# Introduction

# Powerpact 4 panelboards



The range of wall and floor mounted Powerpact 4 panelboards is designed, manufactured and tested to BS EN 60439-1. The structures are rigid sheet steel finished in a cream colour epoxy powder (RAL 9001).

All the boards contain a unique connection system which ensures that all busbar/ breaker connections are tightened to the correct torque. The system comprises a tightening bolt head which shears off when the correct torque is reached. Facilities are provided to enable the breaker to be repositioned at a later time if so required.

The breaker range comprises single pole, single pole with switched neutral, double pole, triple pole and three pole with switched neutral and four pole. Incoming device ratings up to 1600A and outgoing ratings up to 630A.

The extremely flexible board design allows 1, 2, 3 and 4 pole breakers to be positioned in any order on the busbar stack thus allowing maximum use of the available space and also allowing breakers feeding associated loads to be positioned together.

For this reason the number of outgoing ways in the selection tables is expressed in single pole ways as well as three pole ways.

Full discrimination simply by missing a frame size.

### Special breakers

Details of the standard breakers that may be fitted into the various sizes of panelboard are given on the following pages.

The full range of Compact NSX moulded case circuit breakers includes a wide range of breakers for special applications, higher breaking capacities, additional ratings and adaptations including rotary handles and motor mechanisms for remote operation. Most of these breakers, of ratings up to 630A, can be adapted for use in the Powerpact 4 panelboards.

To order these special breakers add the words 'for use in Powerpact 4 panelboard' to your ordering description of the breaker.

## **Application**

The Powerpact 4 is the straight forward answer to all power requirements. It provides an off-the-shelf solution for most standard distribution applications.

### Range

Powerpact 4 is available in many styles to suit various applications in wall mounted and floor standing up to 1600 amps incoming

- Style A is a wall mounted Powerboard with 250amp main bars up to 17 single pole outgoing ways.

  There is no dedicated incomer position giving complete flexibility in the use of the board: splitter board, 2 incomers/1 outgoing or as a conventional board
- Style C is a wall mounted Panelboard with 250 amp main bars and side mounted incomer up to 13 outgoing triple pole ways
- Style D is a wall mounted Panelboard with up to 630 amp main bars and vertically mounted incomer up to 18 triple pole outgoing ways
- Style E is a wall mounted Panelboard with 800 amp main bars and vertically mounted incomer up to 18 triple pole outgoing ways
- Style G is a floor standing Panelboard with 1600 amp main bars and the incomer mounted in its own cubicle 14 outgoing triple pole ways extendible to 28 TP ways

#### **Technical data**

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Incoming	Up to 1600A
Outgoing	Up to 28 triple pole ways (84 single pole ways)
Main cable entry	Top or bottom
Metering	Incoming metering and Outgoing metering as an option (incoming standard on
	style G)
Manufactured and tested to	BSEN60439-1
Busbars rated	Up to 1600A at 415V, 50Hz
Short circuit withstand	36 or 50kA for .5 or 1s
Construction	Rigid folded sheet steel with removable gland plates and end covers
Finish	Steelwork in polyester epoxy powder, cream colour RAL9001
Degree of protection	IP3X
Form 3b type 2	As standard
Form 4 type 2 & 6	Can be achieved by use of individual disconnectable neutral links adjacent to
	breakers or by the use of 4 pole breakers. Tunnel terminals are to be fitted on the
	breaker outgoing terminals and shrouded by short terminal shields. The main neu-
	tral bar either side of the incomer should be removed and discarded together with
	the connecting copper bar. The incoming breaker should be a 4 pole breaker
Extension cubicles	Side/top/bottom extension cubicle is available as an addition
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Technical Dimensions Section 9 Section 10