

## Moulded Case Circuit Breaker

### Chassis systems

#### Overview

MCCBs are often required to be mounted singly, in the case of a motor control centre, or in groups, as part of a larger power distribution system. To help assist with grouped MCCB power distribution requirements, NHP manufacture standardised busbar systems, simply called chassis. NHP stock a range of basic chassis which can be purchased "off the shelf", while more complex, or higher current chassis, are produced on a custom basis to suit a customer specification.

#### Common features

- A new mounting channel common to all chassis to make installation quicker & easier
- All chassis suitable for use up to 690 V AC

#### TemWay XA, XB, XC chassis

- 36 and 40 kA ratings on standard TemWay XA and XB chassis
- 50 and 65 kA ratings on TemWay XC chassis
- XC 1000 A chassis are stocked with 400 A and 250 A tee off combinations
- A range of TemWay 4 pole XA and XB chassis, suitable for earth leakage MCCBs

#### Heavy current "HC" chassis

- HC heavy current chassis for MCCBs, 20 - 1250 A
- HC heavy current chassis, compact single sided version, or double sided
- 11 box sizes – more economical sizing to suit applications. Saves cost
- Common configurations of HC chassis now stocked - fully assembled for quick delivery

#### Testing

Both TemWay and HC Chassis have been unconditionally type tested (no MCCBs fitted) in Australia, at the short time ratings shown in the table below.

#### Chassis ratings

Chassis type	Description	Main bar rating (A)	Fault current level	lcw Rating	MCCB frame size	MCCB Cat. No.
XA	Double sided	630, 800 A <sup>1)</sup>	36 kA for 1 second 40 kA for 0.5 second	125 AF	E/S/ZS125	12A – 125 A
XB	Double sided	800 A <sup>1)</sup>	36 kA for 1 second 40 kA for 0.5 second	250 AF	E/S/ZS250 NJ/ GJ	12 A–250 A
XBSS	Single sided Left or right sided	800 A <sup>1)</sup>	36 kA for 1 second 40 kA for 0.5 second	250 AF	E/S/ZS250 NJ/ GJ	12 A–250 A
PXB	Double sided	800 A	36 kA for 1 second 40 kA for 0.5 second	250 AF	S250PE, or a mix of 250 AF sizes	
XC	Double sided	1000 A <sup>1)</sup>	50 kA for 1 second 65 kA for 0.5 second	250 AF, 400 A	E/S/ZS160-250 up to E/S400	
HC	Double sided or Single sided left or right	1250 A, 1600 A, 2200 A	65 kA for 1 second	250 AF to 1250 AF	E/S160 up to XS1250SE	

**Notes:** <sup>1)</sup> XB Chassis main bars are rated at 800 A, and XC bars are rated 1000 A, while for XA chassis 800 A is an option. To comply with the new Australian New Zealand AS/NZS 3000 - 2007 standard regarding separation, XA, XB and XC chassis should be only used in switchboards having operational currents less than 800A. For chassis that includes integral separation and for utilisation currents equal to, and exceeding 800 A, a HC high current chassis must be used. HC Chassis will not accept TemBreak 1, 125 AF, 250 AF and 400 AF MCCBs.

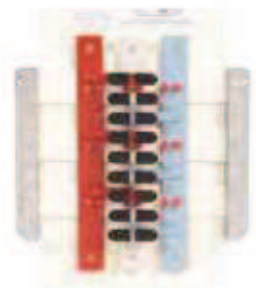






## XA/ XB Chassis for 125 - 250 AF MCCBs

### 3 pole, double sided



XA630 18U chassis

#### Features

- Complies with AS/NZS 3439, AS/NZS 3000 - 2007
- Suits TemBreak MCCBs 125-250 A
- Top and bottom fed
- Busbars fully insulated
- Side mounting rail now standard for quicker mounting on all chassis
- XA and XB chassis now rated up to: 36 kA for 1 second  
40 kA for 0.5 seconds

#### XA 630 and XA 800 - Suits E125, S125, ZS125 MCCBs

No. of Poles	Cutout <sup>1)</sup> Height (mm)	Pan Height (mm)	630 A Cat. No.	800 A <sup>2)</sup> Cat. No.
6	92	90	XA6306U	XA8006U
12	182	180	XA63012U	XA80012U
18	272	270	XA63018U	XA80018U
24	362	360	XA63024U	XA80024U
30	452	450	XA63030U	XA80030U
36	542	540	XA63036U	XA80036U
42	632	630	XA63042U	XA80042U
48	722	720	XA63048U	XA80048U
60	902	900	XA63060U	XA80060U
72	1082	1080	XA63072U	XA80072U

#### XB 800 - Suits E250 S160, S250NJ, S250GJ, ZS250 MCCBs (not S250PE)

No. of Poles	Cutout <sup>1)</sup> Height (mm)	Pan Height (mm)		800 A <sup>2)</sup> Cat. No.
6	107	105	—	XB8006U
12	212	210	—	XB80012U
18	317	315	—	XB80018U
24	422	420	—	XB80024U
30	527	525	—	XB80030U
36	632	630	—	XB80036U
42	737	735	—	XB80042U
48	842	840	—	XB80048U
60	1052	1050	—	XB80060U
72	1262	1260	—	XB80072U

**Notes:** <sup>1)</sup> The length of the escutcheon cut-out (refer to the following pages for detailed dimensions).

<sup>2)</sup> XB Chassis main bars are rated at 800 A, while for XA chassis it is an option. To comply to the new Australian New Zealand AS/NZS 3000 - 2007 standard regarding separation, XA, XB chassis should be only used in switchboards having operational currents less than 800 A. For chassis that includes integral separation and for currents equal to, and exceeding 800 A, a HC high current chassis must be used.



## PXB Chassis for 250AF MCCBs

### 3 pole, double sided



PXB80018U chassis shown

#### Features

- Complies with AS/NZS 3439, AS/NZS 3000 - 2007
- Suitable for MCCBs 12 A - 250 A
- Suits either all electronic or a mix of electronic and thermal magnetic MCCBs
- Top and bottom fed
- Busbars fully insulated
- PXB chassis rated: 36 kA for 1 second  
40 kA for 0.5 seconds

#### PXB 800 - Suits S250PE electronic, S160, E250, S250, ZS250 thermal magnetic MCCBs

No. of Poles	Cutout Height <sup>1)</sup> (mm)	Pan Height <sup>2)</sup> (mm)	800 A Cat. No.
6	107	105	PXB8006U
12	212	210	PXB80012U
18	317	315	PXB80018U
24	422	420	PXB80024U
30	527	525	PXB80030U
36	632	630	PXB80036U
42	737	735	PXB80042U
48	842	840	PXB80048U
60	1052	1050	PXB80060U
72	1262	1260	PXB80072U

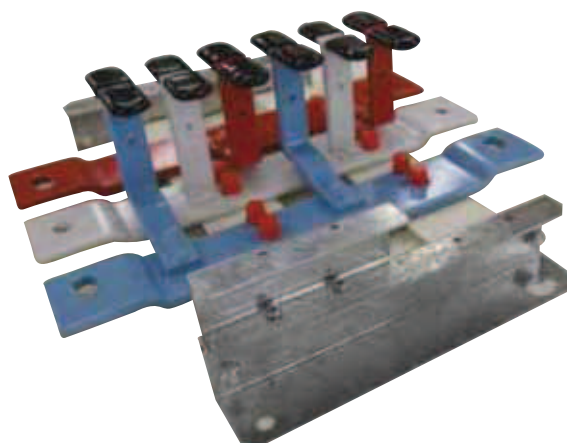
#### PXB chassis details

##### Fitting S250PE Electronic MCCBs

The PXB chassis has extra long tee offs to accommodate 103 mm deep S250PE electronic MCCBs, as an S250PE MCCB will not mount onto a standard XB chassis.

##### Fitting S250PE electronic, S160, E250 and S250 thermal magnetic MCCBs

The PXB chassis caters for a mix of 103 mm deep S250PE and 68mm deep thermal magnetic S160, E250, and S250 MCCBs. The chassis comes as standard with add-on metal brackets & screws, to allow shallower 68 mm deep MCCBs to be installed in any position on the chassis. The total quantity of 3 pole brackets supplied equals the number of 3 pole tee off sets.



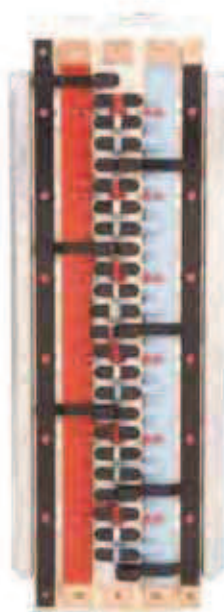
PXB Chassis showing add-on brackets for mounting thermal magnetic MCCBs

- Notes:**
- <sup>1)</sup> The length of the escutcheon cut-out (refer to the following pages for detailed dimensions).
  - <sup>2)</sup> Busbars extend 50 mm beyond the pan length at the top and bottom on XA, XB, XC chassis.
- PXB Chassis main bars are rated at 800 A. In order for adhere to the new Australian New Zealand AS/NZS 3000 - 2007 standard regarding separation, XB chassis should be only used in switchboards having operational currents less than 800 A. For chassis that includes integral separation and for utilisation currents equal to, and exceeding 800 A, a HC high current chassis must be used.



## XA/ XB Chassis for 125 - 250AF MCCBs

### 4 pole, double sided



XB800 48U 4 pole Chassis

#### Features

- Complies with AS/NZS 3439, AS/NZS 3000 - 2007
- Suits TemBreak MCCBs 125-250 A
- Top and bottom fed
- Busbars fully insulated
- Side mounting rail now standard for quicker mounting on all chassis
- XA and XB chassis now rated up to: 36 kA for 1 second  
40 kA for 0.5 seconds
- 630 A 4P chassis have one neutral bar, 800 A 4P types have 2 neutral bars

#### XA 630 and XA 800 - Suits E125, S125, ZS125 MCCBs

No. of Poles	Cutout <sup>1)</sup> Height (mm)	Pan Height (mm)	630 A Cat. No.	800 A <sup>2)</sup> Cat. No.
8	122	150	XA6308U4POLE	XA8008U4POLE
16	242	270	XA63016U4POLE	XA80016U4POLE
24	362	390	XA63024U4POLE	XA80024U4POLE
32	482	510	XA63032U4POLE	XA80032U4POLE
40	602	630	XA63040U4POLE	XA80040U4POLE
48	722	750	XA63048U4POLE	XA80048U4POLE
56	842	850	XA63056U4POLE	XA80056U4POLE
64	962	990	XA63064U4POLE	XA80064U4POLE

#### XB 800 - Suits E250, S160, S250NJ, S250GJ, ZS250 MCCBs (not S250PE)

No. of Poles	Cutout <sup>1)</sup> Height (mm)	Pan Height (mm)		800 A <sup>2)</sup> Cat. No.
8	142	175	—	XB8008U4POLE
16	282	315	—	XB80016U4POLE
24	422	455	—	XB80024U4POLE
32	562	595	—	XB80032U4POLE
40	702	735	—	XB80040U4POLE
48	842	875	—	XB80048U4POLE

**Notes:** <sup>1)</sup> The length of the escutcheon cut-out (refer following pages for detailed dimensions).

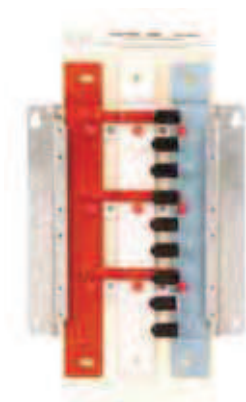
<sup>2)</sup> XB Chassis main bars are rated at 800 A, while for XA chassis it is an option. To comply to the new Australian New Zealand AS/NZS 3000 - 2007 standard regarding separation, XA, XB chassis should be only used in switchboards having operational currents less than 800 A. For chassis that includes integral separation and for currents equal to, and exceeding 800 A, a HC high current chassis must be used.

XA and XB 4 pole chassis have a common pan width. 630 A chassis use 4 main bars while 800 A have 5 main bars (2 neutral bars)



## XB SS Chassis for 125 - 250 AF MCCBs

### 3 pole, single sided



XBSSL800 9U chassis

#### Features

- Single sided MCCB mounting
- Different chassis for left or right side MCCB mounting
- Complies with AS/NZS 3439, AS/NZS 3000 - 2007
- Suits TemBreak, 160 / 250 Amp Frame MCCBs
- Current ratings of MCCBs range 12 A to 250 A
- Top and bottom fed
- Busbars fully insulated
- Side mounting rail now standard for quicker mounting on all chassis
- XA and XB chassis now rated up to: 36 kA for 1 second  
40 kA for 0.5 seconds

#### Single sided chassis

**Suits: E250, S160NJ, E250NJ, S250NJ, S160GJ, S250GJ MCCBs**

#### XB SSL 800

**LEFT hand single sided 3 pole (MCCB loadside connections at LEFT)**

No. of Poles	Cutout <sup>1)</sup> Height (mm)	Pan Height (mm)	800 A <sup>2)</sup> Cat. No.
3	107	105	XBSSL 800 3U
6	212	210	XBSSL 800 6U
9	317	315	XBSSL 800 9U
12	422	420	XBSSL 800 12U
15	527	525	XBSSL 800 15U
18	632	630	XBSSL 800 18U
21	737	735	XBSSL 800 21U
24	842	840	XBSSL 800 24 U
30	1052	1050	XBSSL 800 30 U
36	1262	1260	XBSSL 800 36 U

#### XB SSR 800

**RIGHT hand single sided 3 pole (MCCB loadside connections at RIGHT)**

No. of Poles	Cutout <sup>1)</sup> Height (mm)	Pan Height (mm)	800 A <sup>2)</sup> Cat. No.
3	107	105	XBSSR 800 3U
6	212	210	XBSSR 800 6U
9	317	315	XBSSR 800 9U
12	422	420	XBSSR 800 12U
15	527	525	XBSSR 800 15U
18	632	630	XBSSR 800 18U
21	737	735	XBSSR 800 21U
24	842	840	XBSSR 800 24 U
30	1052	1050	XBSSR 800 30 U
36	1262	1260	XBSSR 800 36 U

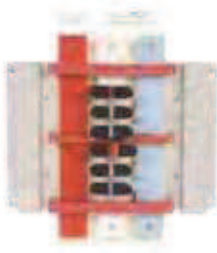
**Notes:** <sup>1)</sup> The length of the escutcheon cut-out (refer following pages for detailed dimensions).

<sup>2)</sup> XB SS Chassis main bars are rated at 800 A. To comply to the new Australian New Zealand AS/NZS 3000 - 2007 standard regarding separation, XB SS chassis should be only used in switchboards having operational currents less than 800 A. For chassis that includes integral separation and for currents equal to, and exceeding 800 A, a HC high current chassis must be used.



## XC Chassis for 160 / 250 A - 400 A MCCBs

### 3 pole, double sided



XC1000 12U chassis

#### Features

- Complies with AS/NZS 3439, AS/NZS 3000 - 2007
- Suits TemBreak MCCB amp ratings 20 A - 400 A
- Top and bottom fed
- Busbars fully insulated
- Side mounting rail now standard for quicker mounting on all chassis
- XC chassis now rated up to:
  - 50 kA for 1 second
  - 65 kA for 0.5 second
- Now stocked with combinations of 250 A and 400 A tee offs

#### XC 1000 - Suits S160, E250, S250NJ, S250GJ, ZS250 MCCBs

No. of Poles	Cutout <sup>1)</sup> Height (mm)	Pan Height (mm)	1000 A <sup>2)</sup> Cat. No.
6	107	170	XC10006U
12	212	275	XC100012U
18	317	380	XC100018U
24	422	485	XC100024U
30	527	590	XC100030U
36	632	695	XC100036U
42	737	800	XC100042U
48	842	905	XC100048U

#### XC 1000 Chassis for 250 A and 400 A MCCBs

As an alternative to a larger high current chassis, where only up to 2 x 400 A and up to 6 x 68 mm deep 250 A MCCBs need to be installed, the new configurations of stocked XC chassis below, can be used.

#### XC 1000 - Suits S160, E250, S250NJ, S250GJ, ZS250, E400, S400 MCCBs

No. of Poles	Cutout <sup>1)</sup> Height (mm)	Pan Height (mm)	Chassis configured for MCCBs below <sup>3)</sup>	1000 A 3P <sup>2)</sup> Cat. No.
Refer chassis dimensions page for dimensions and panel cut out details	415		1 x 400 A and 4 x 250 A	XC10001X4R12U
	625		1 x 400 A and 8 x 250 A	XC10001X4R24U
	835		1 x 400 A and 12 x 250 A	XC10001X4R36U
	555		2 x 400 A and 4 x 250 A	XC10002X4R12U
	765		2 x 400 A and 8 x 250 A	XC10002X4R24U
	975		2 x 400 A and 12 x 250 A	XC10002X4R36U

**Notes:** <sup>1)</sup> The length of the escutcheon cut-out (refer following pages for detailed dimensions).

<sup>2)</sup> XC Chassis main bars are rated at 1000 A. To comply to the new Australian New Zealand AS/NZS 3000 - 2007 standard regarding separation, XC chassis should be only used in switchboards having operational currents less than 800 A. For chassis that includes integral separation and for currents equal to, and exceeding 800 A, a HC high current chassis must be used.

<sup>3)</sup> XC chassis can be custom built for alternate combinations of 250 A MCCBs, and up to 2 x 400 AF MCCBs.

All 400 Amp tee offs are located at the top of the chassis, unless specified.

The stocked XC chassis containing 400 A MCCB tee offs, mount the 400 A MCCB in a single sided configuration. Each 400 A MCCB is configured for right hand side customer load side connection. Any other configuration is available by special order.