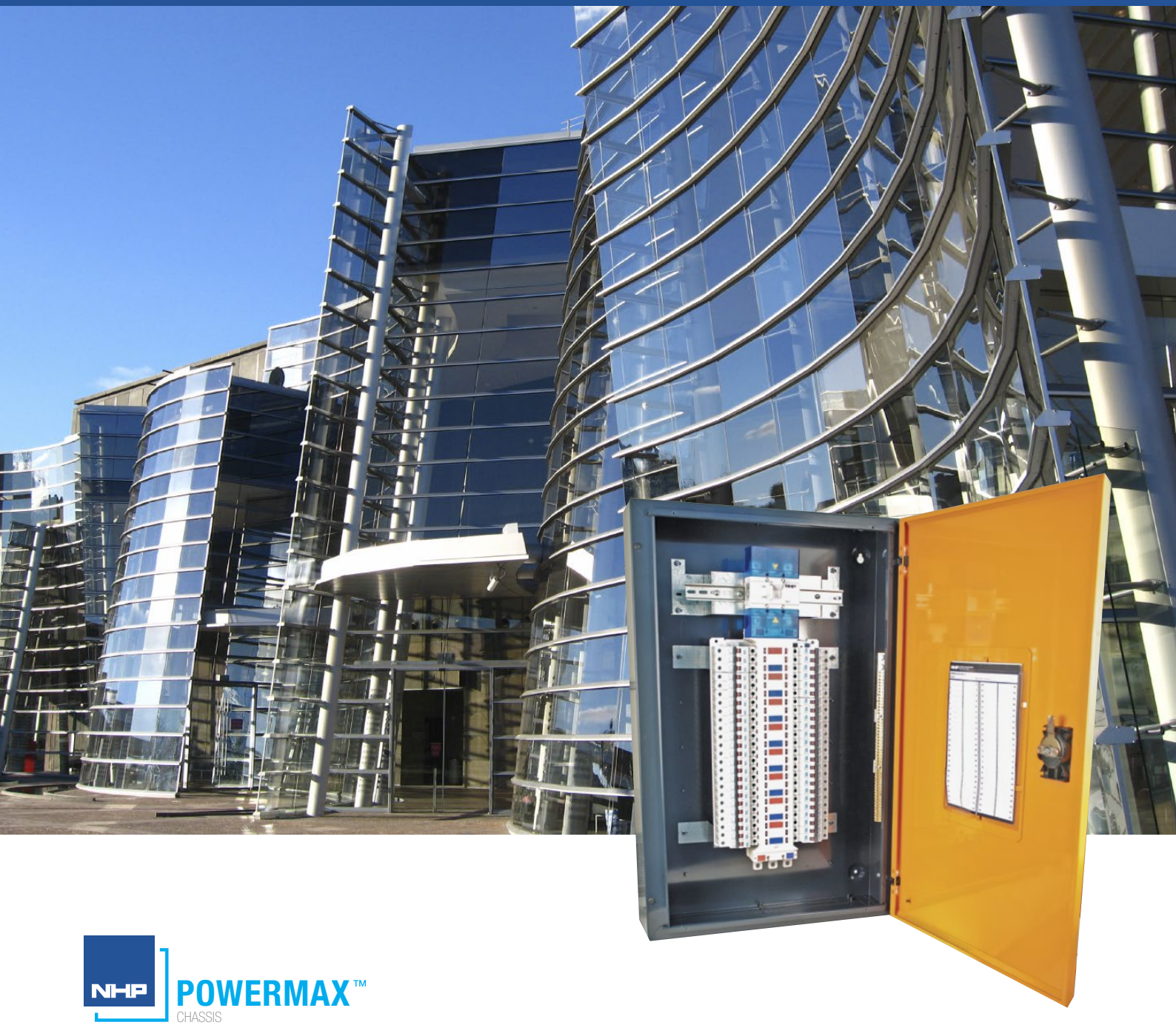
GB Isolation Chassis

Solutions for reducing risk when distribution panelboard modifications are required for critical applications

POWER DISTRIBUTION AND PROTECTION



NHP POWERMAX™ CHASSIS

GB Isolation Chassis

Innovative, cutting edge chassis design

- High short circuit withstand ratings
- Third-party tested by NATA accredited laboratory
- Encapsulated chassis, incorporating an innovative tee off disconnection system
- The GB Chassis has been designed by NHP in Australia to meet Australian and New Zealand requirements
- Manufactured in Australia, ensuring consistent quality
- All testing conducted at an independent Australian test station, to AS/NZS 3439.1:2002
- Unique circuit breaker lock off attachment

Super strong design!
High short circuit current withstand ratings Icc 63kA S250PE

Superior temperature rise ratings!
The GB Chassis has a genuine 250A rating, tested to AS/NZS 3439.1:2002
The GB Chassis runs cooler!

The main busbars are fully encapsulated including the neutral bar.

The GB Chassis's neutral bar is fully integrated and encapsulated. Furthermore the neutral bar can be isolated, is fully rated and can be padlocked off!

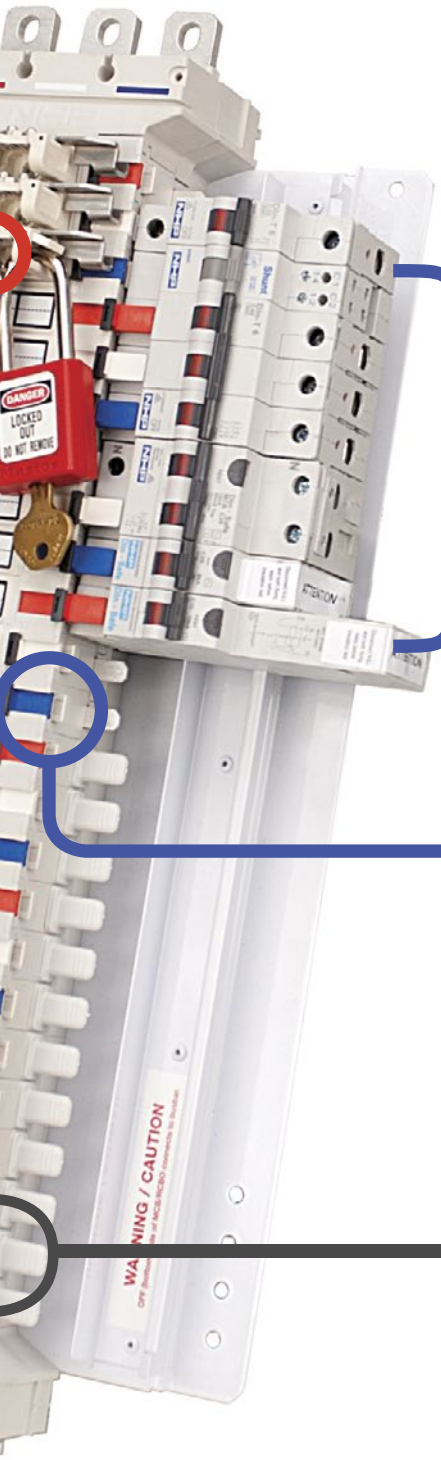
The NHP GB Chassis has identical dimensions to the CD and NC chassis and with its comparable Icw and temperature rise ratings it is a direct replacement. No escutcheon modification required.

PADLOCK ACCESSORY
(Innovation patent no. 2010100182)
A unique lock off attachment can be fitted to the chassis ensuring the isolator interlock switch can be padlocked open / off for safety.

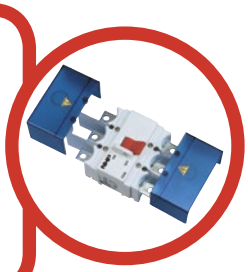
TOGGLE CONVERSION KIT
Unique attachment bar can convert a single switch toggle into a 2P or 3P toggle, ensuring multi phase circuits cannot accidentally have one pole switched!

UNIVERSAL FEED OPTION
The GB chassis is available as a single end feed or a universal feed for total flexibility!

NHP POWERMAX™ CHASSIS

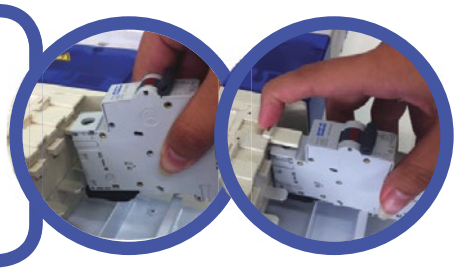


DIRECT CONNECT TAGS
Large copper connection tags allow a standard NHP Katko isolator to be direct connected as a main switch with the GB chassis. A Terasaki 250A MCCB can also be used with an adaptor kit.
Both solutions are rated at 250A in accordance with AS/NZS 3439.1:2002



DIN-T DEVICES AND ACCESSORIES
Suitable for use with standard NHP Din-T 6, Din-T 10 MCBs, RCDs, RCBOs and accessories such as Din-T Shunt trips, UVTs, alarms and auxilary switches

ISOLATOR INTERLOCK
(Patent no. 2011202133)
Innovative isolator interlock ensures the tee off can only be switched 'live' once a circuit breaker is fitted. The button must be pressed in by a fitted MCB/RCBO to release the isolation switch.



COLOURED PHASE SWITCHES
Coloured interlock sliders ensure easy phase identification.

Overview

The GB Isolation Chassis provides an alternative that changes how you think about chassis design!

The NHP GB chassis reduces potential hazards for electrical maintenance workers through a combination of innovation and NHP's solid chassis design principals. The result is a high quality encapsulated chassis that incorporates a proven mechanically interlocked busbar tee off disconnection system. Its mechanical strength and thermal performance are unmatched within the Australian and New Zealand market.

Features:

- Enclosed busbar
- Isolated Tee-off
- Pad lockable option
- Touch protection
- Tee off isolator Interlock
- Integrated padlocking system
- 1, 2, 3 pole toggle switch conversion kit
- Integrated and switchable 4th pole
- Direct connect main switch
- Top and bottom feed tags available
- Fully encapsulated bar work
- Dimensions identical to other NHP chassis
- Australian designed and manufactured
- High short circuit current withstand capacity (Icw)
- Tested high continuous current carrying capacity to AS/NZS 3439.1:2002

Applications

The NHP GB Chassis is perfectly suited to applications which require minimal downtime while retaining excellent thermal and mechanical performance.

Typical Applications:

- Hospitals
- Power stations
- Mining
- Data centres
- Universities / Schools
- Banks / Airports
- Telecommunications
- Manufacturing / production

Special Applications:

- Water and Waste Water treatment plants
- Petrochemical plants / Service stations
- Food and Beverage
- Paint Plants
- Pulp and Paper

NHP POWERMAX™ CHASSIS

Ratings

The GB Chassis has a genuine 250A enclosed current rating and a low temperature rise for both 3P and 3P+N models, which have been successfully tested to AS/NZS 3439.1:2002 by an independent Australian NATA certified test station.

Two important measures of chassis strength are the 'unconditional short circuit withstand capacity' and the 'conditional short circuit withstand capacity'.

NHP approach chassis design with the goal of achieving a high 'unconditional rating`. The unconditional rating is the true measure of strength and short time thermal capacity, it tests the quality of the materials used and the level of engineering behind the design.

Unconditional Ratings:

An unconditional chassis rating (or withstand *Icw*) is achieved by subjecting the chassis to a predefined level of fault current for a predefined time. The incoming feed to the chassis is not protected by a current limiting device such as a circuit breaker or fuse. The higher the unconditional rating the better!

GB Chassis Icw performance	200ms rating	300ms rating	1sec rating
Unconditional withstand (Icw)	25kA	20kA	10kA

Refer to AS/NZS 3439.1:2002 section 4.3 for further information.

Conditional Ratings:

A conditional chassis rating (or Icc) is achieved by subjecting the chassis to a predefined level of fault current. The incoming feed to the chassis is protected by a current limiting device such as a circuit breaker or fuse. In this case it is the tested combination of circuit breaker or fuse that will define the outcome.

GB Chassis Icc performance	MCCB feeder Terasaki S250GJ	MCCB feeder Terasaki S250PE
Conditional withstand (Icc)	36kA	63kA

Refer to AS/NZS 3439.1:2002 section 4.5 for further information.

Busbar Ratings:

All busbar ratings are in accordance with AS/NZS 3439.1:2002.

GB Chassis performance	Enclosed rating for 3P and 3P+N model	Tee off rating*
Current rating (A)	250A	100A

** Tee off rating when used with standard direct connect MCB is 63A, 100A rating applies when used in conjunction with DinTT100.*

Ordering Information

Standard Configuration:

No. of poles	Phase Colour Sequence	No. of ways	Cat. No.	Description	Suits Device Type
3	red / white / blue	12	GB212183TF*	CHASSIS DIN 12W 3P GB	1P, 2P and 3P MCBs / RCDs
3	red / white / blue	24	GB224183TF*	CHASSIS DIN 24W 3P GB	1P, 2P and 3P MCBs / RCDs
3	red / white / blue	36	GB236183TF*	CHASSIS DIN 36W 3P GB	1P, 2P and 3P MCBs / RCDs
3	red / white / blue	48	GB248183TF*	CHASSIS DIN 48W 3P GB	1P, 2P and 3P MCBs / RCDs
3	red / white / blue	60	GB260183TF*	CHASSIS DIN 60W 3P GB	1P, 2P and 3P MCBs / RCDs
3	red / white / blue	72	GB272183TF*	CHASSIS DIN 72W 3P GB	1P, 2P and 3P MCBs / RCDs
3	red / white / blue	84	GB284183TF*	CHASSIS DIN 84W 3P GB	1P, 2P and 3P MCBs / RCDs
3	red / white / blue	96	GB296183TF*	CHASSIS DIN 96W 3P GB	1P, 2P and 3P MCBs / RCDs
3P+N	red / white / blue / black	24	GB224183PNTF*	CHASSIS DIN 24W 3P+N GB	1P, 2P, 3P and 4P MCBs / RCDs
3P+N	red / white / blue / black	48	GB248183PNTF*	CHASSIS DIN 48W 3P+N GB	1P, 2P, 3P and 4P MCBs / RCDs
3P+N	red / white / blue / black	72	GB272183PNTF*	CHASSIS DIN 72W 3P+N GB	1P, 2P, 3P and 4P MCBs / RCDs
3P+N	red / white / blue / black	96	GB296183PNTF*	CHASSIS DIN 96W 3P+N GB	1P, 2P, 3P and 4P MCBs / RCDs
4P	red / black / white / black / blue / black	24	GB224184TF*	CHASSIS DIN 24W 4P GB	2P RCBOs /2P MCBs
4P	red / black / white / black / blue / black	48	GB248184TF*	CHASSIS DIN 48W 4P GB	2P RCBOs/2P MCBs
4P	red / black / white / black / blue / black	72	GB272184TF*	CHASSIS DIN 72W 4P GB	2P RCBOs/2P MCBs
4P	red / black / white / black / blue / black	96[1]	GB296184TF*	CHASSIS DIN 96W 4P GB	2P RCBOs/2P MCBs

TF = Top Feed, replace "TF" with "U" for Universal, (for example GB212183U) or "BF" for Bottom Feed (for example GB212183BF).*

[1] Contact NHP for specification and application details.

Ordering Information

Special Configuration:

No. of poles	Phase Colour Sequence	No. of ways	Cat. No.	Description	Suits Device Type
2P	red / black	24	GB224182TF*	CHASSIS DIN 24W 2P GB	2PMCBs
2P	red / black	48	GB248182TF*	CHASSIS DIN 48W 2P GB	2PMCBs
2P	red / black	72	GB272182TF*	CHASSIS DIN 72W 2P GB	2PMCBs
2P	red / black	96[1]	GB296182TF*	CHASSIS DIN 96W 2P GB	2PMCBs
1P	red	24	GB224181TF*	CHASSIS DIN 24W 2P GB	1PMCBs
1P	red	48	GB248181TF*	CHASSIS DIN 48W 2P GB	1PMCBs
1P	red	72	GB272181TF*	CHASSIS DIN 72W 2P GB	1PMCBs

TF = Top Feed, replace "TF" with "U" for Universal, (for example GB212183U) or "BF" for Bottom Feed (for example GB212183BF).*

[1] Contact NHP for specification and application details.

Accessories

Accessories	
GBTB1	Toggle bar 1-pole
GBTB2	Toggle bar 2-pole
GBTB3	Toggle bar 3-pole
GBTB4	Toggle bar 4-pole
GBSPP3P	Back cover 3-pole (mainswitch connection)
GBSPP4P	Back cover 4-pole (mainswitch connection
GBLM	Padlock mechanism LH & RH side (suit 1P MCBS or 2-3P MCBS with toggle joining bars)
GBLM2P	Padlock mechanism LH & RH side (suit 4P MCBS with toggle joining bars)
GBTOC	Tee-off cap
GBBBC	Busbar cap suit main busbar
GBIB	Interpole barrier
DINTT100	Through terminal to feed DINT10H 80-100A

Concept PLUS Panelboard and GB Chassis:

- Standard AS/NZS 3439-3
- IP 42
- 6 modular sizes up to 96 poles
- Accessory module
- Type tested busbar chassis system
- Compact 160A or 250 A main switch
- Generous wiring room
- Removable gland plates
- Door fitted independent of Escutcheon
- Flush door handle
- Left or right hand door hinging
- Commercial and industrial applications

Ordering Information

Concept PLUS Panelboard and GB Chassis:

Colour	Mainswitch	No. of ways	Box Size	Height (mm)	Cat. No.
grey	NIL	24	1	700	CDG24G2
grey	NIL	36	2	900	CDG36G2
grey	NIL	48	2	900	CDG48G2
grey	NIL	60	3	1100	CDG60G2
grey	NIL	72	4	1300	CDG72G2
grey	NIL	84	4	1300	CDG84G2
grey	NIL	96	5	1500	CDG96G2
grey	160A	24	1	700	CDG24M160G2
grey	160A	36	2	900	CDG36M160G2
grey	160A	48	2	900	CDG48M160G2
grey	160A	60	3	1100	CDG60M160G2
grey	160A	72	4	1300	CDG72M160G2
grey	160A	84	4	1300	CDG84M160G2
grey	160A	96	5	1500	CDG96M160G2
grey	250A	24	1	700	CDG24M250G2
grey	250A	36	2	900	CDG36M250G2
grey	250A	48	2	900	CDG48M250G2
grey	250A	60	3	1100	CDG60M250G2
grey	250A	72	4	1300	CDG72M250G2
grey	250A	84	4	1300	CDG84M250G2
grey	250A	96	5	1500	CDG96M250G2

[1] Contact NHP for specification and application details.

[2] Replace 'G' (grey) with 'O' for an orange enclosure. Eg: CDG24M160O2

Concept Premier Panelboard and GB Chassis:

- Standard AS/NZS 3439-3
- IP 66 rated enclosure
- 1.6 mm fully welded construction
- 316 Stainless steel option
- 7 modular sizes 600 mm to 2000 mm
- Very generous amounts of wiring room
- Accesssory module
- Type tested busbar/chassis system
- Removable gland plates (with gaskets)
- 3 point door locking on sizes 1000 mm and above
- Semi flush door lock

Ordering Information

Concept Premier Panelboard and GB Chassis:

Colour	Mainswitch	No. of ways	Box Size	Height (mm)	Cat. No. [2]
grey	NIL	24	1	800	CPG24G2
grey	NIL	36	2	1000	CPG36G2
grey	NIL	48	2	1000	CPG48G2
grey	NIL	60	3	1200	CPG60G2
grey	NIL	72	4	1400	CPG72G2
grey	NIL	84	4	1400	CPG84G2
grey	NIL	96	5	1600	CPG96G2
grey	160A	24	1	800	CPG24M160G2
grey	160A	36	2	1000	CPG36M160G2
grey	160A	48	2	1000	CPG48M160G2
grey	160A	60	3	1200	CPG60M160G2
grey	160A	72	4	1400	CPG72M160G2
grey	160A	84	4	1400	CPG84M160G2
grey	160A	96	5	1600	CPG96M160G2
grey	250A	24	1	800	CPG24M250G2
grey	250A	36	2	1000	CPG36M250G2
grey	250A	48	2	1000	CPG48M250G2
grey	250A	60	3	1200	CPG60M250G2
grey	250A	72	4	1400	CPG72M250G2
grey	250A	84	4	1400	CPG84M250G2
grey	250A	[96]	5	1600	CPG96M250G2

[1] Contact NHP for specification and application details.

[2] Replace 'G' (grey) with 'O' for an orange enclosure. Eg: CPG24O

Concept Premier Panelboard and GB Chassis:

- Tee-off padlock mechanism
- Standard AS/NZS 3439-3
- IP 66 rated enclosure
- 1.6 mm fully welded construction
- 316 Stainless steel option
- 7 modular sizes 600 mm to 2000 mm
- Very generous amounts of wiring room
- Accesssory module
- Type tested busbar/chassis system
- Removable gland plates (with gaskets)
- 3 point door locking on sizes 1000 mm and above
- Semi flush door lock

Ordering Information

Concept Premier Panelboard and GB Chassis:

Colour	Mainswitch	No. of ways	Box Size	Height (mm)	Cat. No. [2]
grey	NIL	24	1	800	CPG24GLM2
grey	NIL	36	2	1000	CPG36GLM2
grey	NIL	48	2	1000	CPG48GLM2
grey	NIL	60	3	1200	CPG60GLM2
grey	NIL	72	4	1400	CPG72GLM2
grey	NIL	84	4	1400	CPG84GLM2
grey	NIL	96	5	1600	CPG96GLM2
grey	160A	24	1	800	CPG24M160GLM2
grey	160A	36	2	1000	CPG36M160GLM2
grey	160A	48	2	1000	CPG48M160GLM2
grey	160A	60	3	1200	CPG60M160GLM2
grey	160A	72	4	1400	CPG72M160GLM2
grey	160A	84	4	1400	CPG84M160GLM2
grey	160A	96	5	1600	CPG96M160GLM2
grey	250A	24	1	800	CPG24M250GLM2
grey	250A	36	2	1000	CPG36M250GLM2
grey	250A	48	2	1000	CPG48M250GLM2
grey	250A	60	3	1200	CPG60M250GLM2
grey	250A	72	4	1400	CPG72M250GLM2
grey	250A	84	4	1400	CPG84M250GLM2
grey	250A	96	5	1600	CPG96M250GLM2

[1] Contact NHP for specification and application details.

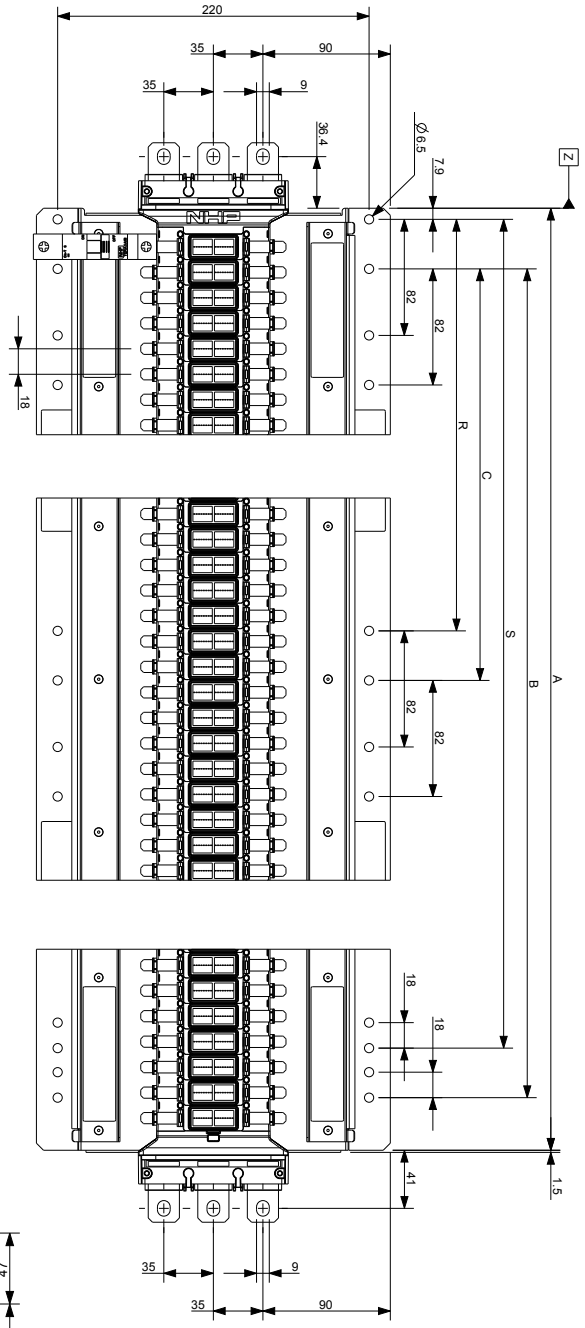
[2] Replace 'G' (grey) with 'O' for an orange enclosure. Eg: CPG24OLM

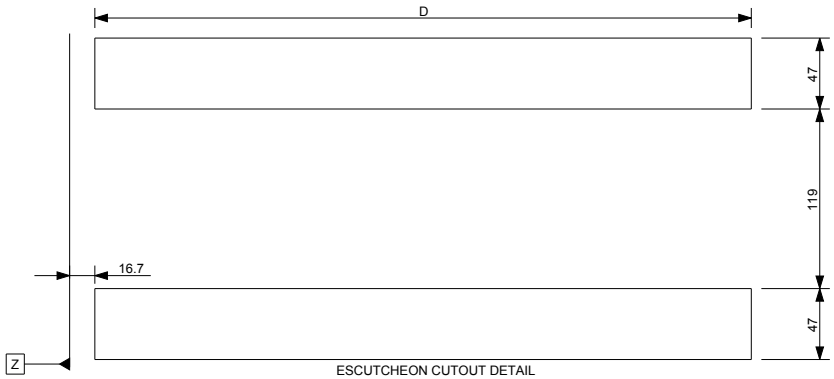
Dimensions

Universal Feed 3 Pole:

Universal feed 3 Pole -12, 24, 36, 48, 60, 72, 84, 96 way (without lock off attachment).

No. of ways	DIM A	DIM B	DIM C	DIM R	DIM S	DIM D
12	140.0	-	-	-	-	110.0
24	248.0	100.0	-	-	100.0	218.0
36	356.0	200.0	-	-	200.0	326.0
48	464.0	400.0	-	-	400.0	434.0
60	572.0	500.0	-	-	500.0	542.0
72	680.0	600.0	300.0	300.0	600.0	650.0
84	788.0	700.0	300.0	300.0	700.0	758.0
96	896.0	800.0	400.0	400.0	800.0	866.0





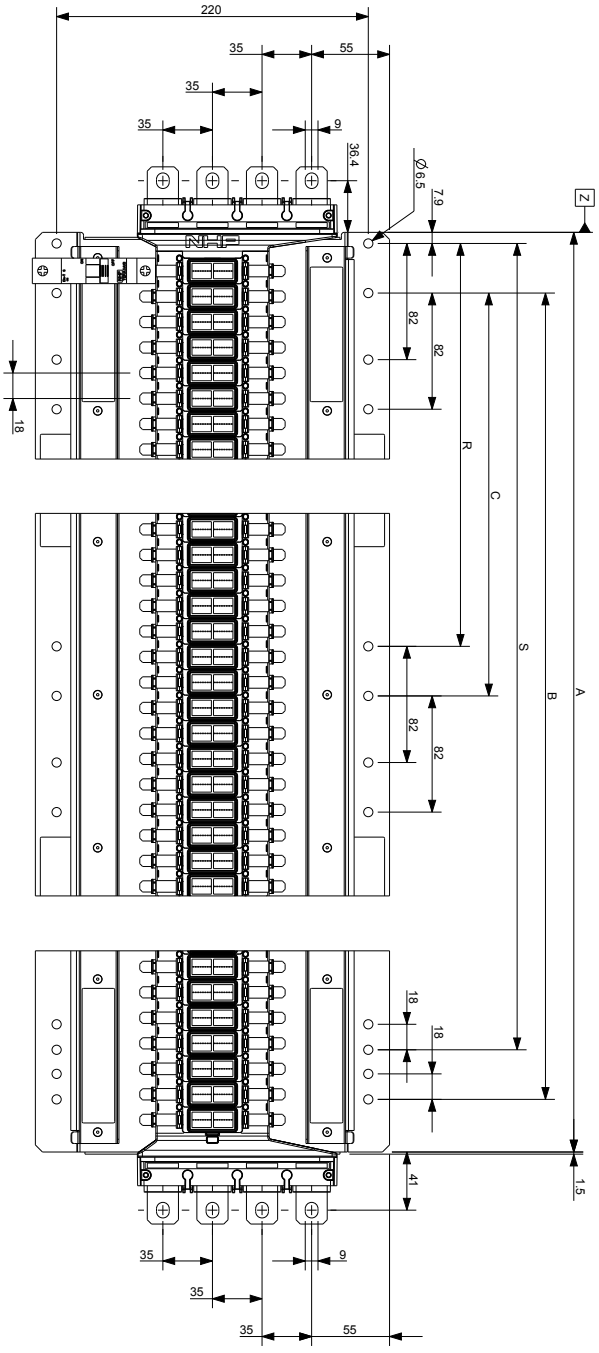
ESCUTCHEON CUTOUT DETAIL

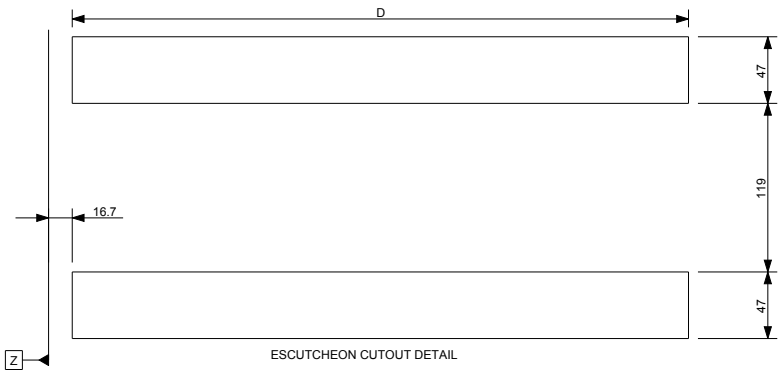
Dimensions

Universal Feed 4 Pole:

Universal feed 4 Pole - 24, 48, 72, 96 way
(without lock off attachment).

No. of ways	DIM A	DIM B	DIM C	DIM R	DIM S	DIM D
24	248.0	100.0	-	-	100.0	218.0
48	464.0	400.0	-	-	400.0	434.0
72	680.0	600.0	300.0	300.0	600.0	650.0
96	896.0	800.0	400.0	400.0	800.0	866.0





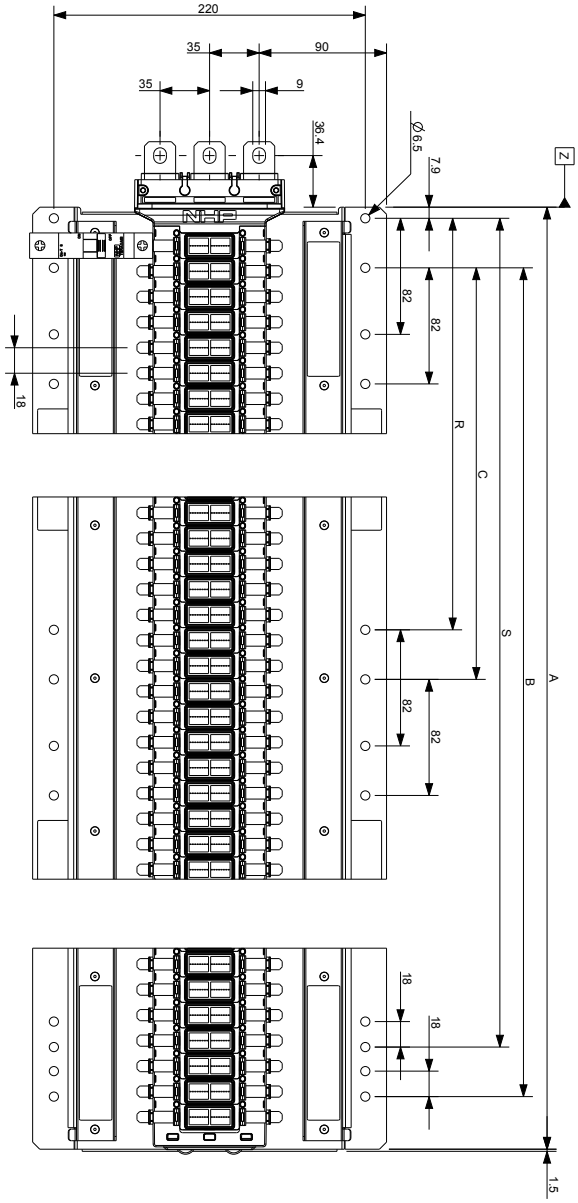
ESCUTCHEON CUTOUT DETAIL

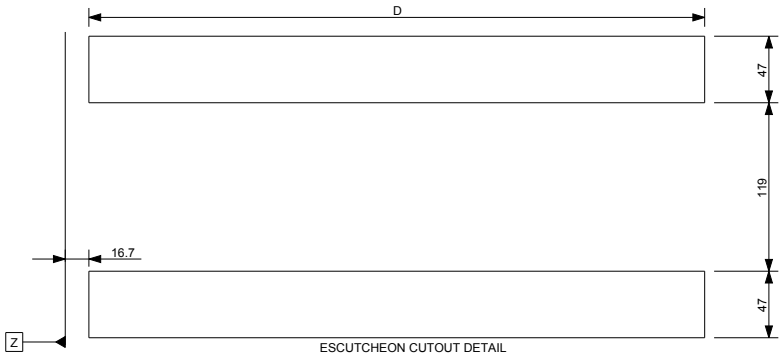
Dimensions

Top Feed 3 Pole:

Top feed 3 Pole -12, 24, 36, 48, 60, 72, 84, 96 way (without lock off attachment).

No. of ways	DIM A	DIM B	DIM C	DIM R	DIM S	DIM D
12	140.0	-	-	-	-	110.0
24	248.0	100.0	-	-	100.0	218.0
36	356.0	200.0	-	-	200.0	326.0
48	464.0	400.0	-	-	400.0	434.0
60	572.0	500.0	-	-	500.0	542.0
72	680.0	600.0	300.0	300.0	600.0	650.0
84	788.0	700.0	300.0	300.0	700.0	758.0
96	896.0	800.0	400.0	400.0	800.0	866.0





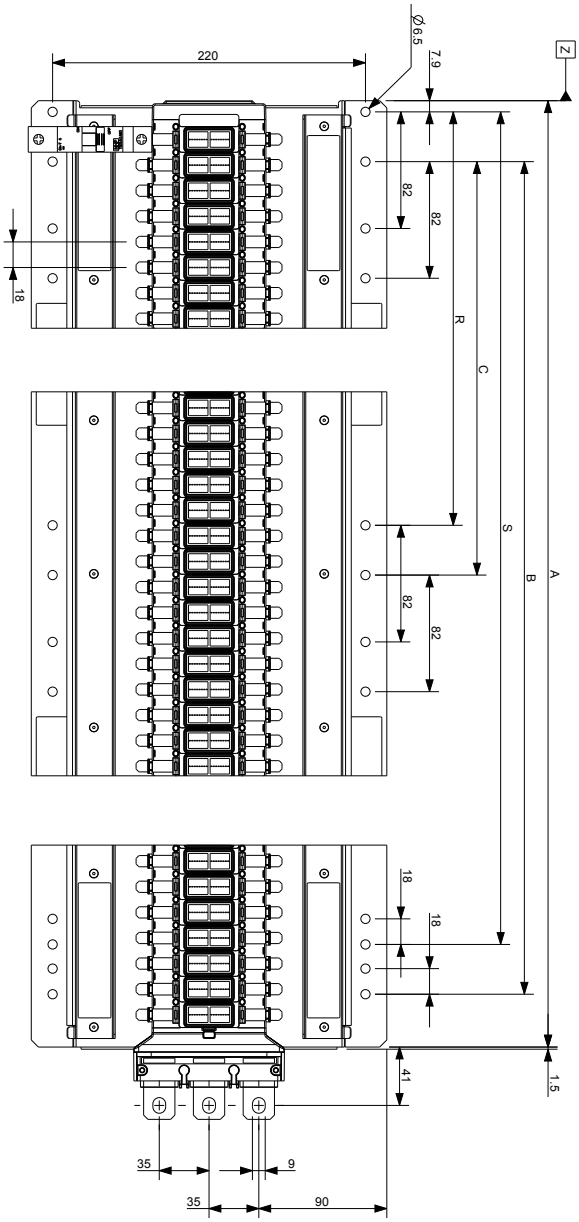
ESCUTCHEON CUTOUT DETAIL

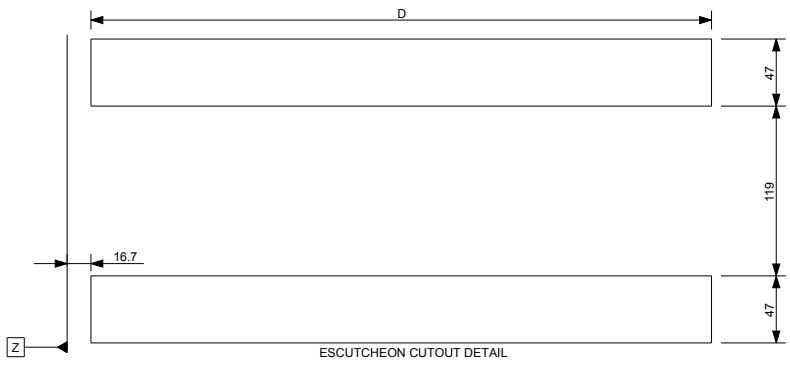
Dimensions

Bottom Feed 3 Pole:

Bottom feed 3 Pole -12, 24, 36, 48, 60, 72, 84, 96 way (without lock off attachment).

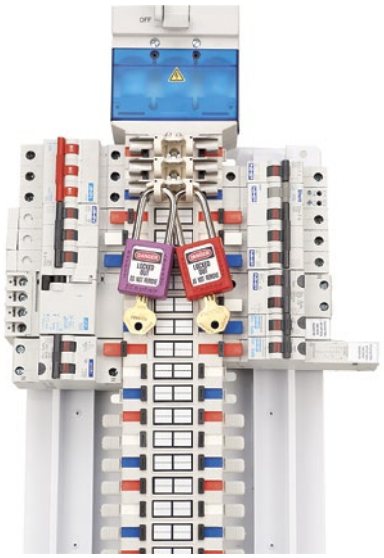
No. of ways	DIM A	DIM B	DIM C	DIM R	DIM S	DIM D
12	140.0	-	-	-	-	110.0
24	248.0	100.0	-	-	100.0	218.0
36	356.0	200.0	-	-	200.0	326.0
48	464.0	400.0	-	-	400.0	434.0
60	572.0	500.0	-	-	500.0	542.0
72	680.0	600.0	300.0	300.0	600.0	650.0
84	788.0	700.0	300.0	300.0	700.0	758.0
96	896.0	800.0	400.0	400.0	800.0	866.0





ESCUTCHEON CUTOUT DETAIL

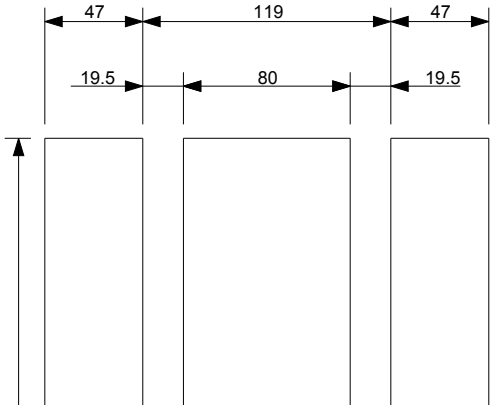
Dimensions

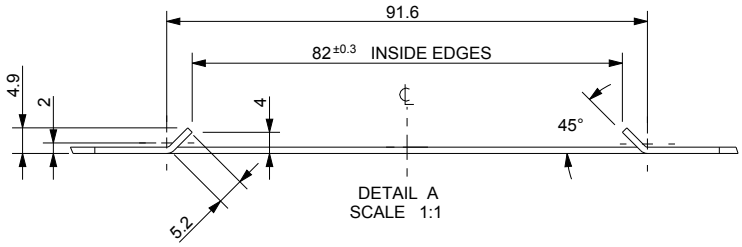


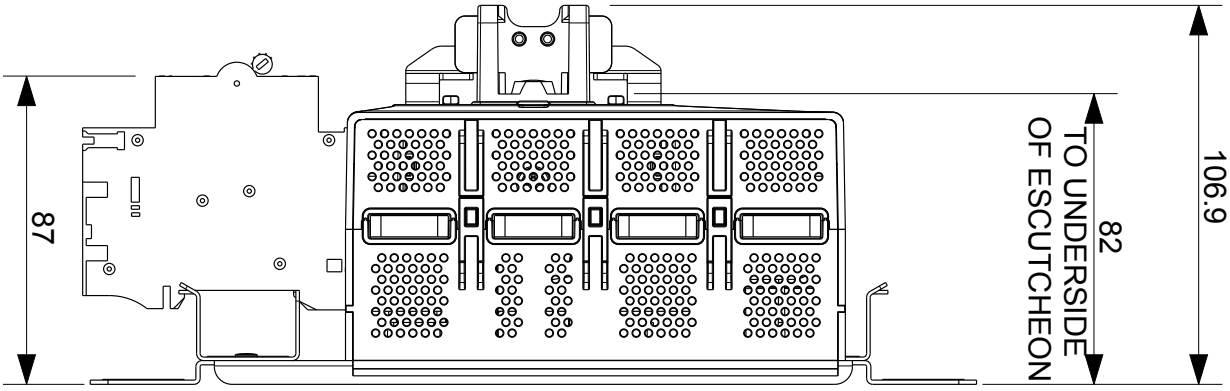
Lock Off Attachment:

When the lock off attachment is fitted to the GB Chassis, the following dimensional changes apply:

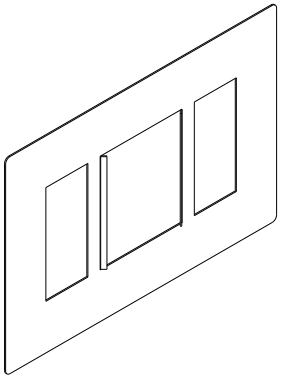
ESCUTCHEON CUT OUT DETAIL [1]







No. of ways	Cat. No.	Description
12	GBESCSP12	Back Plate 12 way
24	GBESCSP24	Back Plate 24 way
36	GBESCSP36	Back Plate 36 way
48	GBESCSP48	Back Plate 48 way
60	GBESCSP60	Back Plate 60 way
72	GBESCSP72	Back Plate 72 way
84	GBESCSP84	Back Plate 84 way
96	GBESCSP96	Back Plate 96 way



[1] *Back plate to be spot welded to back escutcheon or for more detail refer to nhp*

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