 40°C/93% variable: 25°C/98% - 40°C/98%	
Brief rated current (Icw): up to 75 kA (1s/400V AC)		Operating temperature:	-5°C - 40°C
Rated conditional short-circuit current (Icc):	up to 75 kA	Storage temperature:	-25°C - 55°C



FLAT BUSBARS - TECHNICAL DATA			
Rated operational voltage (Ue):	690V AC	Busbar material:	electrolytic copper 99.9% Cu-ETP
Rated insulation voltage (Ui):	1000V AC	Insulating material:	self-extinguishing polyamide V0 (UL 94)
Rated impulse withstand voltage (Uimp):	8 kV - 1.2/50 µs	Tightening torque:	4 Nm
Rated frequency:	50/60Hz	Operating ambient conditions constant: 25°C/83% - 40°C/93% variable: 25°C/98% - 40°C/98%	
Rated current (In): 250, 400, 630, 800, 1250, 1600, 2500, 3200A			
Brief rated current (Icw): up to 100 kA (1s/400V AC)		Operating temperature:	-5°C - 40°C
		Storage temperature:	-25°C - 55°C
Rated conditional short-circuit current (Icc):	up to 100 kA		

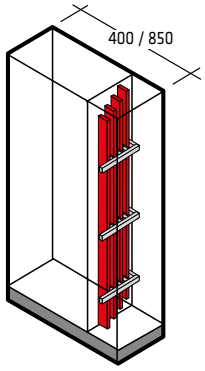


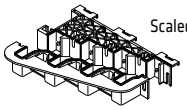
FLEXIBLE BUSBARS - TECHNICAL DATA			
Rated operational voltage (Ue):	690V AC	Busbar material:	electrolytic copper 99.9% Cu-ETP
Rated insulation voltage (Ui):	1000V AC	Insulating material:	self-extinguishing polyamide V0 (UL 94)
Rated impulse withstand voltage (Uimp):	8 kV - 1.2/50 µs	Tightening torque:	M6 screws = 13Nm
Rated frequency:	50/60Hz		M12 screws = 110Nm
Rated current (In):	125, 250, 400, 630, 1000, 1250A	Operating temperature:	-45 °C ÷ 105 °C

Possible configurations with shaped busbar system

VERTICAL BUSBARS
CVX 630 M boards

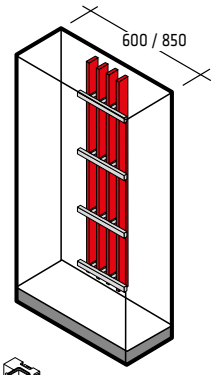
Busbars on bottom of side compartment

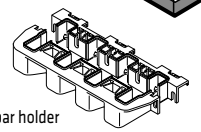




Scaled busbar holder

Busbars on bottom of structure

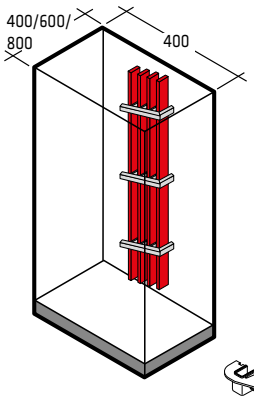




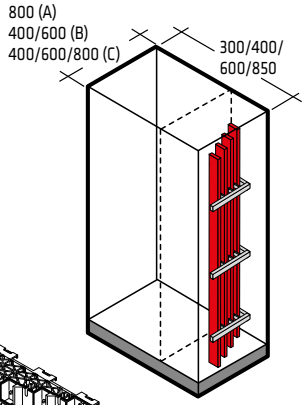
Linear busbar holder

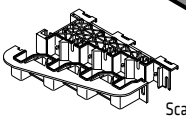
VERTICAL BUSBARS
CVX 1600 enclosures

Busbars on bottom of structure
Busbars on bottom of external compartment



Busbars on side of structure (A)
Busbars on side of internal compartment (B)
Busbars on side of external compartment (C)

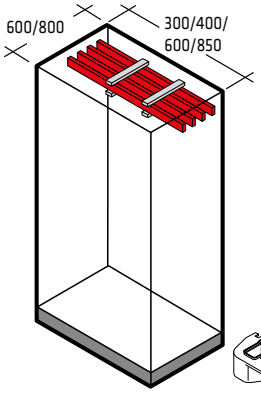


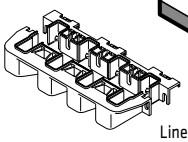


Scaled busbar holder

HORIZONTAL BUSBARS
CVX 1600 enclosures

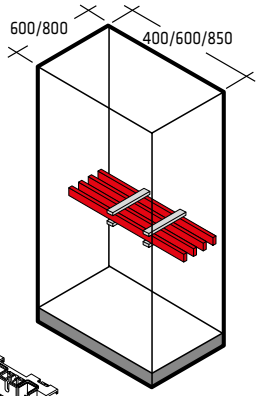
Busbars at top/bottom





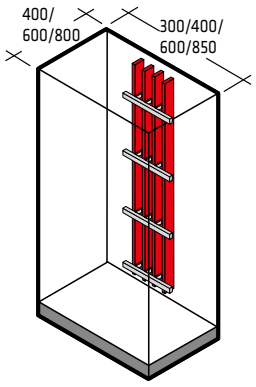
Linear busbar holder

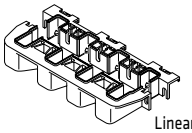
Busbars at all heights



VERTICAL BUSBARS
CVX 1600 enclosures

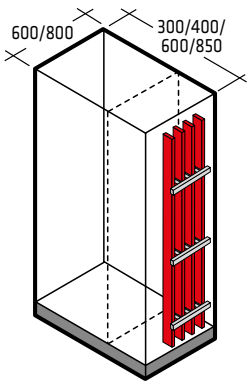
Busbars on bottom of structure
Busbars on bottom of external compartment





Linear busbar holder

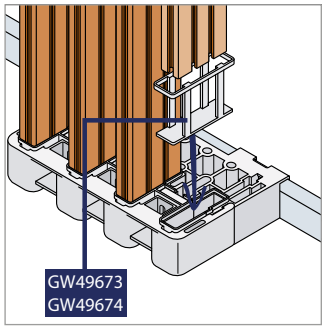
Busbars on side of structure
Busbars on side of internal compartment
Busbars on side of external compartment



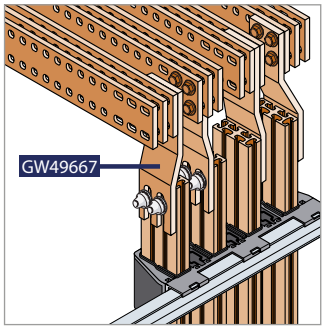
Note: structure dimensions are expressed in millimetres.

For technical information contact the Technical Assistance Service or visit gewiss.com

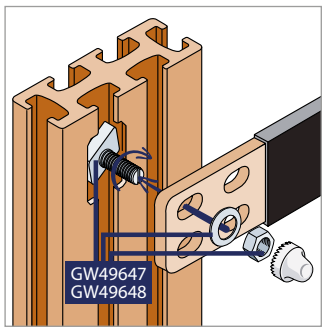
Accessories for shaped busbar



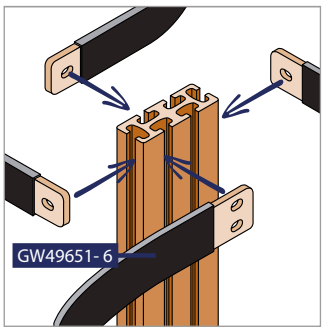
The busbar holders can be used both in intermediate and end positions, thanks to the special support.



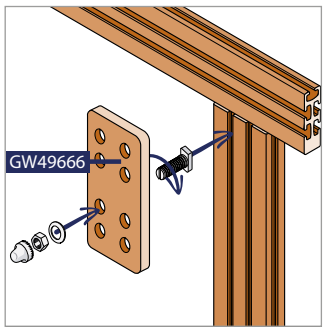
Branch between 2500/3200A flat busbars and 1250/1600A busbars with shaped section.



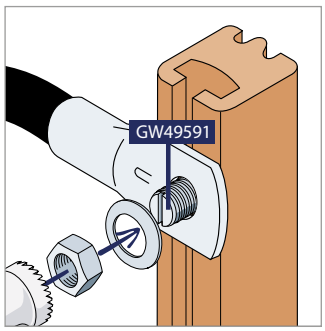
A self-locking hammer screw allows fixing between conductors in any position along the busbar, ensuring a large contact surface.



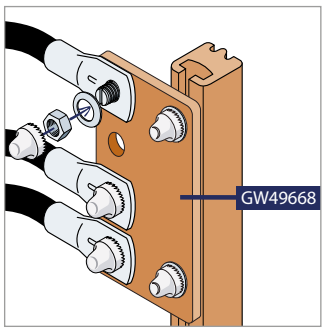
The connections can be made on each side of the busbar.



Joint for 1250-1600 A busbars.
Example of "T" or "L" coupling.

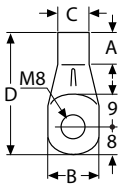


Direct branch by means of cable terminal for cable section up to 50mm².



Branch by means of accessory.

Note: branches headed with cable terminal with the following dimensions:

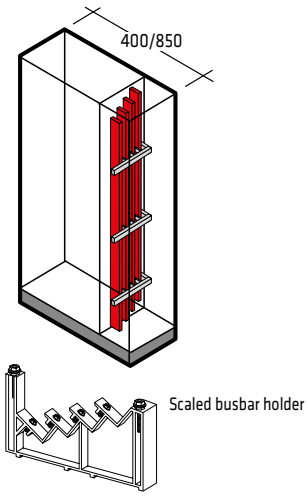


Cable section mm²	A	B	C	D
16	9	13	6	32
25	10.5	13	7	35
35	14	17	9	41
50	15	20	10	42

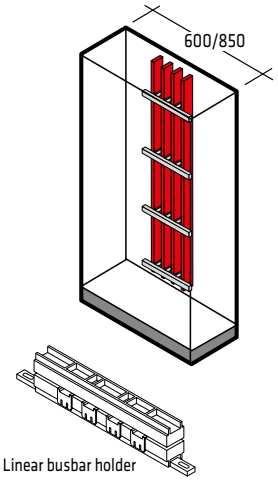
Configurations with flat busbar system

VERTICAL BUSBARS
CVX 630 K boards

Busbars on bottom of side compartment

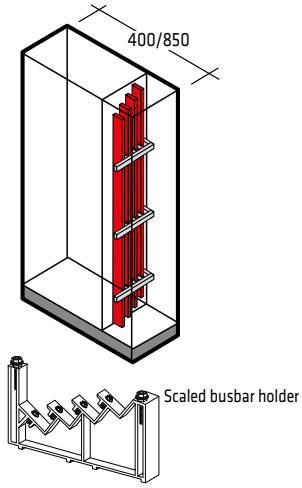


Busbars on bottom of structure

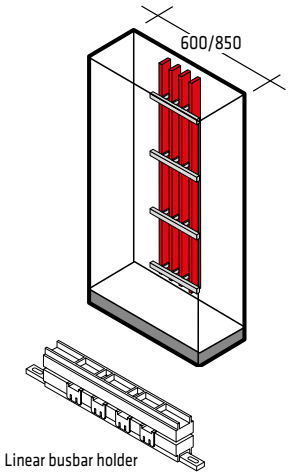


VERTICAL BUSBARS
CVX 630 M boards

Busbars on bottom of side compartment

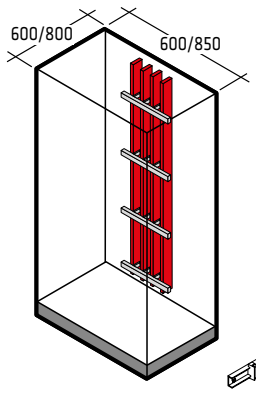


Busbars on bottom of structure

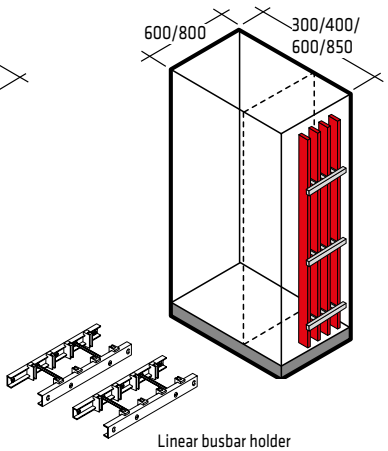


VERTICAL BUSBARS
CVX 1600 enclosures

Busbars on bottom of structure

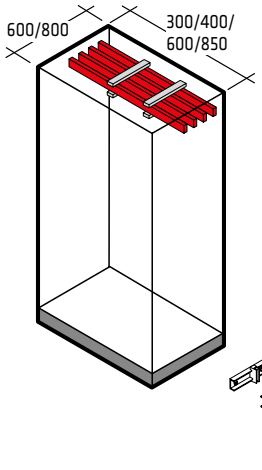


Busbars on side of structure
Busbars on side of internal compartment
Busbars on side of external compartment

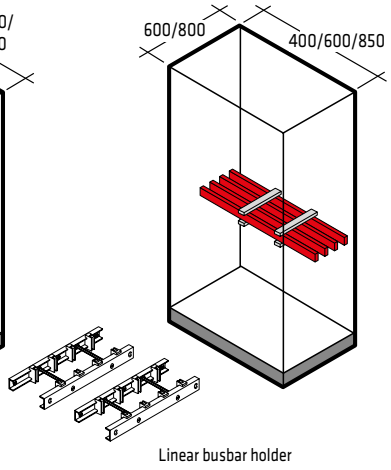


HORIZONTAL BUSBARS
CVX 1600 enclosures

Busbars at top/bottom



Busbars at all heights



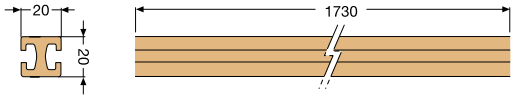
Note: structure dimensions are expressed in millimetres.

Dimension tables

SHAPED PROFILE BUSBARS AND BUSBAR HOLDERS

Busbars up to 1600A

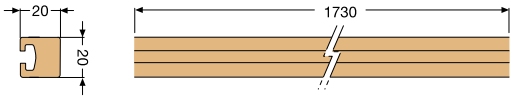
GW 49 651



400A

Section: 200mm²

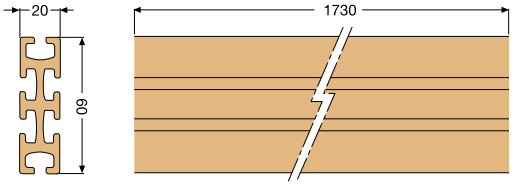
GW 49 652



800A

Section: 283mm²

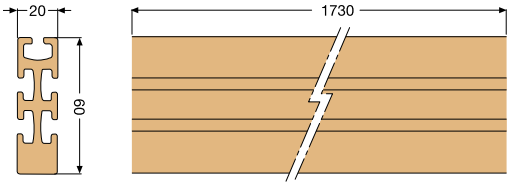
GW 49 653



1250A

Section: 603mm²

GW 49 654

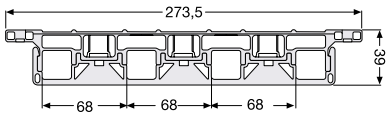


1600A

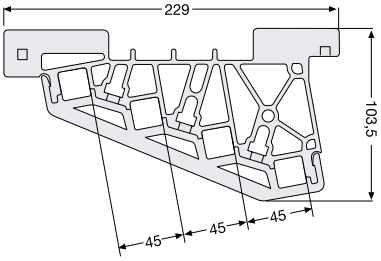
Section: 703mm²

Busbars up to 1600A

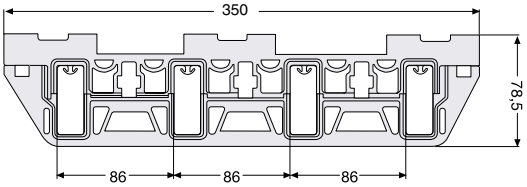
GW 49 658 - GW 45 577/78/79/80



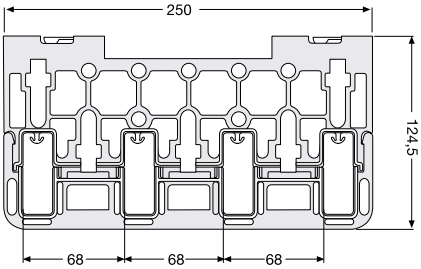
GW 49 656 - GW 45 575/6



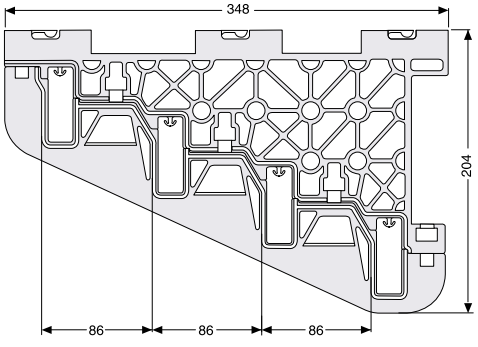
GW 49 659



GW 49 660



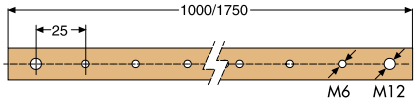
GW 49 657



FLAT BUSBARS AND BUSBAR HOLDERS FOR CVX 630 K / 630 M BOARDS

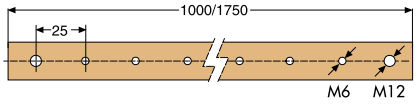
Busbars up to 630A

GW 45 551/5



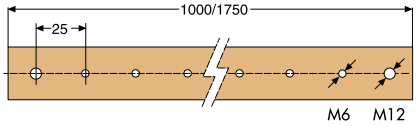
250A

GW 45 552/6



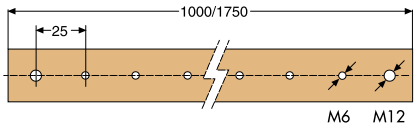
400A

GW 45 553/7



400A

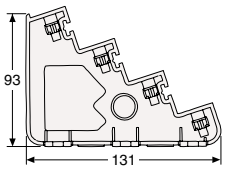
GW 45 554/8



630A

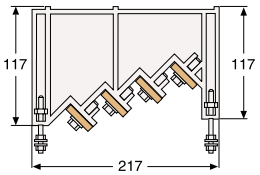
Busbar holders up to 400A

GW 45 561



Busbar holders up to 630A

GW 45 562

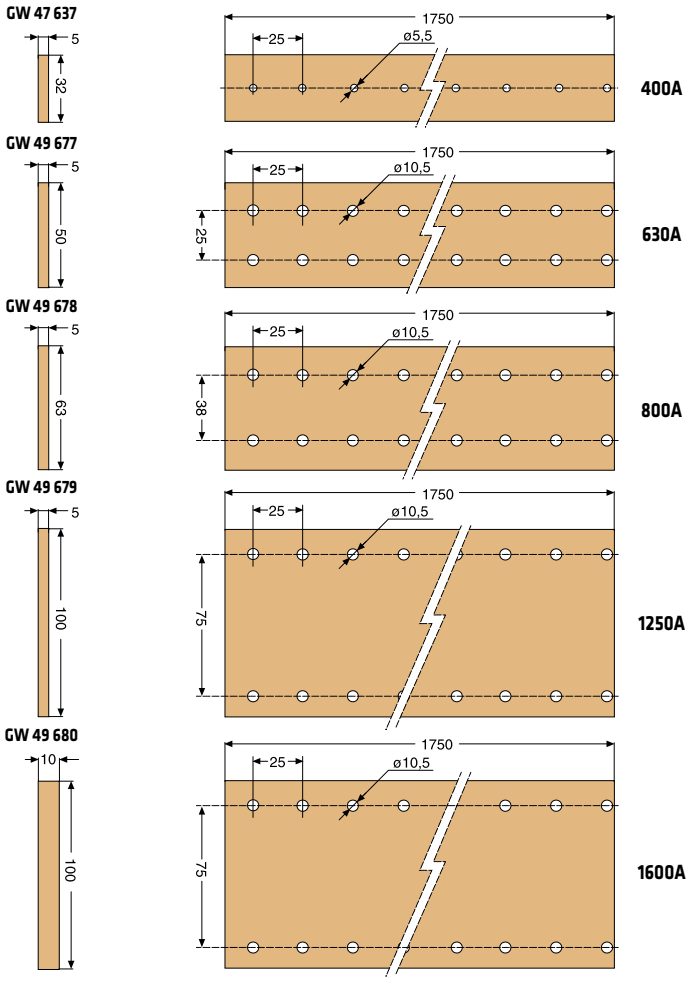


GW 45 563 - GW 45 573 - GW 45 574

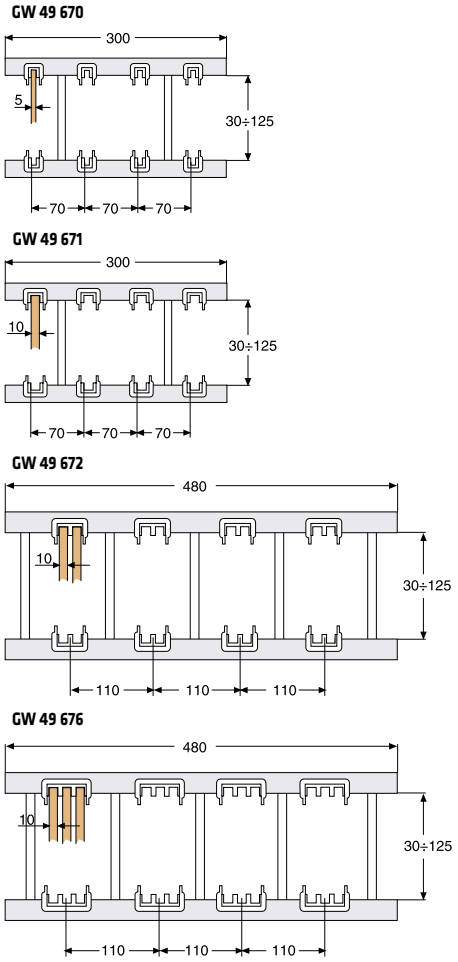
M6 threaded perforations

FLAT BUSBARS AND BUSBAR HOLDERS FOR CVX 1600 ENCLOSURES

Busbars up to 1600A



Busbar holders up to 3200A



Non-threaded perforations.