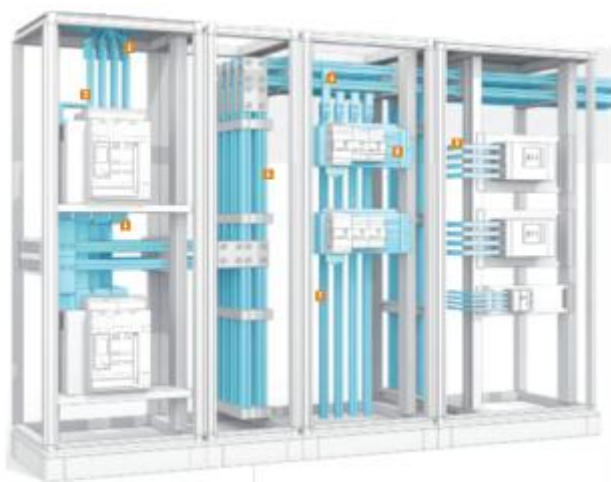


“C-shaped” aluminum bars VX³ for XL3 400/800/4000 enclosures

Cat. No(s): 4 043 60/61/62/63/64/65/66/67/68/69/70/71/80/81/82/83/84
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0 373 50/51/54/55/56/57/58/59/66/67/68/69/77/82/83/86/99



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1. OVERALL DESCRIPTION

Aluminum bars system VX³ is a specific **solution of “C” bars** which are able to apply electric connections along the **whole length** of the bars. The Aluminum bars are provided with different shapes in order to guarantee **high performances** and a **wide applicability** with all distribution enclosures up to XL³ 4000. The bars can be also cut to **obtain the required length** to be easily used for all installation requirements.

Attention: during the cut of the bars to the required length, **take care not to damage the surface treatment**.

To be **easier and ready to use** VX³ system is also equipped with **insulating supports** that hold the bars in the right position according to predefined axle spacing and with **clamps** that allows the use with the functional uprights of XL³ 400/800/4000 enclosures.

VX³ system include a **complete range** of accessories to facilitate the installation and to assure **safety** and **performances**.

2. PRODUCT RANGE

VX³ aluminum bars range

		XL3 400		XL3 800		XL3 4000					
		404436 404437 404438	404450 404451	404460 404461	404470 404471	404460 404461	404470 404471	037366	037368	037367	037369
404430	250A	•	•								
404431	400A	•	•								
404431	630A	•	•								
404433	800A			•	•	•	•				
037354	630A							•	•	•	•
037355	800A							•	•	•	•
037356	1000A							•	•	•	•
037357	1250A							•	•	•	•
037358	1600A							•	•	•	•

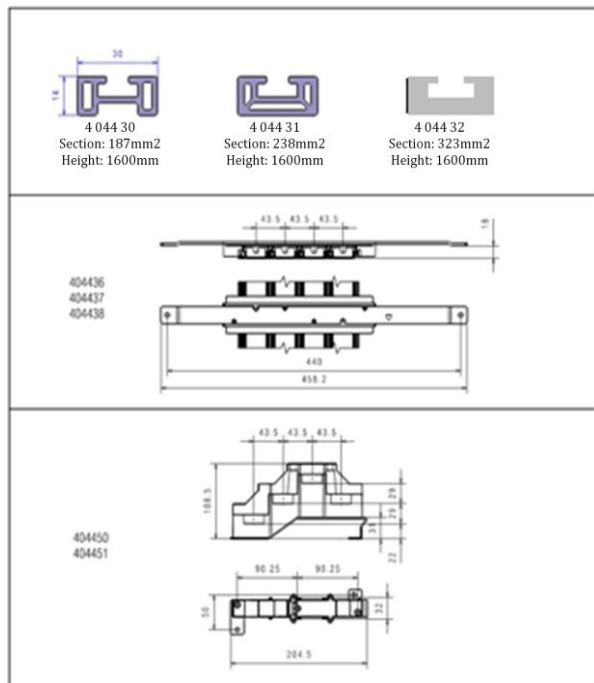
“C-shaped” aluminum bars VX³

for XL3 400/800/4000 enclosures

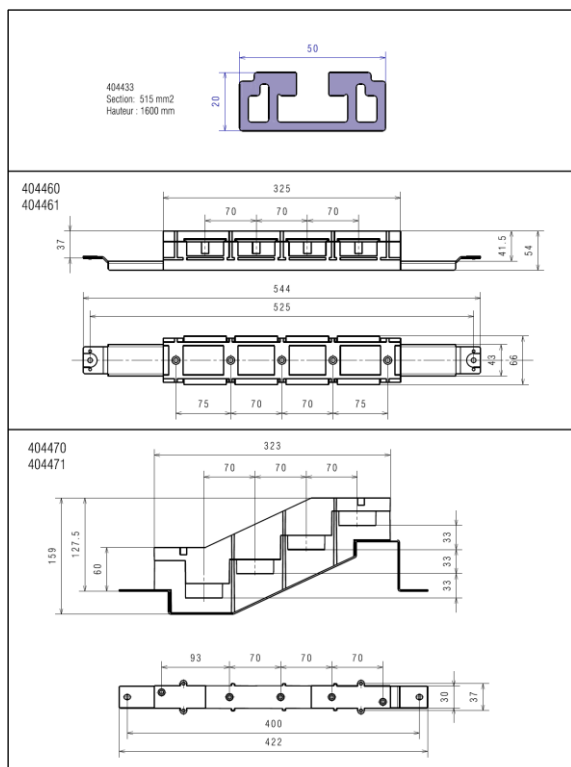
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4 045 30/31/40/41/42/45/46/50/51/52/60/61/62
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3. DIMENSIONS

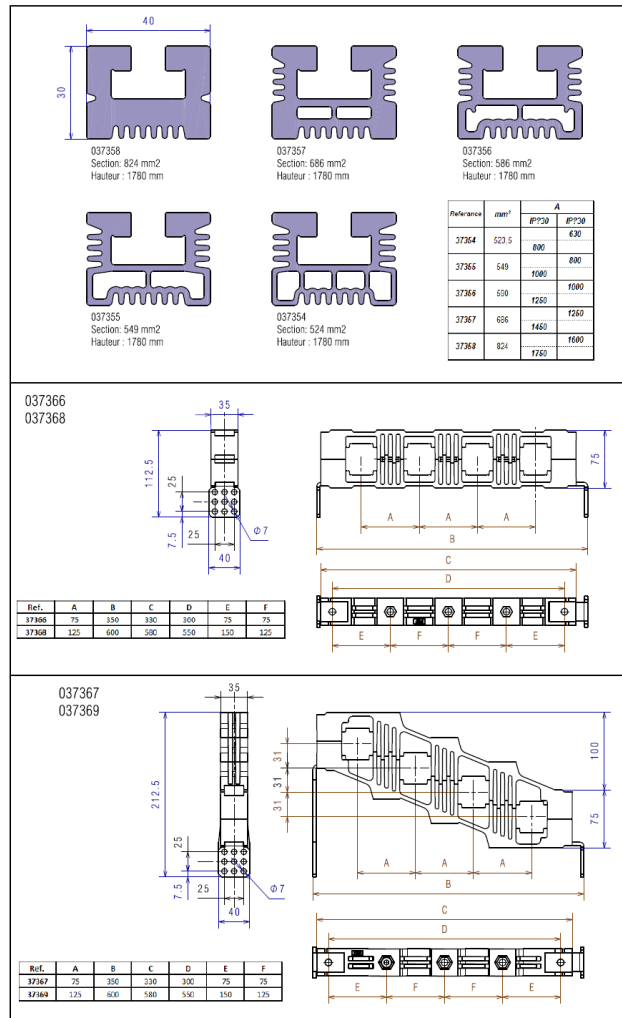
3.1 VX³ 250-630



3.2 VX³ 800A



3.3 VX³ 630-1600



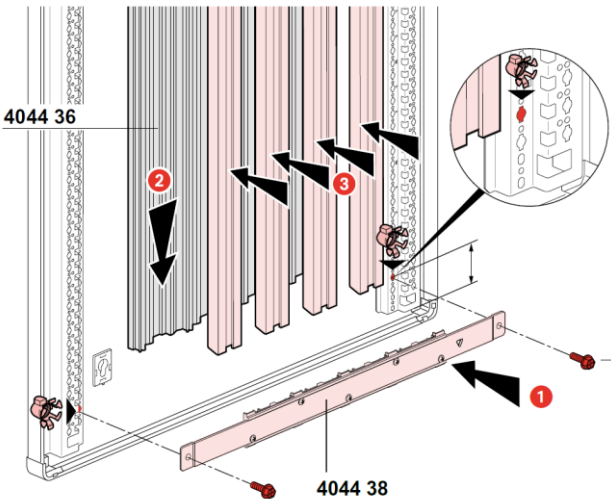
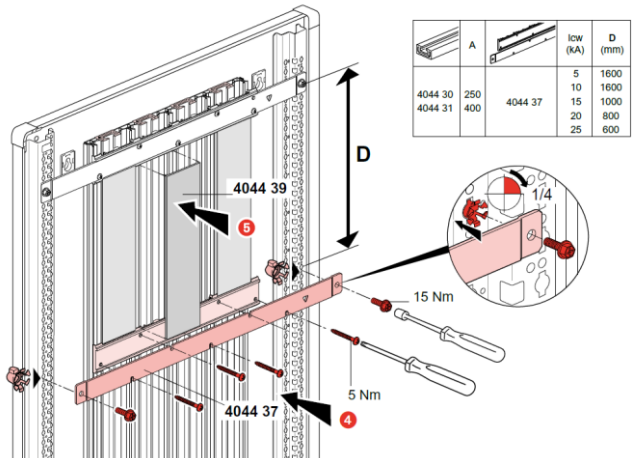
“C-shaped” aluminum bars VX³ for XL3 400/800/4000 enclosures

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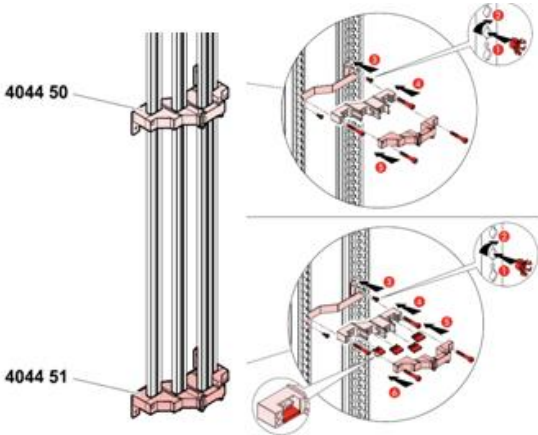
4. INSTALLATION INSTRUCTIONS

The busbar system is installed inside the XL³ 400 structure using the insulating base (item 404436) and it's placed directly in the back of the enclosure. After the insulating heel support (item 404438) and the intermediate support (item 404437) that hold the bars in position assuring the resistance to short-circuits (**ACAE and LOVAG certifications** available). are applied and fixed to the functional uprights of the enclosure. The set of insulating sections is completed with a closing profile which allows a protection degree IP20 (item 404439).

4.1 VX³ 250-630



The busbars can be installed in an external (XL³ 400) or internal (XL³ 800) cable duct using the offset supports 404450/51 for an extreme easiness of wiring.



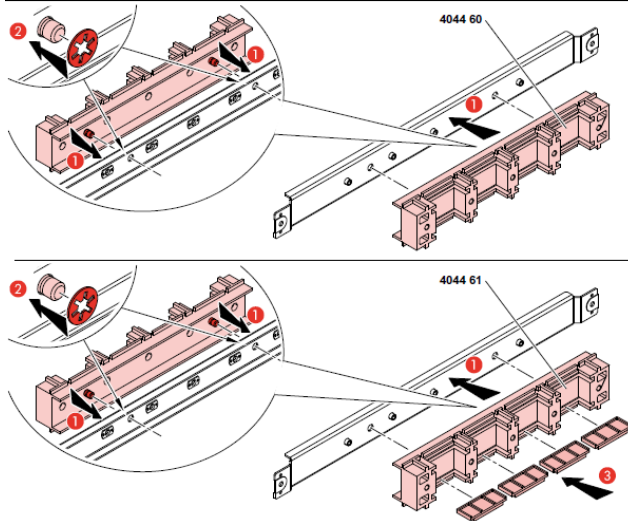
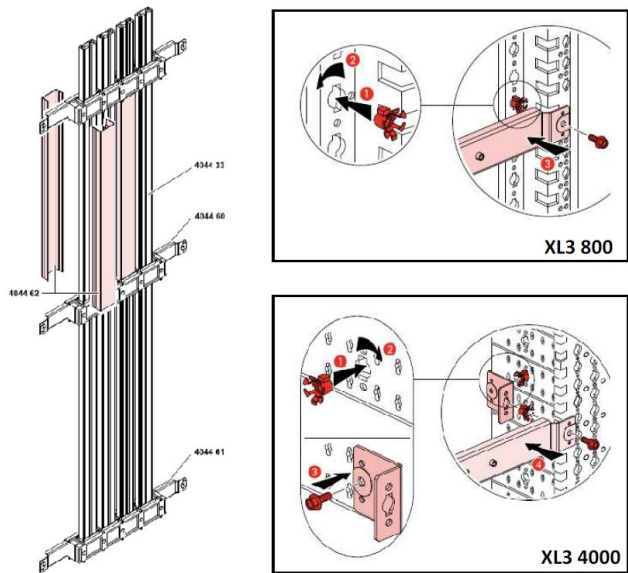
				4044 37	4044 50/51	D [mm]
				4044 30/31/32		
I _{pk} [kA]	10	I _{cw} [kA]		1600	1600	
	21			1000	800	
	30		15	600	400	
	40		20	425	350	
	52		25	325	250	

“C-shaped” aluminum bars VX³
for XL3 400/800/4000 enclosures

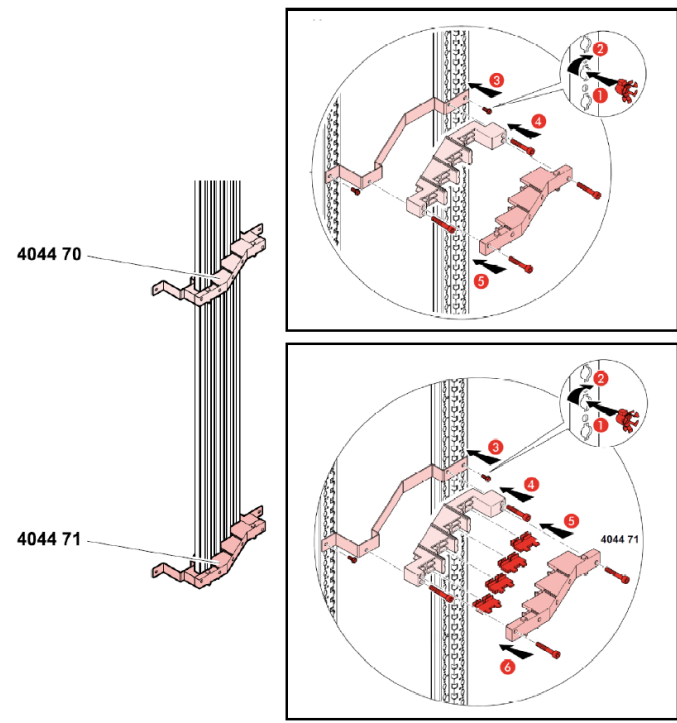
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4 045 30/31/40/41/42/45/46/50/51/52/60/61/62
0 373 50/51/54/55/56/57/58/59/66/67/68/69/77/82/83/86/99

4.2 VX³ 800A

The busbar system is installed inside the XL³ 800/4000 structures using the insulating base (item 404460) and the intermediate supports (item 404461): the supports are applied and fixed to the functional uprights of the enclosures. The set of insulating sections is completed with a cover set which allows a protection degree IP20 (item 404462). The busbar system is installed in the center of the functional uprights.



The busbars can be installed in an external cable duct using the offset supports 404470/71 for an extreme easiness of wiring.

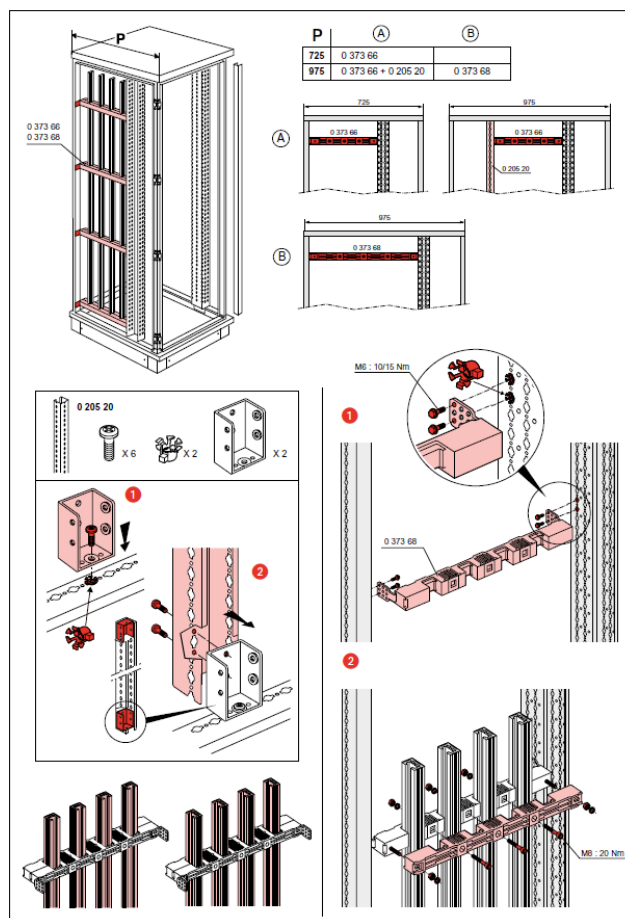
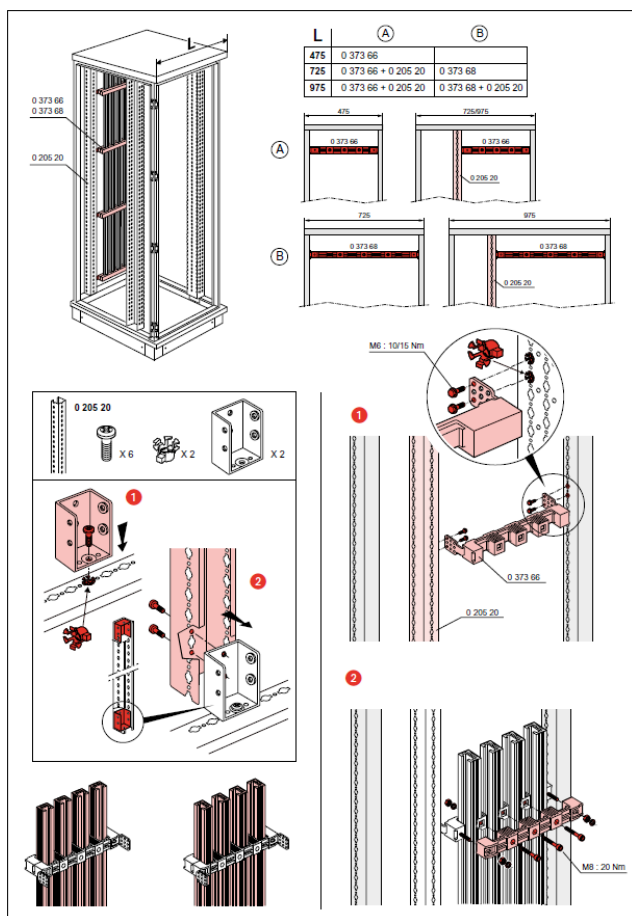


			4044 60 4044 61	4044 70 4044 71	D [mm]
			4044 33		
I _{pk} [kA]	30	I _{cw} [kA]	15	1600	
	40		20	1000	
	52		25	800	
	63		30	700	
	73		35	600	
	84		40	500	
	94		45	400	
	105		50	400	

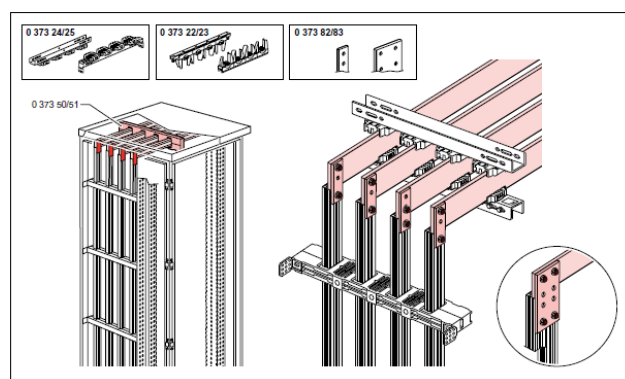
for XL3 400/800/4000 enclosures

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4 044 60/61/62/63/64/65/70/71/72/73/74/75/76/77/87/89/90/91/92
4 045 30/31/40/41/42/45/46/50/51/52/60/61/62
0 373 50/51/54/55/56/57/58/59/66/67/68/69/77/82/83/86/99

The busbar system is installed inside the XL³ 4000 structure using the linear bar supports (item 037366/68).



The systems allows the distribution mix between flat copper busbars and “C-shaped” aluminum busbars.

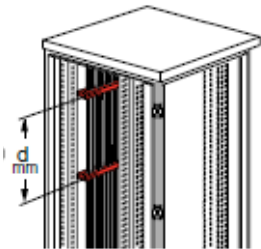


“C-shaped” aluminum bars VX³

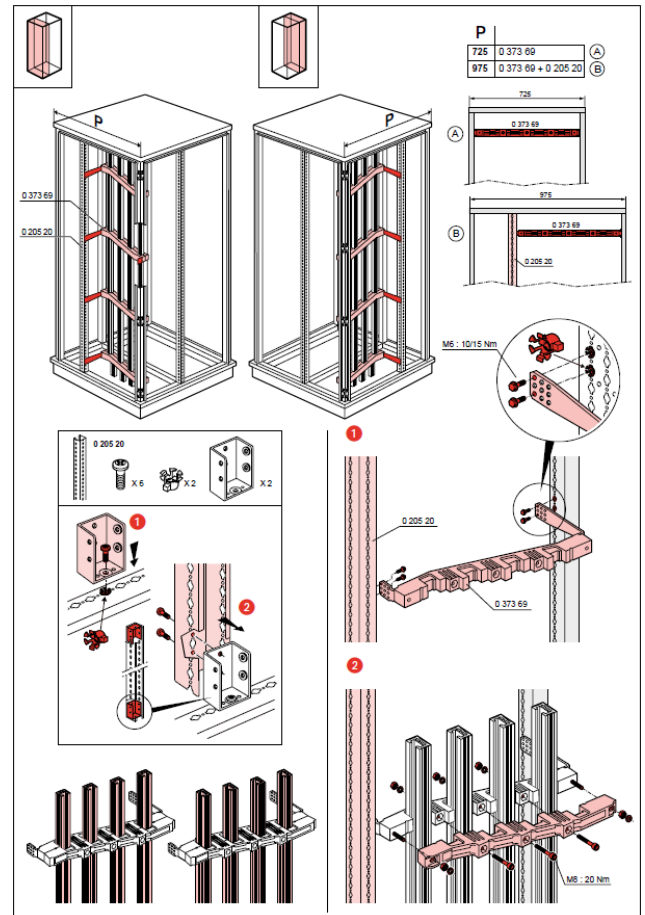
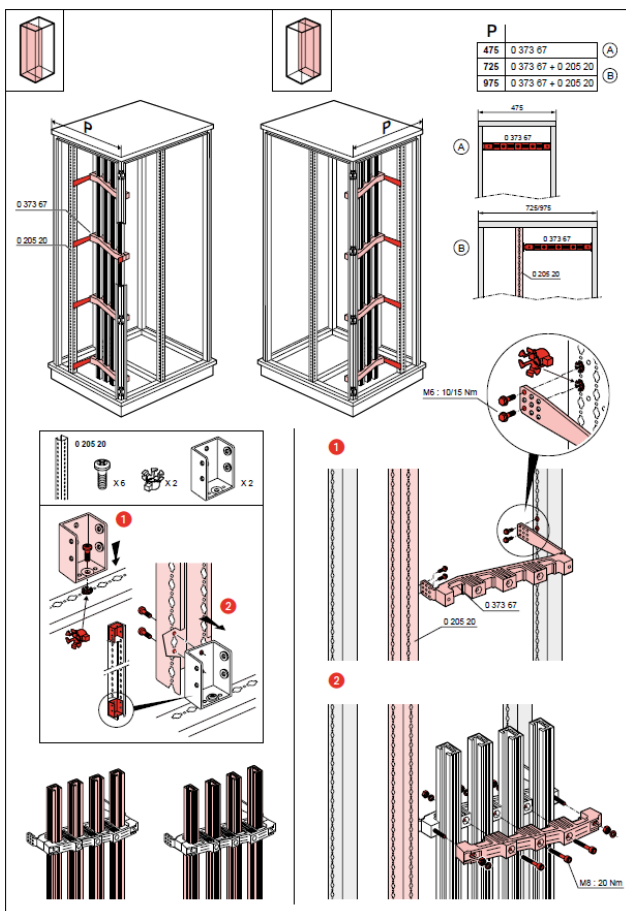
for XL3 400/800/4000 enclosures

Cat. No(s): 4 043 60/61/62/63/64/65/66/67/68/69/70/71/80/81/82/83/84
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4 045 30/31/40/41/42/45/46/50/51/52/60/61/62
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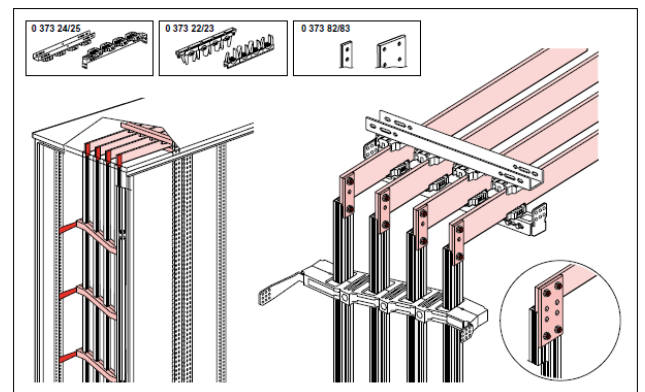
In(A)			Ipk (kA)															
			Icw (kA)															
IP ≤ 30	IP > 30		15	20	25	30	35	40	45	50	60	70						
800	630	1 x 0 373 54	0 373 66	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 68	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
1000	800	1 x 0 373 55	0 373 66	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 68	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
1250	1000	1 x 0 373 56	0 373 66	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 68	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
1450	1250	1 x 0 373 57	0 373 66	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 68	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
1750	1600	1 x 0 373 58	0 373 66	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 68	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
3500	3200	2 x 0 373 58 (A) (B)	2 x 0 373 66 2 x 0 373 68	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
				1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—



The busbars can be installed in the external or internal cable duct of XL³ 4000 enclosures with linear bar supports (item 037367/69).



The systems allows the distribution mix between flat copper busbars and “C-shaped” aluminum busbars.



In(A)			Ipk (kA)															
			Icw (kA)															
IP ≤ 30	IP > 30		15	20	25	30	35	40	45	50	60	70						
800	630	1 x 0 373 54	0 373 67	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 69	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
1000	800	1 x 0 373 55	0 373 67	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 69	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
1250	1000	1 x 0 373 56	0 373 67	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 69	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
1450	1250	1 x 0 373 57	0 373 67	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 69	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
1750	1600	1 x 0 373 58	0 373 67	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
			0 373 69	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
3500	3200	2 x 0 373 58 (A) (B)	2 x 0 373 67 2 x 0 373 69	1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—
				1600	1000	800	700	600	500	400	300	—	—	—	—	—	—	—

“C-shaped” aluminum bars VX³

for XL3 400/800/4000 enclosures

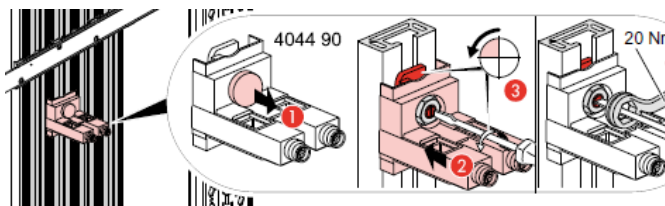
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4 045 30/31/40/41/42/45/46/50/51/52/60/61/62
0 373 50/51/54/55/56/57/58/59/66/67/68/69/77/82/83/86/99

5. EQUIPMENT AND ACCESSORIES

The busbar system is equipped with all accessories to apply correctly all the connections and the electrical links.

5.1 Tapoff terminal 250A

The item can be connected to the “C-shaped” busbar to create a two-cable junction with a maximum cross-section of 50 mm² and a total rated current of 250 A. The product is IP20 by design.

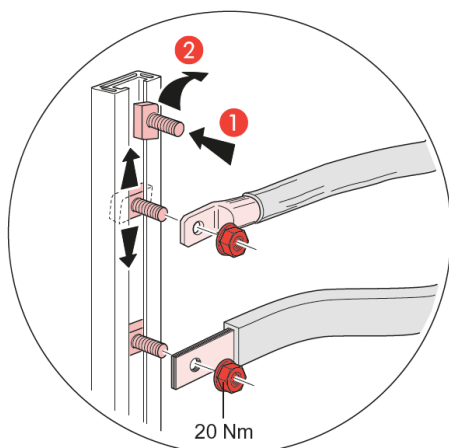


The item 4 044 90 can be used on busbars references 4 044 30/31/32

The item 4 044 89 can be used on busbar reference 4 044 33

5.2 Hammer nuts

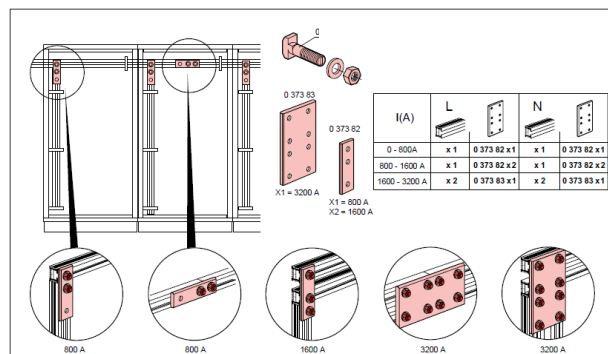
They are used to fix cables with terminals, flexi bars or bars on distribution bars



ITEM	BUSBAR	DIMENSION	LENGHT
4 044 93	4 044 30 4 044 31 4 044 32	M8	22
4 044 94	4 044 33	M8	27
4 044 95	4 044 33 0 373 54 0 373 55 0 373 56 0 373 57 0 373 58	M8	40

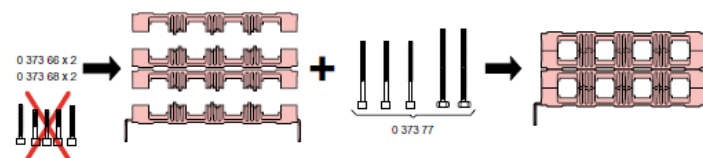
5.3 “C-shaped” bars connection kit

Kit used to easily connect the busbars in the horizontal/horizontal and horizontal/vertical positions.



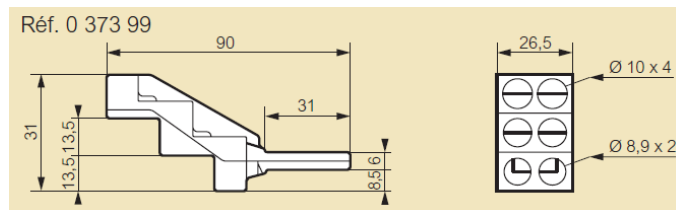
5.4 Pairing kit for insulating supports

The busbars supports can be paired to reach In up to 3200A



5.5 Six outputs connector 250 A

It can be used to connect four 35 mm² cables and two 25 mm² cables. It's connected to the busbars using the hammer nuts (item 037359).



6. TECHNICAL CHARACTERISTICS:

Surface treatment: Copper and Tin plated

Nominal voltage (U_e): 415/690V

Insulation voltage (U_i): 1,000V

Impulse withstand voltage (U_{imp}): 8KV

In: up to 3200A

Icw: up to 70kA

7. CONFORMITY AND APPROVALS

The busbar system is compliant to:

IEC 61439-1/2

IEC 60695-2-11