



**Amendment 3
Meter Cabinet
Metal Cased
Consumer Units
for use in Domestic
Household Premises**



METER CABINET CONSUMER UNITS METAL CASED “SKELETON” FOR MANTEL, CLIFTON & OTHER METER CABINETS

17th Edition Wiring Regulations Incorporating Amendment No. 3 : 2015

REGULATION 421.1.201

Amendment No. 3 to BS 7671 IET Wiring Regulations prescribes that within domestic (household) premises, consumer units and similar switchgear assemblies shall have their enclosures manufactured from non combustible material, or be enclosed in a cabinet or enclosure constructed of non combustible material and comply with product standard BS EN 61439-3.

What are Domestic Household Premises ?

Typical Domestic household premises would include single and multiple occupancy homes such as Houses, Bungalows, High Rise & Low Rise Flats, Apartments, Student lets, Sheltered Accommodation, Farmhouses, Houseboats, Static Homes, Home Office, attached Garages, Workshops and Detached Summerhouses etc.

What is Non Combustible Material ?

There are many types of non combustible material however, amendment 3 of the 17th Edition regulations provides an acceptable example as ferrous metal i.e. Steel Consumer Units.

What is an Enclosure ?

The consumer unit enclosure must be manufactured from a non combustible material so as to limit the spread of fire. An enclosure means the box, cover, door, hinges, handle and any components required to maintain the integrity of the unit.

What is Similar Switchgear ?

Similar switchgear is switchgear that is used for the same fundamental application ie. a circuit protection assembly with two pole isolator and one or more circuit protection devices, e.g. Skeleton consumer units, MCB distribution board, fuse switch, garage unit or PV switchgear etc.

What are Cabinets ?

Typical cabinets are meter cabinets that are normally built into the fabric of the building with a removable door frame and that may or may not include consumer units within. Wylex all metal cased meter cabinet consumer units are designed specifically for use in meter cabinets that are unable to minimise flames escaping or manufactured from combustible materials.

What about Cable Entry ?

As usual good workmanship and proper materials should be applied to all installation work, consumer units must be installed to achieve IP4X on the top elevation (regulation 416.2.2) and IP2XC on all other elevations. This can be achieved by use of cable entry accessories such as consumer unit pattress or other means such as glanding.



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- All metal enclosure, no external plastic parts
- Adjustable cable cover chamber for mounting / cabinet height variations
- Low Smoke & Fume paint
- Non combustible cover blanks*
- Compact enclosure with multiple fixing points in defined widths
- Available in ‘no miss terminal’ fixed busbar versions and flexible versions
- Raised & removable DIN rail / busbar assembly
- Cable entry knockouts on top, bottom and rear elevations
- Mains tails cable entry grommet / gland for supplementary insulation similar to Class II level of protection to mains tails as recommended in the IET On Site Guide**
- Flame retardent cable entry grommets for outgoing circuits***
- Up to 14 way units, all designs Main Switch, High Integrity, Split Load, Dual RCD and Dual Tariff options
- Top hinged self closing door
- RoHS compliant in excess of UK standards
- UKAS certified to BS EN 61439-3



NMMB



EIU



NMCE1



CONSUMER UNITS FOR USE IN DOMESTIC HOUSEHOLD PREMISES

17th Edition Wiring Regulations Including Amendment No. 3

Amendment No3 has brought about the requirement for 'all metal' non combustible enclosures for consumer units and similar switchgear. This is in addition to the requirements for Additional Protection (30mA RCD) as summarised below. Within domestic household premises.

- All socket outlets should be protected by 30mA RCD
- All circuits serving or passing through a room with a fixed bath or shower should be protected by one or more 30mA RCDs**
- All cables buried beneath the plaster surface of the wall or partition (at less than 50mm) should be protected by 30mA RCDs***
- All cables concealed in metal stud partitions (common in new builds) should be protected by 30mA RCDs***
- Installations should be divided up into circuits so as to take account of danger and inconvenience caused by a single fault - e.g. such as a lighting circuit***
- Installations should be designed and arranged so as to prevent unwanted tripping of RCDs***
- Safety services such as smoke alarms should be on independent circuits****
- Installed units must be to IP4X on top elevation & IP2XC elsewhere

REGULATIONS	RELATING TO:	EXAMPLES	ADDITIONAL PROTECTION
411.3.3*	Sockets up to 20A rating	Upstairs Sockets Downstairs Sockets Kitchen Sockets Cooker outlet with integral 13A socket Garage Sockets Plus any other sockets up to 20A rated	30mA RCD Taking into account 3.14.1 **** 3.14.2 ****
701.411.3.3**	All Circuits serving or passing through a room with a fixed bath or shower	Shower circuit Lighting circuit Heating circuit Ventilation circuit Shaver Socket Plus Other circuits	30mA RCDs Taking into account 3.14.1 **** 3.14.2 ****
522.6.200 series and 560.7.1*****	All circuits buried in a wall or partition at less than 50mm and without mechanical protection	Downstairs Lighting Upstairs Lighting Immersion heater Smoke Alarms Burglar Alarm (Safety service) Plus any other circuits	30mA RCD Taking into account 3.14.1 **** 3.14.2 ****

(A) The IET On Site Guide recommends the mains tails should be protected at the point of entry into the metal enclosure by use of a mains tails gland to protect against the possibility of mechanical damage and or disturbance that could lead to tails becoming loose and making contact with the metal enclosure.

- * Regulation 411.3.3 socket outlets with a rated current not exceeding 20A.
- ** Regulation 701.411.3.3 Additional protection shall be provided for all circuits of the location by use of one or more 30mA RCD.
- *** Regulations in the 522.6.200 series cables concealed in a wall or partition at less than 50mm depth and without earthed mechanical protection e.g. conduit.
- **** Regulation 314.1 Every installation shall be divided into circuits as necessary to avoid danger and inconvenience in the event of a fault, take account of danger that may arise from the failure of a single circuit such as a lighting circuit, reduce the possibility of unwanted tripping of RCDs etc.
- **** Regulation 314.2 Separate circuits to be provided for parts of the installation that need to be separately controlled in such a way that those circuits are not affected by the failure of other circuits.
- ***** Regulation 560.7.1 Chapter 56 circuits for safety services shall be independent of other circuits.
In addition Chapter 51 requires designers/installers to take account of all relevant British Standards and manufacturers instructions. For example BS5839 Part 6 is the British Standard for fire detection and alarm systems in dwellings. It states that power supplies to Grade D smoke alarms should be an independent circuit at the consumer unit, or a separately electrically protected local lighting circuit.
- ***** Regulation 416.2.2 requires that the installed consumer unit achieves IP4X (1mm probe) on the top elevation. All other elevations should be to IP2XC (2.5mm probe).



A typical domestic household application with meter cabinets

17th Edition Wiring Regulations Including Amendment No. 3

Full metal Main Switch unit with RCBOs



Full metal High Integrity unit with RCBOs and MCBs



Full metal Split Load unit with RCBOs and MCBs



Full metal Dual RCD unit with MCBs



All RCBOs



30mA Earth leakage protection

Illustrations are of 320mm wide units (up to 11 ways), 430mm wide units (up to 14 ways) and 273mm units (up to 7 ways) are also available



METAL CASED SKELETON UNITS - 273mm WIDE FIXING CENTRES

CAT REF	DESCRIPTION
Main Switch Metal Cased Skeleton Units	
FALNM806	Metal 8 way consumer unit 100A Fixed

Shroud extension from gland plate max 78mm min 14mm



METAL CASED SKELETON UNITS - 320mm WIDE FIXING CENTRES

CAT REF	DESCRIPTION
Main Switch Metal Cased Skeleton Units	
FALNM1106	Metal 11 way consumer unit 100A Fixed

Split Load Metal Cased Skeleton Units

FALNMRS5406	Metal Split Load consumer unit 5+4 Fixed
FALNMRS9SLM	Metal Split Load consumer unit 9 ways Flexible

High Integrity Metal Cased Units

FALNMRS23206	7Way High Integrity Consumer Unit 2+3+2 Fixed
FALNMRS7SSLMHI	7Way High Integrity Consumer Unit Flexible

Dual RCD Metal Cased Skeleton Units

FALNMISS7SLM	Main Switch & Dual RCD Split 7Way Flexible
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Dual Tariff Metal Cased Skeleton Units

FALNMHIIX9DT	Dual Tariff 9 way Split Flexible
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Shroud extension from gland plate max 78mm min 14mm



METAL CASED SKELETON UNITS - 430mm WIDE FIXING CENTRES

CAT REF	DESCRIPTION
Main Switch Metal Cased Skeleton Units	
F43NM1406	Metal 14 way consumer unit 100A

Split Load Metal Cased Skeleton Units

F43NMRS6606	Metal Split Load consumer unit 6+6 Fixed
F43NMRS12SLM	Metal Split Load consumer unit 12 ways Flexible

High Integrity Metal Cased Units

F43NMRS44206	10 Way High Integrity Consumer Unit 4+4+2 Fixed
F43NMRS10SSLHI	10 Way High Integrity Consumer Unit Flexible

Dual RCD Metal Cased Skeleton Units

F43NMISS10SLM	Main Switch & Dual RCD Split 10Way Flexible
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Dual Tariff Metal Cased Skeleton Units

F43NMHIIX12DT	Dual Tariff 12 way Split Flexible
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Shroud extension from gland plate max 78mm min 14mm



MINIATURE CIRCUIT BREAKERS (6KA)

B CURVE	C CURVE	RATING	POLES	MODULES
-	NHXC03	3A	1	1
NHXB06	NHXC06	6A	1	1
NHXB10	NHXC10	10A	1	1
NHXB16	NHXC16	16A	1	1
NHXB20	NHXC20	20A	1	1
NHXB25	-	25A	1	1
NHXB32	NHXC32	32A	1	1
NHXB40	NHXC40	40A	1	1
NHXB50	NHXC50	50A	1	1

ACCESSORIES

MCBLDX	MCB Locking device
WPL	Padlock for MCBLDX



NSBS RCBO (combined MCB/RCD device)

B CURVE	C CURVE	CURRENT RATING	RCD RATING	POLES	MODULES
NHXSBS1B06	NHXSBS1C06	6A	30mA	1	1
NHXSBS1B10	NHXSBS1C10	10A	30mA	1	1
NHXSBS1B16	NHXSBS1C16	16A	30mA	1	1
NHXSBS1B20	NHXSBS1C20	20A	30mA	1	1
NHXSBS1B32	NHXSBS1C32	32A	30mA	1	1
NHXSBS1B40	NHXSBS1C40	40A	30mA	1	1
NHXSBS1B50	NHXSBS1C50	50A	30mA	1	1
-	WRCBL6C2+	6A	30mA	2	2
-	WRCBL10C2+	10A	30mA	2	2
-	WRCBL16C2+	16A	30mA	2	2
-	WRCBL20C2+	20A	30mA	2	2
-	WRCBL32C2+	32A	30mA	2	2
-	WRCBL40C2+	40A	30mA	2	2

+ Suitable for flexible comb busbar consumer units only



ACCESSORIES

CAT REF	PRODUCT
EIU	Moulded cable gland kit for metal consumer unit to provide additional support and supplementary insulation similar to Class II construction for the incoming cables. Suitable for 16mm ² or 25mm ² cable 32mm knockout - as recommended in the IET On Site Guide



FLAME RETARDANT CABLE ENTRY GROMMETS

CAT REF	PRODUCT
NMCE1	7 x 20mm & 3 x 32mm grommets
NMCE2	10 x 20mm grommets

Rigid grommets with saw tooth grip to keep grommets firmly and permanently in place



NH ACCESSORIES

CAT REF	PRODUCT	MODULE
NMMB	Metal blanking plate - Twist fit	1
NHB1PP	Blanking plate - Busbar & cover (insulated 960°C)	1
NHET25	25mm Earth Terminal	-
WPL	Padlock for NHLDK & MCBLDX	
NH13CBKIT	13 pin comb busbar c/w labels and 5 protection covers	



Electrium



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