



# Technical Data

## Insulated and Metal Consumer Units

### Brief product description:

The BG range of insulated domestic consumer units have a modern style designed to match Nexus wiring devices. They support compliance with the latest 17th Edition Wiring Regulations, with flexibility designed in to provide maximum circuit combinations, and have been designed to provide the fastest and simplest installation.

Available in insulated and metal versions (metal versions have metal base and insulated cover and visor. Allow for protected and unprotected ways, with a choice of Main Switch, Split load (one RCD), Dual RCD and option for three RCDs in 22 module unit.

### Features:

- Modern stylish design with a profile that matches Nexus wiring accessories Quality designed in
- Flexibility for maximum circuit combinations, and easy upgrades Fast and simple installation

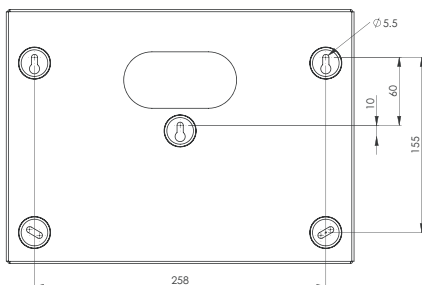


### Technical Specifications

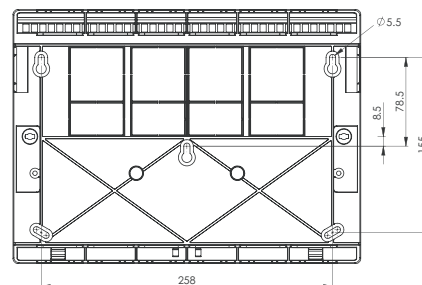
Standard(s)	BS EN 60439-3
Max Current Rating	100A
Operating Voltage	230V 50Hz
Short Circuit Withstand	16kA rms
IP rating	IP2XC
Earthing System	TN-S, TN-C-S, TT systems
Terminal Capacity	16mm <sup>2</sup> Neutral and Earth
RoHS Directive	Not required to be covered
WEEE Directive	Not required to be covered
UV Stability	Yes
Cables	Supplied with 16mm <sup>2</sup> cables
Cover Blanks	Each unit supplied 2 off cover blanks
Labels	Each CU supplied with full set of labels – see attached

### Line Diagrams

12 Module Base Fixing Centres – Metal



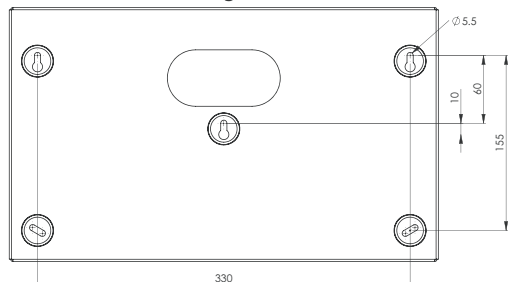
12 Module Base Fixing Centres – Plastic Insulated



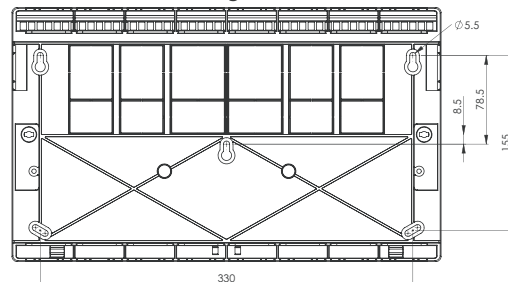
# Insulated and Metal Consumer Units

## Line Diagrams

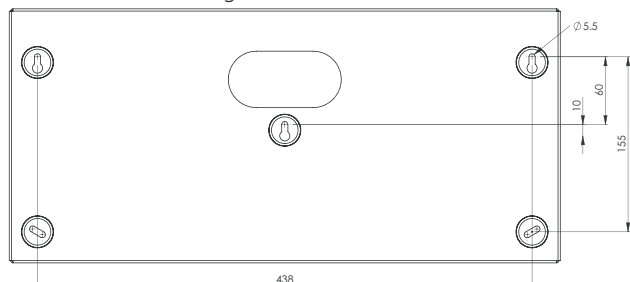
16 Module Base Fixing Centres – Metal



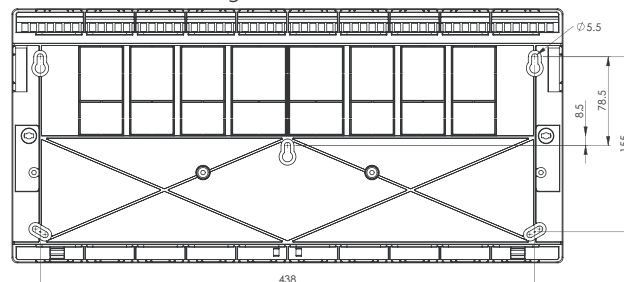
16 Module Base Fixing Centres – Plastic Insulated



22 Module Base Fixing Centres – Metal



22 Module Base Fixing Centres – Plastic Insulated



## Packaging Information

Cat.No	Description	Packaging Type		
		Product	Inner Box	Outer Box
CUSW10	Insulated 12 Mod with 100A Switch	Printed Box		
CUSL808	Insulated 12 Mod Split load, 100A Sw and 80A RCD	Printed Box		
CUSW14	Insulated 16 Mod with 100A Switch	Printed Box		
CUSL8012	Insulated 16 Mod Split load, 100A Sw and 80A RCD	Printed Box		
CUD6610	Insulated 16 Mod Dual RCD, 100A Sw and 2x63A RCD	Printed Box		
CUD8610	Insulated 16 Mod Dual RCD, 100A Sw and 80 & 63A RCD	Printed Box		
CUDP16610	Insulated 16 Mod Dual RCD, 100A Sw and 2x 63A RCD, cw 10xMCBs	Printed Box		
CUSW20	Insulated 22 Mod with 100A Switch	Printed Box		
CUSL8018	Insulated 22 Mod Split load, 100A Sw and 80A RCD	Printed Box		
CUD6616	Insulated 22 Mod Dual RCD, 100A Sw and 2x63A RCD	Printed Box		
CUD8616	Insulated 22 Mod Dual RCD, 100A Sw and 80 & 63A RCD	Printed Box		
CUDP16616	Insulated 22 Mod Dual RCD, 100A Sw and 2x 63A RCD, cw 12xMCBs	Printed Box		
CUSW10M	Metal 12 Mod with 100A Switch	Printed Box		
CUSW14M	Metal 16 Mod with 100A Switch	Printed Box		
CUD6610M	Metal 16 Mod Dual RCD, 100A Sw and 2x63A RCD	Printed Box		
CUSW20M	Metal 22 Mod with 100A Switch	Printed Box		
CUD6616M	Metal 22 Mod Dual RCD, 100A Sw and 2x63A RCD	Printed Box		

# Insulated and Metal Consumer Units

## Packaging Information

Cat.No	Description	Pack Quantity			Barcode		
		Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
CUSW10	Insulated 12 Mod with 100A Switch	1			5050765024471		
CUSL808	Insulated 12 Mod Split load, 100A Sw and 80A RCD	1			5050765024488		
CUSW14	Insulated 16 Mod with 100A Switch	1			5050765024495		
CUSL8012	Insulated 16 Mod Split load, 100A Sw and 80A RCD	1			5050765024501		
CUD6610	Insulated 16 Mod Dual RCD, 100A Sw and 2x63A RCD	1			5050765024518		
CUD8610	Insulated 16 Mod Dual RCD, 100A Sw and 80 & 63A RCD	1			5050765024525		
CUDP16610	Insulated 16 Mod Dual RCD, 100A Sw and 2x 63A RCD, cw 10xMCBs	1			5050765028967		
CUSW20	Insulated 22 Mod with 100A Switch	1			5050765024549		
CUSL8018	Insulated 22 Mod Split load, 100A Sw and 80A RCD	1			5050765024556		
CUD6616	Insulated 22 Mod Dual RCD, 100A Sw and 2x63A RCD	1			5050765024563		
CUD8616	Insulated 22 Mod Dual RCD, 100A Sw and 80 & 63A RCD	1			5050765024570		
CUDP16616	Insulated 22 Mod Dual RCD, 100A Sw and 2x 63A RCD, cw 12xMCBs	1			5050765028974		
CUSW10M	Metal 12 Mod with 100A Switch	1			5050765024594		
CUSW14M	Metal 16 Mod with 100A Switch	1			5050765024600		
CUD6610M	Metal 16 Mod Dual RCD, 100A Sw and 2x63A RCD	1			5050765028981		
CUSW20M	Metal 22 Mod with 100A Switch	1			5050765024624		
CUD6616M	Metal 22 Mod Dual RCD, 100A Sw and 2x63A RCD	1			5050765028998		

## Weights and Dimensions

Cat.No	Dimension ( W x L X H ) unit : cm			Weight (g)			CBM (m <sup>3</sup> )		
	Product	Inner Box	Outer Box	Each	Inner Box	Outer Box	Individual	Inner Box	Outer Box
CUSW10	TBA			TBA			TBA		
CUSL808	TBA			TBA			TBA		
CUSW14	42 x 26 x 14.5			TBA			0.0158		
CUSL8012	42 x 26 x 14.5			TBA			0.0158		
CUD6610	42 x 26 x 14.5			TBA			0.0158		
CUD8610	42 x 26 x 14.5			TBA			0.0158		
CUDP16610	42 x 26 x 14.5			3.5			0.0158		
CUSW20	TBA			TBA			TBA		
CUSL8018	TBA			TBA			TBA		
CUD6616	TBA			TBA			TBA		
CUD8616	TBA			TBA			TBA		
CUDP16616	TBA			TBA			TBA		
CUSW10M	TBA			TBA			TBA		
CUSW14M	TBA			TBA			TBA		
CUD6610M	TBA			TBA			TBA		
CUSW20M	TBA			TBA			TBA		
CUD6616M	TBA			TBA			TBA		

## Installation Information

### Consumer Unit Installation Guide

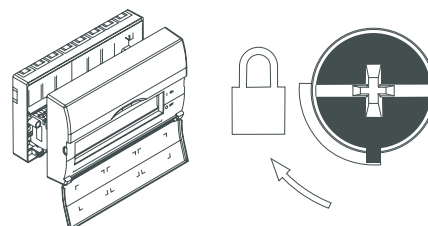
This provides a guide to the assembly and installation of a British General Consumer unit.

This product must be installed by a competent person in accordance with the current IEE Wiring Regulations (BS 7671) and Building Regulations.

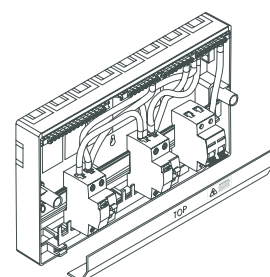
Note:- Most illustrations relate to a typical Dual RCD unit, exact configuration will depend on type, size and material of consumer unit purchased.

**Please ensure electrical supply is disconnected before installation**

**1. Remove front cover, by opening visor and turning screws ¼ turn anti-clockwise to unlock position.**



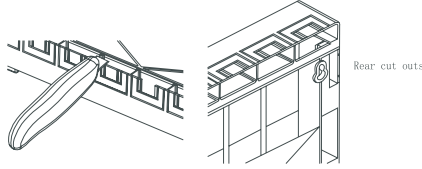
**2. Remove busbar cover if fitted.**



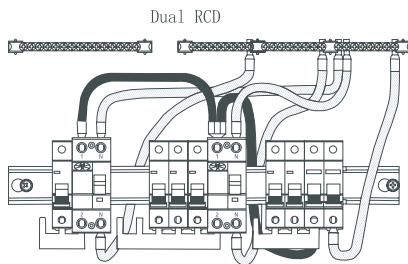
# Insulated and Metal Consumer Units

## Installation Information

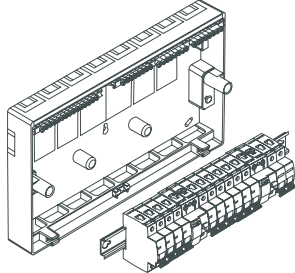
**3. Provide cable access via cut outs for standard mini trunking sizes insides, top and bottom, or access via cut outs in base. Only remove minimum required.**



**6. Refit DIN rail if previously removed and re-connect neutral cables, locate and prepare main incoming cables.**



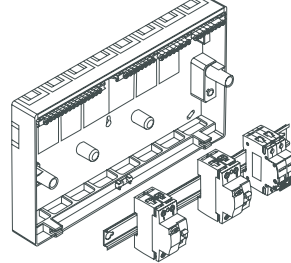
**9. Fit busbars to devices.**



Note:- Please ensure the live cable to RCD1 is fitted under the busbar in the main switch live terminal.

**12. Refit busbar cover.**

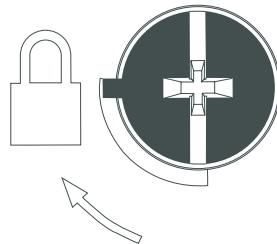
**4. Optional removal of DIN rail is possible, disconnect neutral cable from terminal bars or devices, loosen screws either end of DIN rail, slide DIN rail sideways and lift out.**



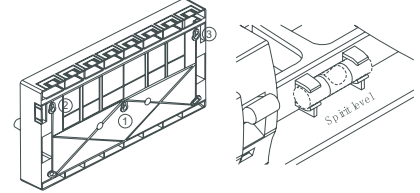
**7. Fit devices, ensure switch is aligned with notches on right hand side of the DIN rail. Fit required devices onto DIN rail, fit top of device onto rail first and then push down bottom of device. Devices can be removed by pulling out bottom device clip (use flat screwdriver) and remove by lifting bottom part of device first.**

**10. Locate, prepare and connect all incoming cables as required, suggest cable strip length of 12mm. Ensure connections are secure and terminal screws fully tightened.**

**13. Refit front cover, by opening visor and turning screws ¼ turn clockwise to lock position.**

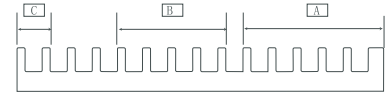


**5. Secure to wall, use keyhole slots to hang in position, use fitted spirit level to ensure fitted level, and other fixing holes to firmly secure. For uneven walls use 3 point fixing.**



**8. Configure by cutting the supplied busbar to desired length, depending on number of ways protected by RCD1 and RCD2 if Dual, or/and unprotected. Ensure one finger for incomm plus number of ways required, plus any spare ways which may need to be used later.**

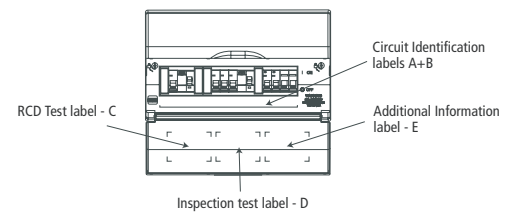
C: Length equal to number of ways unprotected by main switch plus one finger  
 B: Length equal to number of ways protected by 63A RCD plus one finger for the RCD.  
 A: Length equal to number of ways protected by 80A RCD plus one finger for the RCD



Note:- Please cut busbar square to finger edge, and discard excess.

**11. Test in accordance with the current IEE wiring regulations.**

**14. Apply labels – open hinged visor and apply warning and circuit identification labels as shown.**



Note:- Fill any unused ways with blanks provided.

## General

Tools – Screwdriver PZ 2 or Flat screwdriver, knife and pliers.

Cleaning – use a soft damp cloth with luke warm water (only clean outside of unit).

Standards – All consumer units have been designed to comply with the requirements of BS EN 60439-3, BS 7671 and Part P document.

## Guarantee

BG Electrical products are guaranteed against faulty materials and workmanship for a period of 5 years from date of delivery: products will be repaired or (at BG Electrical's discretion) replacements will be supplied or (at BG Electrical's discretion) a credit note will be issued. This guarantee is subject to BG Electrical's conditions of sale and in particular to the following conditions being met:

1. Notification of any defect is given to BG Electrical as soon as reasonably practicable after becoming apparent, and the products then returned to BG Electrical.
2. The products have only been operated under normal operating conditions and have only been subject to normal use.
3. No work (other than normal and proper maintenance) has been carried out to the products without BG Electrical's prior written consent.
4. The products have been assembled, or incorporated into other goods, by a qualified and recognised electrician and only in accordance with any instructions issued by BG Electrical.
5. The defect has not arisen from an item manufactured or supplied by a person other than BG Electrical.

This guarantee does not affect any consumer statutory rights.

All components used in a BG Electrical Consumer unit, must be supplied by BG Electrical. The use of any other components will negate compliance to BS EN 60439-3 and the BG Electrical Guarantee. Failure to fit the consumer unit in accordance with these instructions will invalidate the guarantee.

## Technical Helpline: -0845 194 7584

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