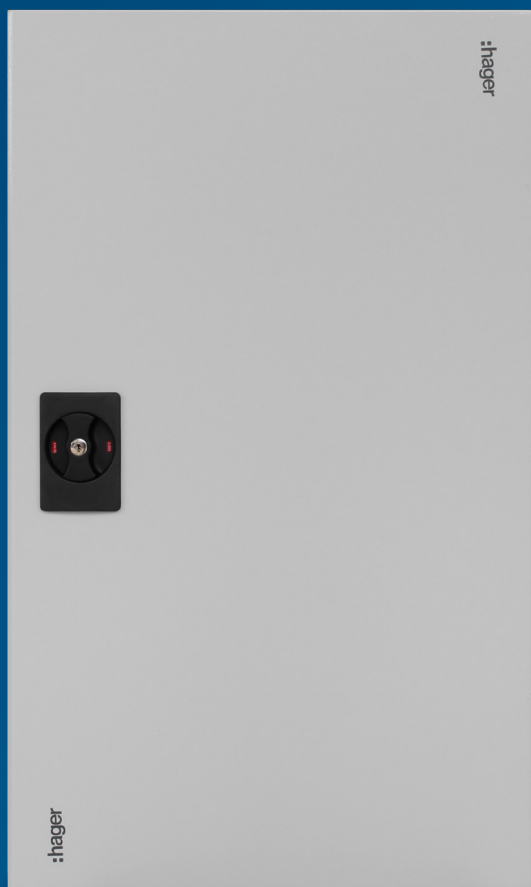Residential and
light commercial

invicta
panelboards

:hager

Your simple energy distribution solution

As an industry leader in power distribution, we strive to create innovative products that make installations faster and more cost effective.

Developed as an optimised solution for small to medium commercial installations and large home projects; our range of invicta panelboards offer simple and efficient possibilities for energy distribution in your commercial projects.

Available in 24, 36, 48, 60 & 72 pole and compatible with the onekombo 6kA range of modular protection devices, our invicta panelboard range is ideal for the large home, light commercial or retail applications.

Our onekombo single module RCBO range leads to safety and simplicity: offering a breaking capacity of 6kA, type A performance and a neutral fly lead, they can be swiftly mounted alongside all other modular protection devices in invicta panelboards.

For complete protection against touching live parts once energised, safety caps and safety pole fillers (which remain with chassis after removal of escutcheon) are provided in our invicta panelboards to maintain IP2x.

## Single module RCBOs can be swiftly mounted in invicta panelboards.

invicta
panelboards

Combined with our 6kA MCBs and RCBOs, we provide an economical solution for the small jobs that serve the basic needs of the end user. The invicta range comes fitted with 2 x 8 poles of DIN space for mounting additional modular devices such as emergency lighting test kits, contactors, surge protection or sub-metering devices.
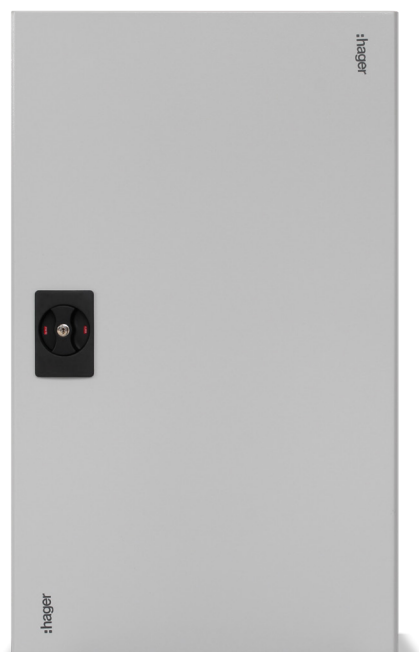
If more DIN space is required, we have an optional extension box which provides an additional 2 x 18 poles. Together with other features such as a reversible door, large connection points for earth and neutral links, and ease of fixing to the wall; invicta is truly the benchmark for multi-usage panelboards.
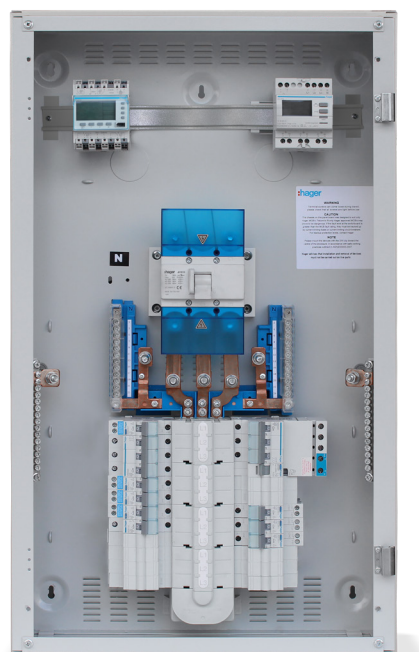
The advantages for you:

Chassis designed to take 6kA MCB and onekombo range of single module RCBOs

Split Neutral & Earth bars with M8 connection studs

2 x 8 poles of DIN space ideal for mounting contactors or emergency lighting test kits

Five keyhole shaped mounting holes make it easy to mark the wall prior to fixing, giving a faster install
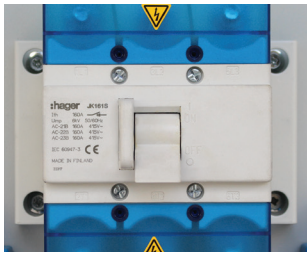
Time saving and convenient removable / reversible door

Flush key lockable handle with open/close indication

Technical data:

|	
Chassis sizes	24, 36, 48, 60 & 72
Incomer switches	160A, 250A
Standards	AS/NZS 61439
Rated Short circuit withstand current (Icw)	20kA/0.2s 40kA Peak
Compatible devices	6kA RCBOs and MCBs
Accessories	36P Extension Box

Expert tips

01

Fitted with a strong, 160A or 250A main isolator, providing higher robustness in the connection terminals.
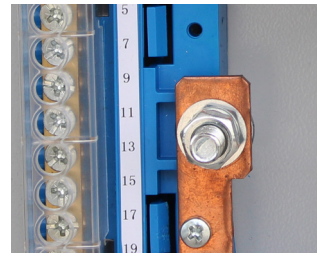

02

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.
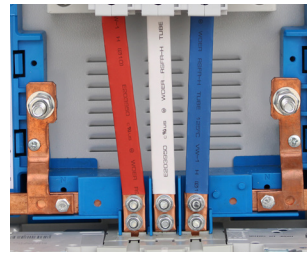
03

Additional neutral link provides greater flexibility and accessibility during installation. Neutral link covers provide additional IP2x protection.

04

Larger connection points for Neutral and Earth links makes the invicta board easily accessible during and after installation.

05

The chassis has been designed to take Hager's onekombo range of 6kA single module RCBOs and 6kA MCBs.
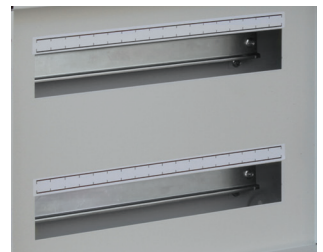

06

The 16 poles of additional DIN space in the top of the board makes it easy to accomodate extra devices.

07

Cable tie access points allow easy cable management within the enclosure making it neat and tidy.

08

The additional 36 poles of DIN rail available within the optional extension box can be used for mounting modular energy control and indication devices.

Description
invicta panelboards have been developed as an optimised solution for small to medium commercial installations and large home projects.

Features
- Available in 24, 36, 48, 60 & 72 poles
- 1.2mm tough powdercoated galvanised steel construction
- Powdercoated RAL7035 (light grey)
- IP30
- Complete with either a 160A or 250A main isolator switch prefitted
- Split earth and neutral links for easy cabling
- Fully type tested chassis
- 2 x 8 pole DIN space each side of main incomer
- Lockable door (CL001)
- Safety pole fillers remain with chassis when escutcheon is removed
- Circuit identification card
- Positive MCB alignment system

JVC2400S16TW

invicta panelboards

Description	Characteristics	Cat. ref
With 160A main switch	24 pole chassis	**JVC2400S16TW**
	36 pole chassis	**JVC3600S16TW**
	48 pole chassis	**JVC4800S16TW**
	60 pole chassis	**JVC6000S16TW**
	72 pole chassis	**JVC7200S16TW**
With 250A main switch	24 pole chassis	**JVC2400S25TW**
	36 pole chassis	**JVC3600S25TW**
	48 pole chassis	**JVC4800S25TW**
	60 pole chassis	**JVC6000S25TW**
	72 pole chassis	**JVC7200S25TW**

JVC0EXTDW

Extension boxes

Description	Characteristics	Cat. ref
Supplied without gland plates. Gland plates only required if mounting as a stand alone.	2 row 18 DIN	**JVC0EXTDW**

Accessories

Description	Characteristics	Width	Cat. ref
Incomer link kit	For 3Ø 80-125A MCB	4.5mod	**JVC0M12**
	For 3Ø up to 63A MCB	3 mod	**JVC0M06**
MEN kit			**JVC0MEN**
Gland plates			**JVC0GPL**
Safety pole fillers (10Pk)			**JVC0PFL**
Door lock and key (CL001)			**JVC0LCK**
Door lock and key (92268)			**JVC92268**
Spare keys (CL001)	2 keys		**JVC0LSK**
Document holder			**JK2X007AU**
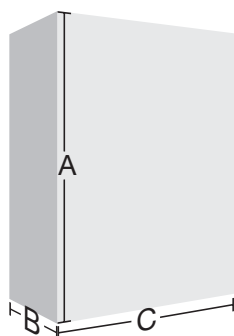
Dimensions (mm)	A	B	C
24 pole panelboard	800	135	480
36 pole panelboard	900	135	480
48 pole panelboard	1000	135	480
60 pole panelboard	1128	135	480
72 pole panelboard	1235	135	480

Extension box

Dimensions (mm)	A	B	C
JVC0EXTDW	350	135	480

Description

Compact combination devices which provide overcurrent protection & earth leakage protection. The Type A devices, with a switched neutral, are available in various current ratings from 6A - 40A. The 1 module RCBO is specifically designed for DIN rail enclosures but can also be used in invicta panelboards. It is supplied with a 1 metre long neutral-in fly lead.

Features

- IEC 61009.1 & AS/NZS 61009.1
- Fault indication window
- ACC9xxT is Type I to comply with AS/NZS 3190 requirements, suitable for patient areas.
- Bi-connect terminals enable supply from either cables in the cage or busbars in the slot.

1 mod connection capacity

- 10mm² flexible
- 16mm² rigid

2 mod connection capacity

- 16mm² flexible
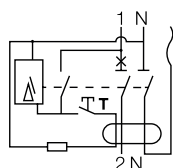- 25mm² rigid

Accessories

- Toggle locking device - MZN175

Technical information:
Axx9xxT - Page 224
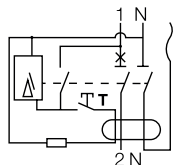**AxA9xxT - Page 225**

RCBO 1P+N 6kA C curve

Current rating (A)	Residual current Idn	Width		Cat ref.
6A	30mA	1 mod	✕ ADC306T	→ ★ ADC906T
10A	30mA	1 mod	✕ ADC310T	→ ★ ADC910T
13A	30mA	1 mod	✕ ADC313T	→ ★ ADC913T
16A	30mA	1 mod	✕ ADC316T	→ ★ ADC916T
20A	30mA	1 mod	✕ ADC320T	→ ★ ADC920T
25A	30mA	1 mod	✕ ADC325T	→ ★ ADC925T
32A	30mA	1 mod	✕ ADC332T	→ ★ ADC932T
6A	10mA	1 mod		★ ACC906T
10A	10mA	1 mod		★ ACC910T
13A	10mA	1 mod		★ ACC913T
16A	10mA	1 mod		★ ACC916T
20A	10mA	1 mod		★ ACC920T
25A	10mA	1 mod		★ ACC925T
32A	10mA	1 mod		★ ACC932T

ADC920T

RCBO 1P+N 6kA D curve

Current rating (A)	Residual current Idn	Width	Cat ref.
6A	30mA	1 mod	★ ADD906T
10A	30mA	1 mod	★ ADD910T
13A	30mA	1 mod	★ ADD913T
16A	30mA	1 mod	★ ADD916T
20A	30mA	1 mod	★ ADD920T
25A	30mA	1 mod	★ ADD925T

ADD920T

Description

Protection and control of circuits against overloads and short-circuits by isolating the circuit according to AS/NZS 3000:2018. The colour of the toggle on the MSNx63R gives a differentiation when used as a main switch device.

Technical data
- AS/NZS 60898
- Tripping curve - 'C' magnetic setting between 5 and 10In
- Breaking capacity: 6,000A
- Voltage rating: 240/415V AC Not for use on DC
- Current rating: 6 to 63A
- Bi-connect terminals enable supply from either cables in the cage or busbars in the slot.

Connection capacity
- 25mm² rigid
- 16mm² flexible

Accessories for MSN3xx
- LZ060, MZN175, MZ201, MZ202, MZ203, MZ204, MZ206, MZN120, MZN121, Bx163T

MSN163   MSN163R

Single pole

Current Rating (A)	Width	Pack Qty	Cat ref.
6	1 mod	12	**MSN106**
10	1 mod	12	**MSN110**
13	1 mod	12	**MSN113**
16	1 mod	12	**MSN116**
20	1 mod	12	**MSN120**
25	1 mod	12	**MSN125**
32	1 mod	12	**MSN132**
40	1 mod	12	**MSN140**
50	1 mod	12	**MSN150**
63	1 mod	12	**MSN163**
63	1 mod	12	**MSN163R**

MSN220   MSN263R

Double pole

Current Rating (A)	Width	Pack Qty	Cat ref.
6	2 mod	6	**MSN206**
10	2 mod	6	**MSN210**
16	2 mod	6	**MSN216**
20	2 mod	6	**MSN220**
25	2 mod	6	**MSN225**
32	2 mod	6	**MSN232**
40	2 mod	6	**MSN240**
50	2 mod	6	**MSN250**
63	2 mod	6	**MSN263**
63	2 mod	6	**MSN263R**
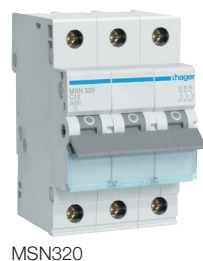
MSN320

MSN363R

Triple pole
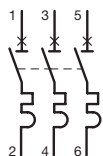
Current Rating (A)	Width	Pack Qty	Cat ref.
6	3 mod	4	**MSN306**
10	3 mod	4	**MSN310**
16	3 mod	4	**MSN316**
20	3 mod	4	**MSN320**
25	3 mod	4	**MSN325**
32	3 mod	4	**MSN332**
40	3 mod	4	**MSN340**
50	3 mod	4	**MSN350**
63	3 mod	4	**MSN363**
63	3 mod	4	**MSN363R**
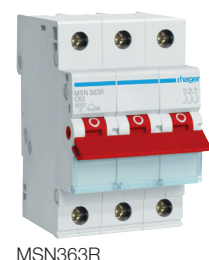
Description

Protection and control of circuits against overloads and short-circuits by isolating the circuit according to AS/NZS 3000:2018. The colour of the toggle on the MDNx63R gives a differentiation when used as a service protection device.

Technical data

- AS/NZS 60898
- Tripping curve - 'D' magnetic setting between 10 and 20In
- Breaking capacity: 6,000A
- Voltage rating: 240/415V AC Not for use on DC
- Current rating: 6 to 63A
- Bi-connect terminals enable supply from either cables in the cage or busbars in the slot.

Connection capacity

- 25mm^2 rigid
- 16mm^2 flexible

Accessories for MDNxxx

- LZ060, MZN175, MZ201, MZ202, MZ203, MZ204, MZ206, MZN120, MZN121, Bx163T

Single pole

Current Rating (A)	Width	Pack Qty	Cat ref.
6	1 mod	12	**MDN106P**
10	1 mod	12	**MDN110P**
16	1 mod	12	**MDN116P**
20	1 mod	12	**MDN120P**
25	1 mod	12	**MDN125P**
32	1 mod	12	**MDN132P**
40	1 mod	12	**MDN140P**
50	1 mod	12	**MDN150P**
63	1 mod	12	**MDN163P**
63	1 mod	12	**MDN163R**

MDN116P   MDN163R
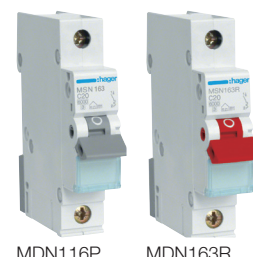
Double pole

Current Rating (A)	Width	Pack Qty	Cat ref.
6	2 mod	6	**MDN206P**
10	2 mod	6	**MDN210P**
16	2 mod	6	**MDN216P**
20	2 mod	6	**MDN220P**
25	2 mod	6	**MDN225P**
32	2 mod	6	**MDN232P**
40	2 mod	6	**MDN240P**
50	2 mod	6	**MDN250P**
63	2 mod	6	**MDN263P**
63	2 mod	6	**MDN263R**

MDN232P   MDN263R

Triple pole
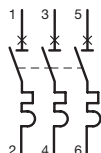
| Current Rating (A)	Width	Pack Qty	Cat ref.
6	3 mod	4	**MDN306P**
10	3 mod	4	**MDN310P**
16	3 mod	4	**MDN316P**
20	3 mod	4	**MDN320P**
25	3 mod	4	**MDN325P**
32	3 mod	4	**MDN332P**
40	3 mod	4	**MDN340P**
50	3 mod	4	**MDN350P**
63	3 mod	4	**MDN363P**
63	3 mod	4	**MDN363R**

MDN316P

MDN363R

Features

The compact one module wide Add-On Block (AOB) can be used in combination with any Hager 3P MCB up to 63A. The one module RCD Add-On Block + MCB combinations suit all Hager chassis boards including the performa series and invicta panelboards. It is the most compact '3P+N RCBO' for chassis boards. The RCD Add-On Block + MCB provides the protective characteristics of both devices, thereby protecting the panelboards entire circuit and removing the need to wire between

DIN mounted RCD & MCB. This results in a significant reduction of time, labour & the size & cost of integrated RCD socket outlets. The 'Type A' Add-On Block gives the added protection against any 'pulsating DC component' generating from such loads as; power tools, motor speed controllers etc.

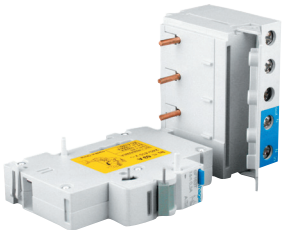Conforms with IEC 61008-1 and AS/NZS 61008.1 when used with a Hager MCB.
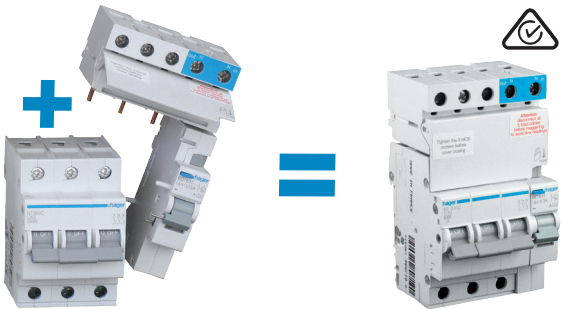
3P MCB + RCD ADD-ON BLOCK

3P+N RCBO

One Module Add-On Block

Description	Residual current Idn	Cat ref.
3 phase earth leakage protection	30mA	**BD163T**
Up to 63A	100mA	**BE163T**
Type A	300mA	**BF163T**

BD163T

Panelboard solutions

invicta panelboards

Developed as an optimised solution for small to medium commercial installations and large home projects. Available in 24, 36, 48, 60 and 72 pole.

+

onekombo
ADC9xxT, MSNxxxx, MDNxxxx

Hager's onekombo RCBO range offers a breaking capacity of 6kA performance, type A and can be swiftly mounted with all other modular protection devices in invicta panelboards.

+

Add-On Block
Bx163T

The compact one module wide Add-On Block (AOB) can be used in combination with any Hager 3P MCB up to 63A. It is the most compact '3P+N RCBO' for chassis boards.

performa™ panelboards

Ideal for multi-residential, commercial and industrial applications. Available in 24 to 96 pole, with X15 orange colour and other options as set out below. More than 500 variations assembled in Australia for quick delivery. Also available as bottom fed.

+

Protection Devices
AxA1, Ax1, MSNxxxx, MDNxxxx, NDNxxxx, NTxxxx, HMxxxxT*

Our commercial single module RCBO range is available in 6kA (ADA1) or 10kA (AD1) breaking capacity. Both are type A and come with a functional earth lead.
HMxxxxT is for elite 400 only

+

Add-On Block
Bx163T

The compact one module wide Add-On Block (AOB) can be used in combination with any Hager 3P MCB up to 63A. It is the most compact '3P+N RCBO' for chassis boards.

	apex	apex PLUS	elite	elite 400
IP rating	IP43	IP43	IP66	IP66
24 pole of additional DIN	✓	✓	✓	✓
Split chassis option		✓	✓	
Stainless steel option			✓	✓
Hybrid chassis option				✓

:hager

05AUNZ0519

:hager

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