

news

No. 01/2018

**Black is beautiful:
silhouette matt black**

**Complex to compact:
4P RCBO space saver**



:hager

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Strong & versatile: invicta panelboards

invicta panelboards have undergone a full set of upgrades since its inception back in 2014. Some of which include the new 160A isolation switch, additional neutral link and incomer kits.

08

performa 3 and 4 way split chassis

Extra options for chassis' give more ways to segregate circuits for energy monitoring and optimisation in mixed use multi-residential, commercial and industrial buildings.

14

More variants: 6kA & 10kA RCBOs

Many new variants such as 6A, 32A, 10mA and 100mA RCBOs have been added to our residential and commercial ranges. This gives you many new options when it comes to meeting the latest standards for your 6kA or 10kA installation.

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More protection: 4P RCBOs

In addition to the extension of the ranges, we have also added a new range of 4 pole 4 module wide RCBOs for 3 phase installations in DIN rail enclosures that is compatible with our onekonekt range of modular devices.

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Continual power: Changeover switches

Manual transfer of two power supply sources has never been so easy with a 3 stable position switch (I-O-II) on our changeover switches. This range has been updated and expanded to include some new 40A devices.

10

Upgraded: Terminal links in loadcentres

In the new AS/NZS 3000 wiring rules, neutral terminals must ensure the connection of cables is secure. We have upgraded the terminal links in all of our loadcentres to comply with the standard.

12

Unique: GD10VIC1

A small and compact enclosure provided loaded with compact onekombo single module RCBOs for the specific upgrade of old Victorian federal fuse boards.

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Window into the world of 3P MCBs

Making our MSN 3P MCBs more adaptable by adding a window to the side of the device. This gives the option to combine it with our Add-On Block 3 phase earth leakage protection for use in panelboards.

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Black is beautiful: silhouette matt black

silhouette - our Good Design Award winning range of switches and sockets is now available in trendy matt black.

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Safer isolation: Double pole switches

Double pole isolation for appliances within the home. Available in white and black, in silhouette and visage styles.

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Best of both worlds: Hybrid switch plates

The use of non Hager switch plates to cater for specialty mechanisms is a thing of the past with our new hybrid switch plates which accommodate the most common mechanisms.



Hager provides simple and safe electrical solutions for residential and commercial buildings.

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Strong and versatile: invicta boards

Designed for small to medium sized commercial installations and large home projects, the invicta panelboard range offers simple and efficient possibilities for energy distribution in your projects.

The range is constantly improved with updates including a new 160A isolator switch, an additional main Neutral link and new incomer link kits to make the invicta range stronger and more versatile.

01 **NEW**

Compatibility

The chassis has been designed to accommodate our ADC3xxT onekombo range of 6kA single module RCBO's and our range of 6kA MCB's. We also have a new 3P RCBO solution with our 3P MSN3xxT that can now connect to our Add-On Block with 3 phase earth leakage protection.

02 **NEW**

Accessibility

An additional Neutral link and large connection points on the Neutral and Earth links provides greater flexibility and accessibility during installation. Neutral link covers give additional IP2x protection.

03 **NEW**

Strength

Now fitted with an upgraded 160A main isolator, providing higher robustness in the connection terminals.

04 **NEW**

Flexibility

Incomer link kits provide options for the use of an MCB as the main incomer where the application requires protection of circuits against overloads and short circuits.

05

Neat & tidy

Cable tie access points allow easy cable management within the enclosure.

06

Easy mounting

Five easy to access keyhole mounting holes, assist with locating for marking prior to final fixing.

07

Spacious

12 poles of additional DIN space in the top of the board to accommodate extra devices.

08

Adaptability

Easy to remove door hinges on a removable and reversible door makes the panelboard adaptable to the installation.





performa

3 and 4 way split chassis'

Ideal for multi-residential, commercial and industrial applications, our performa panelboard range is quite comprehensive. With many options available in material, main switch, chassis size, accessories and even colour, there are more than 500 variations available.

Separate light, power, motor and other circuits and the need for specific energy monitoring or control on each circuit gave way to the creation of our 3 and 4 way split chassis versions, expanding the options in the apex+ and elite ranges of performa panelboards.

3 way split

NEW



18 top / 24 mid / 18 bottom

The 3 way split chassis is ideal for installations where more than just light and power circuits need to be split. The additional split in the chassis can be used for a separate circuit such as motor loads.

4 way split

NEW



18 top / 24 mid / 24 mid / 12 bottom

The 4 way split chassis can separate even more with 2 additional splits, they can be used for 2 sets of light and power circuits in the one board, giving more flexibility for your installation.

Panelboards



Other options available:

- 6 standard chassis sizes
- 13 split chassis'
- 4 hybrid chassis' in elite 400
- 5 main incomers
- Grey or X15 orange
- Galvanised or stainless steel
- Additional DIN in apex+ and elite
- Extension boxes
- Incomer kits
- Many other accessories

Upgraded: Neutral links in DIN enclosures

The new AS/NZS 3000 wiring rules released this year will focus on the quality of connection. In anticipation of Clause 2.10.4, we have upgraded the terminal links in our IC2, golf and vector enclosure ranges.



DIN rail enclosures (R to L)

- vector IP enclosures
- VT metal enclosures
- vega D automation enclosures
- IC² enclosures
- GD enclosures
- golf combined 240V and home networking enclosures

All of our DIN rail enclosures and panelboards comply to these rules.

Tunnel terminals in neutral bars

Clause 2.10.4

All sorts of tunnel terminal types may be used. The standards provide directives for tunnel-type terminals which have screws that are in direct contact with conductors, as pertaining to **Illustration A**.

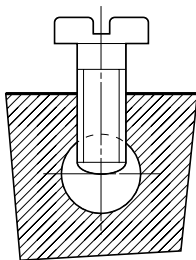
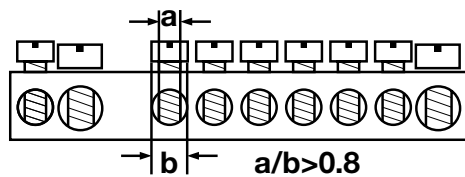


Illustration A
Tunnel terminals with screws in direct contact with the conductor

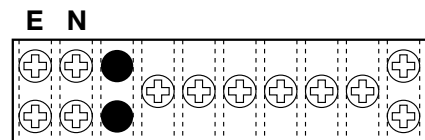
Screw shape

All screws shall be shaped not to cut the conductor (no sharp edges at the end of screws).



Or 80% diameter

Alternatively, the terminal shall be of a type having one screw with an outside diameter not less than 80% of the tunnel diameter.



2 screws

Two screws are required for connection of the following conductors:

- the main incoming neutral
- the main earthing conductor
- the MEN connection
- the PEN (protective earth neutral)

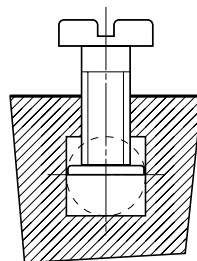



Illustration B
Tunnel terminals with a plate or ferrule giving indirect pressure



Illustration C
Hager  terminal

Exception

Those rules don't apply when the conductor is clamped by another means, like **Illustration B** or Hager  terminals as in **Illustration C**.

Unique: GD10VIC1 loaded board

NEW



GD10VIC1

Our GD10VIC1 is an easy changeover and upgrade from the old Victorian Federal fuse board to the modern safety of circuit breakers.

This product comprises of a basic 10 module wide enclosure with DIN rail, a fire rated back plate, busbar, Neutral links and 4 x onekombo RCBOs.

A fast installation time is possible because of the 4 single module RCBOs supplied with an attached neutral fly-lead.



Typical Victorian terrace that might contain an old Victorian federal fuse board.

For a long time, our 3 module NT and NDN 10kA commercial MCBs were the only devices compatible with our Add-On Block 3 phase earth leakage protection. Until now. With the addition of a window on the side of the devices, along with some coupling holes, we have now made the MSN 6kA residential MCBs compatible with all of our BDx63T single module Add-On Block devices.

This is particularly useful when installing a 6kA invicta panelboard that requires 3 phase earth leakage protection in a compact space.



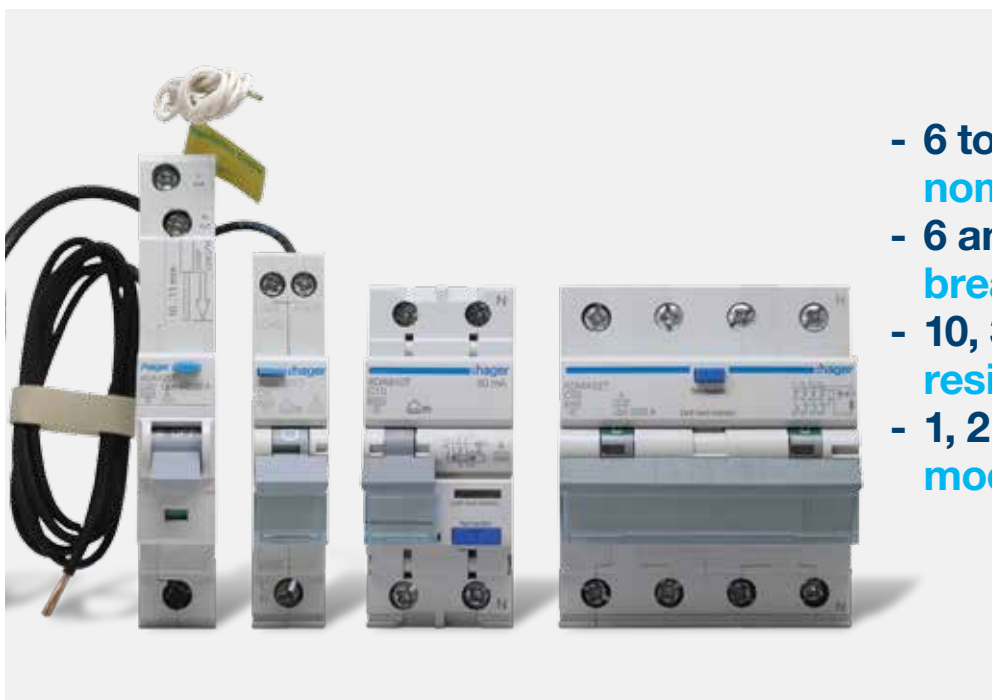
MSN332 + BD163T



**A window into
the world of
3P MCBs**

More variations More protection 6kA and 10kA RCBOs

In the new AS/NZS 3000 wiring rules, RCD protection will be mandatory on all final sub-circuits. RCBO devices with amperages of 6, 10, 13, 16, 20, 25, 32, 40 and 45A – with a breaking capacity of 6 or 10kA and residual current of 10, 30 or 100mA – are now available as part of our expanded solution portfolio. Along with this are our new 4 module 4P RCBO devices, for use in three phase DIN rail installations. Thanks to this, you have many new options open to you when it comes to meeting the latest standards.



- 6 to 45A
nominal current
- 6 and 10kA
breaking capacity
- 10, 30 or 100mA
residual current
- 1, 2 and 4
module width

An overview of the new RCBO range

Residential	4.5kA	1 module	30mA	6A to 32A	ADA3xxT	
	6kA	1 module	30mA	6A to 32A	ADC3xxT	NEW
		2 module	10mA	6A to 16A	ACA9xxT	NEW
			30mA	6A to 40A	ADA9xxT	
			100mA	6A to 40A	AEC9xxT	NEW
		4 module	30mA	6A to 40A	ADM4xxT	NEW
			100mA	6A to 40A	AEM4xxT	NEW
Commercial	6kA	1 module (longbody)	10mA	6A to 32A	ACA1xxT	NEW
			30mA	6A to 45A	ADA1xxT	NEW
	10kA	1 module (longbody)	10mA	6A to 32A	AC1xxB	NEW
			30mA	6A to 32A	AD1xxB	
		2 module	10mA	10A to 16A	ACA5xxT	
			30mA	6A to 32A	ADA5xxT	
		4 module	30mA	6A to 40A	ADX4xxT	NEW
			100mA	6A to 40A	AEX4xxT	NEW

From complex to compact



4P 6kA and 10kA 4mod RCBOs

Our new 4 pole RCBO combines RCD and MCB protection in a 4 module wide device and is compatible with our onekonekt system... 3 phase protection in DIN rail switchboards has never been as simple and space saving.

With its isolated neutral fork terminal, the device fits smoothly on a 3 phase busbar (KDN380x) making it fast and easy to install. The neutral cage terminal can be connected to the neutral link or to the neutral busbar (KB181x).

RCBOs



6kA and 10kA 1mod longbody RCBOs

Our commercial range of longbody 1 module RCBOs now include 6kA 30mA RCBOs from 6A to 32A to fit in performa panelboards.

The use of 30mA devices is the general practice for an installation but because a more sensitive device is needed for additional safety in child care areas and the like, we have extended this to include a 10mA* range in both 6kA (ACA1xxT) and 10kA (AC1xxB).



6kA 1mod RCBOs

Our onekombo range of RCBOs is the benchmark for compliance and quality. To offer more versatility for your installations, this range is now extended to include a 6A (ADC306T) and a 32A (ADC332T) version.

6kA 2mod RCBOs

Our range of 6kA 2mod RCBOs has been expanded to provide you with a 6A RCBO in both 10mA (ACA906T) and 30mA (ADA906T) for your residential installations. Along with this is a full range of 100mA RCBOs as well (AEC9xxT).

Providing you with a comprehensive range of RCBOs that will assist you to meet the AS/NZS wiring rules in your next installation, whether it be residential or commercial.



* For specific applications such as home care medical equipment, the safety switch installed shall comply with additional requirements. Ask your electrician.



Continual power: Changeover switches



Manual changeover switches provide manual transfer of two power supply sources to ensure continuity of supply to your facility. Our modular manual changeover switches have a three stable position switch (I-O-II) to allow you to control two power supply sources. Available in 2 and 4 pole versions, in 25A, 40A or 63A, for single and three phase applications including the switching of generators, luminaires, machines etc.



NEW

Black is beautiful: silhouette matt black



WBSP2S-MB

Switches and sockets

NEW

Whether for cars, office furniture or consumer electronics – black is never off trend. What could be more natural, then, than making your customers' home stand out with this universal trend as well? For this reason, our most popular, Good Design Award winning switch and socket range – silhouette – is now available in a trendy matt black.

It's an ideal way to make sockets in dark spaces as discrete as possible, or to deliberately emphasise a switch as a design element instead. The new silhouette matt black switches and sockets – offer you a chance to cater to your customers' "dark" desires.



WBSSP1-MB



WBSSP2-MB



WBSSV1-MB



WBSSV2-MB



WBSP1VS-MB



WBSP1S-MB



WBSP2S-MB



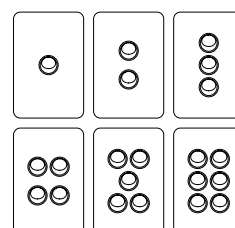
WBSP2SUSB-MB



WBSP115S-MB



WBSP2XS-MB



Our silhouette switches and switch plates are available in 1 to 6 gang.

Safer isolation: Double pole switches

Our new 40A double pole switches in visage and silhouette styles are the perfect solution where double pole isolation is required for various types of appliances within the home. There are 2 cover plates supplied with each switch – one marked with the word ‘Cooker’ and the other blank.

silhouette **NEW**



WBSCKSV1 and WBSCKSV1-MB
silhouette double pole switches are
available in white and matt black

visage **NEW**



WBVCKSV1 and WBVCKSV1-BK
visage double pole switches are
available in white and gloss black (BK)

Best of both worlds: Hybrid switch plates

To assist installations where specialty, non Hager mechanisms are required, or where the mechanisms supplied with a ceiling fan are utilised, we now have a range of switch plates that accommodate 30M style mechanism fittings. These plates are manufactured to the same high quality of our existing ranges, providing full UV stability, that doesn't yellow over time.

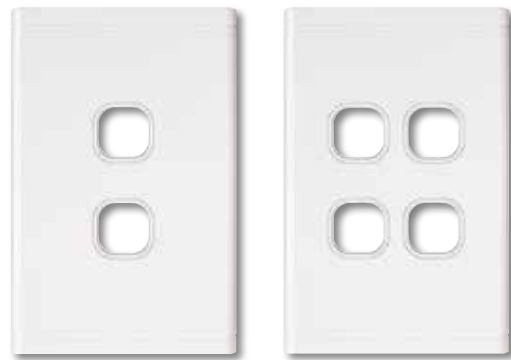
silhouette **NEW**



WBSHSP2 and WBSHSP4

silhouette 2 and 4 gang hybrid switch plates

visage **NEW**



WBVHSP2 and WBVHSP4

visage 2 and 4 gang hybrid switch plates



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