



# Type B Distribution Boards

meeting the needs of the 17<sup>th</sup> Edition



# Distribution decisions

## 17<sup>th</sup> Edition

Often more final circuits will need RCD protection. With multiple PCs, printers and other equipment likely to have a small earth leakage, nuisance tripping may be an issue. Consider having more outgoing ways and individual RCBO protection to avoid nuisance tripping.

## Metering

The Building Regulations Part L2 includes requirements for metering and sub metering in non-domestic buildings.

## Control

Demand for energy efficiency has led to an increased demand for control. Consider Type B boards that have integral DIN rails for control devices and that allow different size extension boxes to be fitted on the top, bottom or sides of the board.

## Installation

More outgoing ways, more RCBOs, more metering and more control devices means that ease of installation and cabling are important.



“Consider having more outgoing ways and individual RCBO protection to avoid nuisance tripping.”

# Features and benefits

Hager's Type B distribution boards are designed to help electrical installers meet the challenges of a modern installation.

They are available in both 125A and 250A ratings.

## Ease of metering

You can install a meter next to the incoming device in the 125A board. Dual metered boards are also available. Another option is to install a surge protection device.

## Simple cable entry

Trunking and cable entry facility means there is no need to use paxolin. Cable protection is built into the endplate cable entry.

## Neutral bars

Transparent IP2X neutral cover allows for ease of cable installation. Screws fully turned down for easy and fast cabling.

## Earth terminal cabling

Earth terminal bars are mounted offset to neutral terminal bars and angled towards the installer for easy cable installation. The screws are fully turned down for simple and fast cabling.

## Simple extensions

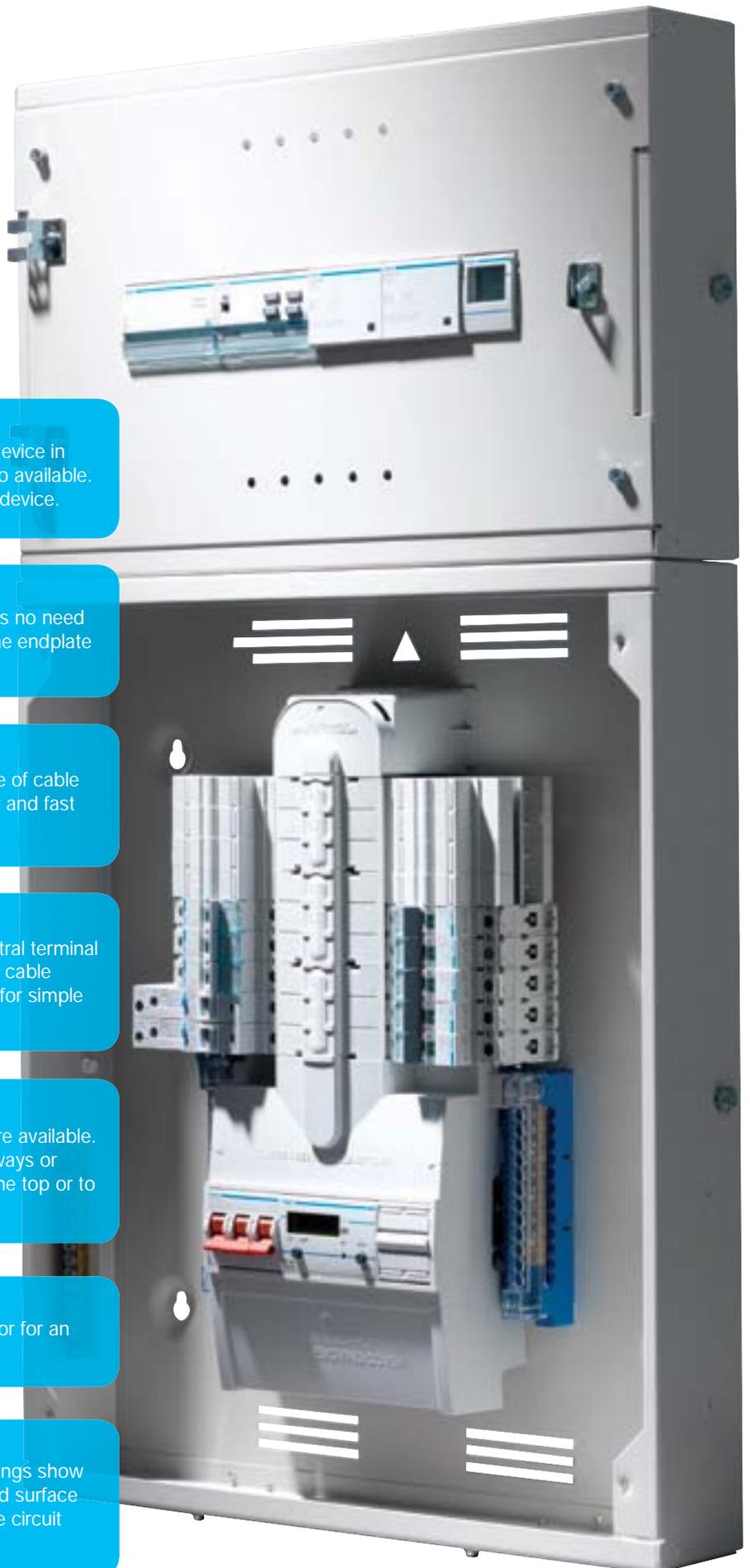
18 and 36 module DIN rail extension boxes are available. No spacers required to mount boards, cableways or extension boxes. Boxes can be mounted at the top or to either side of the board.

## Tap off board extension

125A top tap off for simple board extensions or for an additional MCB up to 125A.

## Clear labelling

Ease of phase identification L1, L2, L3 mouldings show through when the front cover is fitted. Textured surface on busbar assembly allows contractor to write circuit identification.



# Benefits

Hager has developed the new Invicta Type B boards as a solution for modern commercial installations.

The whole nature of electrical sub and final distribution for commercial installations has changed in the last few years. Typically there are more outgoing ways, more RCBOs and/or RCD protection, more metering and more control devices.

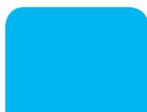
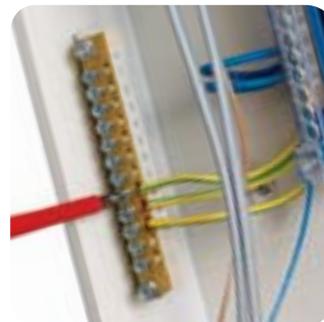
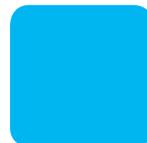
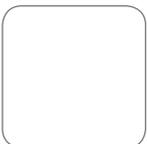
Hager decided that it was time to design a board that meets the needs of current installations, not those of the past. Our new range of Type B boards makes it easier for you to design and install electrical distribution systems that meet the needs of today and the future.

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Electrical distribution is at the heart of a building's services. Modern distribution boards must enable designs that meet the demands of the 17<sup>th</sup> Edition, the need for more metering and the demands for energy efficient solutions through control devices or building management systems.

## Why specify Invicta 3 Type B boards?

- Multiple incomer choices for 125A and 250A boards
- Optimal cabling space
- Earth and neutral bars positioned for easier cabling
- Screws on earth and neutral bars need less turns to fit cable
- Unique trunking entry system – no need for paxolin
- Metering fitted next to incomer / within board
- Wide range of extension boxes for side, top and bottom
- No spacers needed to mount boards, cableways or extension boxes
- Removable door and front cover for ease of fitting
- 125A tap off for board extensions or MCB



# Four reasons plus much more ...

The new Invicta 3 Type B boards are packed full of features to help make your life easier. There are many reasons why they should be at the top of your list. Here are just four:



## Reason 1: Trunking Cable Entry

The Invicta Type B board has an end plate that is adapted for coupling to trunking. Simply remove the gland plate from the top or bottom of the board to leave a smooth return edge.

This allows flush coupling to trunking and a smooth entry for cables to meet the requirements of the regulations. Paxolin and other time consuming solutions are a thing of the past.



## Reason 2: Earth and Neutral Bars

The earth and neutral bars are positioned and designed for simpler installation.

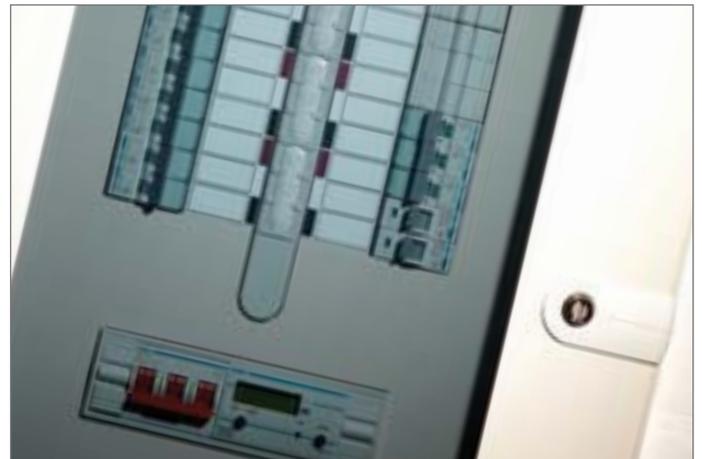
The neutral bars have transparent IP2X shrouding to make cabling easier. The screws on both need less turns to fix the cable.



## Reason 3: Metering

The metering kit fits directly into the main board.

This saves space and means that there is no need for an extension box.



## Reason 4: Glazed Door

The Invicta Type B board is the best-looking distribution board on the market.

Its glazed door allows 'ordinary persons' as defined by the 17<sup>th</sup> Edition to look into the board while denying them access through a lock.

# Commercial distribution

The 17<sup>th</sup> Edition plus a demand for more metering and control devices have changed the nature of sub and final distribution in commercial projects.

## 17<sup>th</sup> Edition

The 17<sup>th</sup> Edition wiring regulations means that commercial installations need more design and planning for the final circuit configuration. In most cases more of the final circuits will need RCD protection.

Many of these installations will contain equipment that is likely to have a small earth leakage – multiple PCs and printers for instance. This may mean that you need to install more circuits for socket outlets and protect each with individual RCBOs.

## Measurement matters

As a nation we are more aware of energy consumption. Most if not all commercial properties now demand a metering strategy at the design stage so that building end users can monitor where energy is being used.

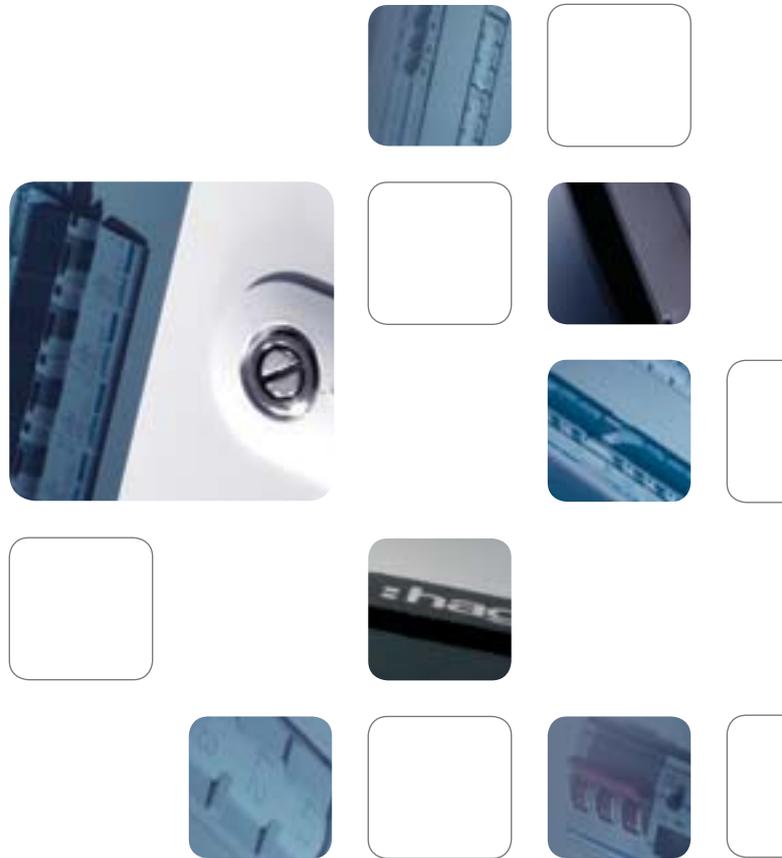
## Energy saving

In addition, DIN rail mounted control devices such as time switches, lighting dimmers and twilight switches are becoming increasingly popular. On a more complex level many building automation systems also operate by controlling the final circuits.

All of these factors affect the installation of distribution boards. Our new range of type B boards meets these needs.



To find out more about factors affecting sub and final distribution contact us for a copy of our "Guide to Commercial Installations: Part 1 Type B Distribution Boards and the Regulations."



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