domestic
commercial
industrial

circuit protection

Founded in 1897, Wylex introduced the first 'consumer unit' to the electrical industry, this original design was the forerunner to the 'Standard Range', which is still in wide use today across the world.
From its United Kingdom base at Wythenshawe, through a policy of continuous design improvement, Wylex has continued to develop a comprehensive range of Domestic, Commercial and Industrial circuit protection devices based on quality and close attention to the practical requirements of the contractor including the fundamental requirements of electrical safety embodied in the relevant latest British and International standards including the new issue and amendments of the IET Wiring Regulations.

Left
Electrium's purpose built Commercial Centre in Cannock, Staffordshire



As a leading manufacturer of electrical domestic and industrial circuit protection products, Wylex is committed to the continual improvement of all quality assurance procedures and performance.

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DOMESTIC

COMMERCIAL

PV ISOLATION

LIGHTING CONTROL

HEATING CONTROL

PV METERED
CONSUMER UNIT

CONSUMER UNIT

ADDITIONAL RCD
PROTECTION

SUPPLY ISOLATOR

SURGE PROTECTION

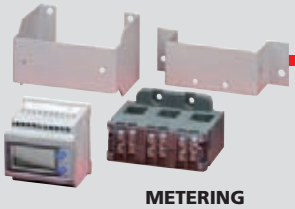
SUB DISTRIBUTION SINGLE PHASE

SUB DISTRIBUTION
THREE PHASE

SUB DISTRIBUTION
THREE PHASE

SUB DISTRIBUTION

MAIN DISTRIBUTION



METERING

100A

250A

INDUSTRIAL

LIFT ISOLATION

LIGHTING CONTROL

CONSUMER UNIT

CONSUMER UNIT

CONSUMER UNIT

H&V ISOLATION

SUB DISTRIBUTION
THREE PHASE

MAIN ISOLATION

LOCAL ISOLATION

SUB DISTRIBUTION
THREE PHASE
INTEGRAL METERING

SUB DISTRIBUTION SINGLE PHASE

SUB DISTRIBUTION

METERING

LOCAL ISOLATION

MAIN
DISTRIBUTION

METERING

SURGE PROTECTION

630A

THE NH RANGE

The NH range of consumer units provides contemporary styling with particular attention to generous cable preparation room, supplied with incoming devices and two busbar options "fixed" for quick installation balcony connection and "flexible" easily configured DIN rail design with cut to length busbar kits. All designs are available as insulated or metal cased versions

NH Solution 17 RANGE

To help installers comply with the amended requirements of 17th Edition wiring regulations, Wylex created the NH Solution 17 Range of consumer units providing 100% 30mA RCD protection (if required)

- **Main Switch – Complete Independent circuits**
- **Split Load – Half independent circuits**
- **High Integrity – Some independent circuits**
- **Dual RCD – No independent circuits**

NH PHOTO VOLTAIC RANGE

The ever changing needs of end users, as they try to reduce their energy consumption and reduce their carbon foot print: has lead to the development for all of our NH Solution 17 Consumer Unit designs to be adapted for the addition of a separate micro generation supply e.g. Solar Photo Voltaic.

17th 1st AMENDMENT

EDITION

For details on the application to meet the 17th edition wiring regulations please refer to page 59.


NH804


NHRS6604


NHRS12SL


NHRS44204

MAIN SWITCH

CAT REF	MS RATING	* WAYS	DIN MODULES	
NH204/40	40A	2		
NH204/63	63A	2		
NH504	100A	5		
NH804	100A	8		
NH1104	100A	11		
NH1404	100A	14		
NH1904	100A	19		
NH504+3	100A	5	3	
NH804+3	100A	8	3	With DIN Accessory Section
NH804+6	100A	8	6	
NH1104+3	100A	11	3	

Flexible - comb busbar and full DIN rail MS units available
Suffix catalogue ref with FLEX e.g. NH804FLEX

SPLIT LOAD

CAT REF	RCD RATING	MCB WAYS	MS RATING	* WAYS
NHRS2404	80A 30mA	2	100A	4
NHRS3304	80A 30mA	3	100A	3
NHRS4204	80A 30mA	4	100A	2
NHRS5404	80A 30mA	5	100A	4
NHRS4504	80A 30mA	4	100A	5
NHRS3604	80A 30mA	3	100A	6
NHRS6304	80A 30mA	6	100A	3
NHRS3904	80A 30mA	3	100A	9
NHRS4804	80A 30mA	4	100A	8
NHRS6604	80A 30mA	6	100A	6
NHRS5704	80A 30mA	5	100A	7
NHRS7504	80A 30mA	7	100A	5
NHRS8404	80A 30mA	8	100A	4
NHRS9304	80A 30mA	9	100A	3
NHRS12504	80A 30mA	12	100A	5
NHRS11604	80A 30mA	11	100A	6
NHRS10704	80A 30mA	10	100A	7
NHRS61104	80A 30mA	6	100A	11
NHRS71004	80A 30mA	7	100A	10
NHRS9804	80A 30mA	9	100A	8
NHRS8904	80A 30mA	8	100A	9
NHRS51204	80A 30mA	5	100A	12

FLEXIBLE SPLIT LOAD CONSUMER UNITS

CAT REF	RCD RATING	MCB WAYS MIN	MCB WAYS MAX	MS RATING	* WAYS	* WAYS TOTAL
NHRS6SL	80A 30mA	2	4	100A	2 4	6
NHRS9SL	80A 30mA	3	6	100A	3 6	9
NHRS12SL	80A 30mA	3	9	100A	3 9	12
NHRS17SL	80A 30mA	5	12	100A	5 12	17

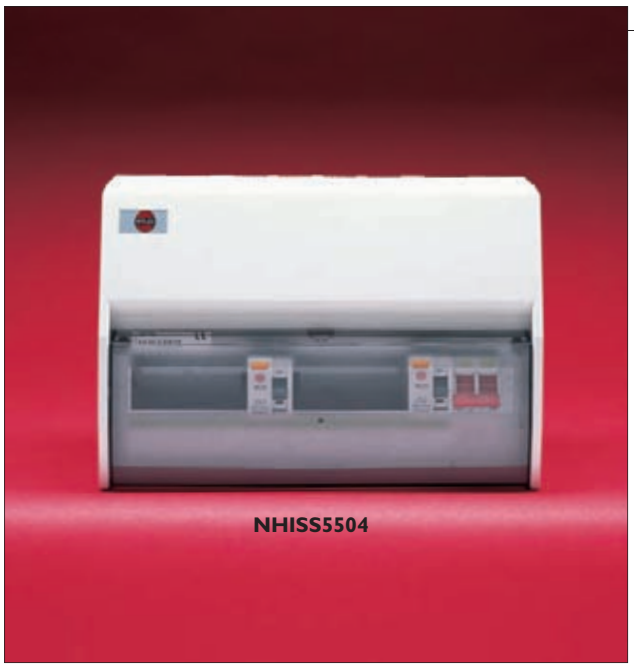
SPLIT LOAD WITH DIN RAIL ACCESSORY SECTION

CAT REF	RCD RATING	MCB WAYS	MS RATING	* WAYS	NO OF MODULES
NHRS6504+6	80A 30mA	6	100A	5	6
NHRS5604+6	80A 30mA	5	100A	6	6
NHRS7704+3	80A 30mA	7	100A	7	3
NHRS8604+3	80A 30mA	8	100A	6	3
NHRS6804+3	80A 30mA	6	100A	8	3

HIGH INTEGRITY

CAT REF	30mA MCB WAYS	30mA MCB WAYS	MS RATING	* MS WAYS	TOTAL *
NHRS23204	2	3	100A	2	7
NHRS44204	4	4	100A	2	10
NHRS43304	4	3	100A	3	10
NHRS33404	3	3	100A	4	10
NHRS76204	7	6	100A	2	15
NHRS66304	6	6	100A	3	15
NHRS46504	4	6	100A	5	15
NHRS55504	5	5	100A	5	15
NHRS45604	4	5	100A	6	15
NHRS7SSLHI	2 to 4	2 to 4	100A	1 to 4	7
NHRS10SSLHI	2 to 5	2 to 5	100A	2 to 5	10
NHRS15SSLHI	2 to 9	2 to 9	100A	2 to 9	15

* RCBOs or MCBs may be fitted to unprotected ways depending upon the installation requirements see page 59.


NHISS5504


NHRS504


NHSTM4504

INSULATED - DUAL RCD 2x 80A 30mA RCD

CAT REF	MS WAYS	RCD 1 MCB WAYS	RCD 2 MCB WAYS	TOTAL No of MCB WAYS
NHISS3404	-	3	4	7
NHISS4604	-	4	6	10
NHISS5504	-	5	5	10
NHISS8704	-	7	8	15

INSULATED - FLEXIBLE DUAL RCD 2x 80A 30mA RCD

CAT REF	MS WAYS	RCD1 MCB WAYS	RCD2 MCB WAYS	TOTAL No of MCB WAYS
NHISS10SL	-	4 to 6 Max	4 to 6 Max	10
NHISS15SL	-	6 to 9 Max	6 to 9 Max	15

RCD INCOMER

CAT REF	RCD RATING	MCB WAYS	DIN MODULES	
NHRS204/40	40A 30mA	2		
NHRS204/63	63A 30mA	2		
NHRS504	100A 30mA	5		
NHRS804	100A 30mA	8		
NHRS1104	100A 30mA	11		
NHRS1404	100A 30mA	14		
NHRS1904	100A 30mA	19		
NHRM204/40	40A 100mA	2		
NHRM204/63	63A 100mA	2		
NHRM504	100A 100mA	5		
NHRM804	100A 100mA	8		
NHRM1104	100A 100mA	11		
NHRM1404	100A 100mA	14		
NHRM1904	100A 100mA	19		
NHRS504+3	100A 30mA	5	3	With DIN Accessory Section
NHRS804+3	100A 30mA	8	3	
NHRS804+6	100A 30mA	8	6	
NHRS1104+3	100A 30mA	11	3	
NHTM504	100A 100mA TD*	5		
NHTM804	100A 100mA TD*	8		
NHTM1104	100A 100mA TD*	11		
NHTM1404	100A 100mA TD*	14		
NHTM1904	100A 100mA TD*	19		

*Time Delay RCD

TIME DELAY FLEXIBLE SPLIT LOAD CONSUMER UNITS

CAT REF	RCD RATING	MCB WAYS MIN	MCB WAYS MAX	TD RCD	*MCB WAYS MIN	*MCB WAYS MAX	MCB WAYS TOTAL*
NHSTM9SL	80A 30mA	3	6	100A 100mA	3	6	9
NHSTM12SL	80A 30mA	3	9	100A 100mA	3	9	12
NHSTM17SL	80A 30mA	5	12	100A 100mA	5	12	17

Flexible consumer units utilise a full DIN rail and accept modular DIN devices such as a Bell Transformer or Timer.

SPLIT LOAD WITH TIME DELAY RCD INCOMER

CAT REF	RCD RATING	MCB WAYS	TD RCD	*MCB WAYS
NHSTM3604	80A 30mA	3	100A 100mA	6
NHSTM4504	80A 30mA	4	100A 100mA	5
NHSTM5404	80A 30mA	5	100A 100mA	4
NHSTM6304	80A 30mA	6	100A 100mA	3
NHSTM3904	80A 30mA	3	100A 100mA	9
NHSTM4804	80A 30mA	4	100A 100mA	8
NHSTM5704	80A 30mA	5	100A 100mA	7
NHSTM6604	80A 30mA	6	100A 100mA	6
NHSTM7504	80A 30mA	7	100A 100mA	5
NHSTM8404	80A 30mA	8	100A 100mA	4
NHSTM9304	80A 30mA	9	100A 100mA	3
NHSTM12504	80A 30mA	12	100A 100mA	5
NHSTM11604	80A 30mA	11	100A 100mA	6
NHSTM8904	80A 30mA	8	100A 100mA	9
NHSTM9804	80A 30mA	9	100A 100mA	8
NHSTM10704	80A 30mA	10	100A 100mA	7
NHSTM71004	80A 30mA	7	100A 100mA	10
NHSTM61104	80A 30mA	6	100A 100mA	11
NHSTM51204	80A 30mA	5	100A 100mA	12

A range of matching DIN enclosures is also available, see page 51.

* RCBOs or MCBs may be fitted to unprotected ways depending upon the installation requirements see page 59.

NHIIX6604

NH704IP

DUAL TARIFF 100A MAIN SWITCH AND 100A MAIN SWITCH

CAT REF	MS RATING	*WAYS	MS RATING	*WAYS
NHIIX5404	100A	5	100A	4
NHIIX4504	100A	4	100A	5
NHIIX3904	100A	3	100A	9
NHIIX4804	100A	4	100A	8
NHIIX7504	100A	7	100A	5
NHIIX6604	100A	6	100A	6
NHIIX5704	100A	5	100A	7
NHIIX9804	100A	9	100A	8
NHIIX8904	100A	8	100A	9
NHIIX11604	100A	11	100A	6
NHIIX51204	100A	5	100A	12

DUAL TARIFF 100A MAIN SWITCH AND 100A 30mA RCD MAIN SWITCH

CAT REF	RCD RATING	MCB WAYS	MS RATING	*WAYS
NHRSX5704	100A 30mA	5	100A	7
NHRSX6604	100A 30mA	6	100A	6
NHRSX7504	100A 30mA	7	100A	5
NHRSX8904	100A 30mA	8	100A	9
NHRSX9804	100A 30mA	9	100A	8

IP65 CONSUMER UNITS WITH MAIN SWITCH

CAT REF	MS RATING	*WAYS†
NH304IP	63A	3
NH704IP	100A	7
NH1004IP	100A	10

†2 module wide RCBOs only

IP65 CONSUMER UNITS WITH RCD INCOMER

CAT REF	RCD RATING	MCB WAYS
NHRS304IP	40A 30mA	3
NHRS704IP	80A 30mA	7
NHRS1004IP	80A 30mA	10

NH HOUSE BUILDERS CONSUMER UNITS

During the construction phase of a domestic property, house developers may need to have the facility to lock off the visor and restrict the access to the consumer unit. This will be inline with their specific Health and Safety procedures and requirements on the construction site.

Wylex have produced a range of High Integrity 'flexible' consumer units that are pre drilled and blanked ready to be fitted with a NHLDK visor locking kit and WPL padlock if required. When the property is handed over for sale the visor locking kit is easily removed by the electrical contractor, returning the consumer unit back to its original design allowing complete access to the main isolator and protective devices for the house owner.

NH HOUSE BUILDERS CONSUMER UNITS

CAT REF	PRODUCT
NHP-7HIFWLK	7 way High Integrity, lockable ready
NHP-10HIFWLK	10 way High Integrity, lockable ready
NHP-15HIFWLK	15 way High Integrity, lockable ready
NHLDK	Visor locking kit
WPL	Padlock for NHLDK

We strongly recommend that with a modified lockable visor consumer units a separate accessible point of isolation is available for emergencies e.g. an RECSW2S isolation switch or emergency push button isolator. It is the responsibility of the installer to ensure compliance with all relevant regulations and Health & Safety requirements of the construction site / building developer. **See page 62.**


NH806


NHRS4506


NHRS12SLM


NHRS10SSLMHI

MAIN SWITCH

CAT REF	MS RATING	*WAYS	+ DIN MODULES
NH206/40	40A	2	
NH206/63	63A	2	
NH506	100A	5	
NH806	100A	8	
NH1106	100A	11	
NH1406	100A	14	
NH1906	100A	19	
NH506+3	100A	5	3
NH806+3	100A	8	3
NH806+6	100A	8	6
NH1106+3	100A	11	3

SPLIT LOAD

CAT REF	RCD RATING	MCB WAYS	MS RATING	*WAYS
NHRS2406	80A 30mA	2	100A	4
NHRS3306	80A 30mA	3	100A	3
NHRS4206	80A 30mA	4	100A	2
NHRS5406	80A 30mA	5	100A	4
NHRS4506	80A 30mA	4	100A	5
NHRS3606	80A 30mA	3	100A	6
NHRS6306	80A 30mA	6	100A	3
NHRS3906	80A 30mA	3	100A	9
NHRS4806	80A 30mA	4	100A	8
NHRS6606	80A 30mA	6	100A	6
NHRS5706	80A 30mA	5	100A	7
NHRS7506	80A 30mA	7	100A	5
NHRS8406	80A 30mA	8	100A	4
NHRS9306	80A 30mA	9	100A	3
NHRS12506	80A 30mA	12	100A	5
NHRS11606	80A 30mA	11	100A	6
NHRS10706	80A 30mA	10	100A	7
NHRS61106	80A 30mA	6	100A	11
NHRS71006	80A 30mA	7	100A	10
NHRS9806	80A 30mA	9	100A	8
NHRS8906	80A 30mA	8	100A	9
NHRS51206	80A 30mA	5	100A	12

FLEXIBLE SPLIT LOAD CONSUMER UNITS

CAT REF	RCD RATING	MCB WAYS MIN	MCB WAYS MAX	MS RATING	*WAYS MIN	*WAYS MAX	*WAYS TOTAL
NHRS6SLM	80A 30mA	2	4	100A	2	4	6
NHRS9SLM	80A 30mA	3	6	100A	3	6	9
NHRS12SLM	80A 30mA	3	9	100A	3	9	12
NHRS17SLM	80A 30mA	5	12	100A	5	12	17

SPLIT LOAD WITH DIN RAIL ACCESSORY SECTION

CAT REF	RCD RATING	MCB WAYS	MS RATING	*WAYS	No of MODULE WAYS
NHRS5606+6	80A 30mA	6	100A	5	6
NHRS7706+3	80A 30mA	7	100A	7	3

100mA available to order

HIGH INTEGRITY

CAT REF	30mA RCD WAYS MCB	30mA RCD WAYS MCB	MS RATING	MS WAYS*	TOTAL
NHRS23206	2	3	100A	2	7
NHRS44206	4	4	100A	2	10
NHRS43306	4	3	100A	3	10
NHRS33406	3	3	100A	4	10
NHRS76206	7	6	100A	2	15
NHRS66306	6	6	100A	3	15
NHRS46506	4	6	100A	5	15
NHRS55506	5	5	100A	5	15
NHRS45606	4	5	100A	6	15
NHRS7SSLMHI	1 to 4	1 to 4	100A	1 to 4	7
NHRS10SSLMHI	2 to 5	2 to 5	100A	2 to 5	10
NHRS15SSLMHI	2 to 9	2 to 9	100A	2 to 9	15

Flush mounting consumer units available to order.
Suffix Catalogue Reference with **/FLU** eg: **NHRS6606/FLU**

* RCBOs or MCBs may be fitted to unprotected ways depending upon the installation requirements see page 59.


NHISS5506


NHRS1106


NHSTM9SLM


NHIIX4506

METAL - DUAL RCD 2x 80A 30mA RCD

CAT REF	MS WAYS	RCD 1 MCB WAYS	RCD 2 MCB WAYS	TOTAL No of MCB WAYS
NHISS3406	-	3	4	7
NHISS4606	-	4	6	10
NHISS5506	-	5	5	10
NHISS8706	-	7	8	15

METAL - FLEXIBLE DUAL RCD 2x 80A 30mA RCD

CAT REF	MS WAYS	RCD 1 MCB WAYS	RCD 2 MCB WAYS	TOTAL No of MCB WAYS
NHISS10SLM	-	6 Max	6 Max	10
NHISS15SLM	-	9 Max	9 Max	15

RCD INCOMER

CAT REF	RCD RATING	MCB WAYS
NHRS206/40	40A 30mA	2
NHRS206/63	63A 30mA	2
NHRS506	100A 30mA	5
NHRS806	100A 30mA	8
NHRS1106	100A 30mA	11
NHRM206/40	40A 100mA	2
NHRM206/63	63A 100mA	2
NHRM506	100A 100mA	5
NHRM806	100A 100mA	8
NHRM1106	100A 100mA	11
NHTM506	100A 100mA time delay	5
NHTM806	100A 100mA time delay	8
NHTM1106	100A 100mA time delay	11

SPLIT LOAD WITH TIME DELAY RCD INCOMER

CAT REF	RCD RATING	MCB WAYS	TD RCD RATING	*WAYS
NHSTM3606	80A 30mA	3	100A 100mA	6
NHSTM4506	80A 30mA	4	100A 100mA	5
NHSTM5406	80A 30mA	5	100A 100mA	4
NHSTM6306	80A 30mA	6	100A 100mA	3
NHSTM3906	80A 30mA	3	100A 100mA	9
NHSTM4806	80A 30mA	4	100A 100mA	8
NHSTM6606	80A 30mA	6	100A 100mA	6
NHSTM7506	80A 30mA	7	100A 100mA	5
NHSTM9306	80A 30mA	9	100A 100mA	3
NHSTM8906	80A 30mA	8	100A 100mA	9
NHSTM9806	80A 30mA	9	100A 100mA	8
NHSTM71006	80A 30mA	7	100A 100mA	10
NHSTM61106	80A 30mA	6	100A 100mA	11
NHSTM51206	80A 30mA	5	100A 100mA	12

FLEXIBLE SPLIT LOAD CONSUMER UNITS (TIME DELAY)

CAT REF	RCD RATING	MCB WAYS MIN	MCB WAYS MAX	TD RCD	*WAYS MIN	*WAYS MAX	*WAYS TOTAL
NHSTM9SLM	80A 30mA	3	6	100A 100mA	3	6	9
NHSTM12SLM	80A 30mA	3	9	100A 100mA	3	9	12
NHSTM17SLM	80A 30mA	5	12	100A 100mA	5	12	17

DUAL TARIFF 100A MAIN SWITCH & 100A MAIN SWITCH

CAT REF	MS RATING	*WAYS	MS RATING	*WAYS
NHIIX2406	63A	2	100A	4
NHIIX3306	100A	3	100A	3
NHIIX4506	100A	4	100A	5
NHIIX7506	100A	7	100A	5
NHIIX6606	100A	6	100A	6
NHIIX5706	100A	5	100A	7
NHIIX8906	100A	8	100A	9
NHIIX51206	100A	5	100A	12
NHIIX11606	100A	11	100A	6

DUAL TARIFF 100A MAIN SWITCH & 100A 30mA RCD SWITCH

CAT REF	RCD RATING	MCB WAYS	MS RATING	*WAYS
NHRSX5706	100A 30mA	5	100A	7
NHRSX6606	100A 30mA	5	100A	6
NHRSX7506	100A 30mA	7	100A	5
NHRSX8906	100A 30mA	8	100A	9
NHRSX9806	100A 30mA	9	100A	8

* RCBOs or MCBs may be fitted to unprotected ways depending upon the installation requirements see page 59.

NHDIS1111

METAL - SPLIT LOAD DUPLEX

CAT REF	TOP BANK MS RATING	TOP BANK *WAYS	BOTTOM BANK RCD RATING	BOTTOM BANK MCB WAYS
NHDIS88	100A	8	80A 30mA	8
NHDIS1111	100A	11	80A 30mA	11

METAL - HIGH INTEGRITY DUPLEX 2 x RCDS, 1x 100A MAIN SWITCH

CAT REF	80A 30mA RCD WAYS BOTTOM BANK	80A 30mA RCD WAYS BOTTOM BANK	80A 30mA RCD WAYS TOP BANK	MS *WAYS	TOTAL
NHDRS14SSLHI	-	8	Flexi	Flexi	14
NHDRS20SSLHI	-	11	Flexi	Flexi	20
NHDRS26SSLHI	-	14	Flexi	Flexi	26
NHDRS36SSLHI	-	19	Flexi	Flexi	36

METAL - HIGH INTEGRITY DUPLEX 3 x RCDS, 1x 100A MAIN SWITCH

CAT REF	80A 30mA RCD WAYS BOTTOM BANK	80A 30mA RCD WAYS BOTTOM BANK	80A 30mA RCD WAYS TOP BANK	MS *WAYS	TOTAL
NHDRS12HI	Flexi	Flexi	Flexi	Flexi	12
NHDRS18HI	Flexi	Flexi	Flexi	Flexi	18
NHDRS24HI	Flexi	Flexi	Flexi	Flexi	24
NHDRS34HI	Flexi	Flexi	Flexi	Flexi	34

METAL - DUAL RCD DUPLEX 2 x RCDS, 100A MAIN SWITCH

CAT REF	BOTTOM BANK 80A 30mA RCD WAYS	BOTTOM BANK 80A 30mA RCD WAYS	TOP BANK 80A 30mA RCD WAYS	TOP BANK MS WAYS	TOTAL
NHDISS119	-	11	9	-	20
NHDISS1214	-	14	12	-	26

METAL - DUAL TARIFF DUPLEX

CAT REF	TOP BANK MS RATING	TOP BANK *WAYS	BOTTOM BANK MS RATING	BOTTOM BANK *WAYS
NHDIIX88	100A	8	100A	8
NHDIIX1111	100A	11	100A	11
NHDIIX1414	100A	14	100A	14
NHDIIX1919	100A	19	100A	19

CAT REF	MS RATING	*WAYS	RCD RATING	MCB WAYS
NHDISX88	100A	8	80A 30mA	8
NHDISX1111	100A	11	80A 30mA	11

FALNHR10SL

MAIN SWITCH

CAT REF	80A 30mA RCD WAYS	80A 30mA RCD WAYS	MS RATING	*WAYS	TOTAL
FALNH806	-	-	100A	8	8
FALNH1206	-	-	100A	12	12
FALNH1706	-	-	100A	17	17

SPLIT LOAD

FALNHRS10SL	-	Flexi	100A	Flexi	10
FALNHRS15SL	-	Flexi	100A	Flexi	15

HIGH INTEGRITY

FALNHRS10SSL	Flexi	Flexi	100A	Flexi	10
FALNHRS13SSL	Flexi	Flexi	100A	Flexi	13
FALNHRS76206	7	6	100A	2	15

DUAL SPLIT LOAD RCD

FALNHISS10SL	Flexi	Flexi	100A	-	10
FALNHISS15SL	Flexi	Flexi	100A	-	15
FALNHISS4606	4	6	100A	-	10
FALNHISS5506	5	5	100A	-	10
FALNHISS8706	8	7	100A	-	15

RCD INCOMER

CAT REF	100A 30mA RCD WAYS	TOTAL
FALNHRS706	7	7
FALNHRS1106	11	11

* RCBOs or MCBs may be fitted to unprotected ways depending upon the installation requirements see page 59.

MINIATURE CIRCUIT BREAKERS (6KA)

B CURVE	C CURVE	RATING	POLES	MODULES
NHXB06	NHXC06	6A	1	1
NHXB10	NHXC10	10A	1	1
NHXB16	NHXC16	16A	1	1
NHXB20	NHXC20	20A	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

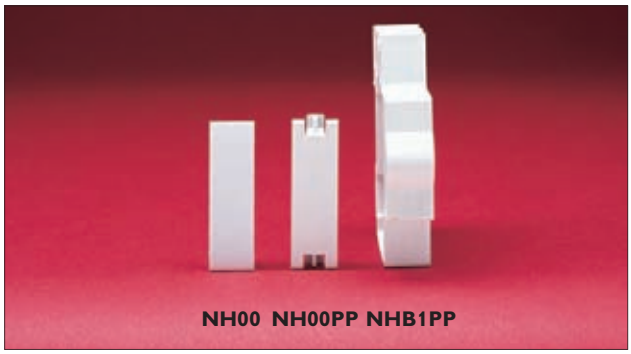
MODULAR CARTRIDGE FUSE HOLDERS WITH FUSE

CAT REF	RATING	POLES	MODULE	SPARE FUSE
NSC05	5A	1	1	CFL05
NSC10	10A	1	1	CFL10
NSC15	15A	1	1	CFL15
NSC20	20A	1	1	CFL20
NSC30	30A	1	1	CFL30
NSC35	35A	1	2	CFL35
NSC40	40A	1	2	CFL40
NSC45	45A	1	2	CFL45

DIN RAIL MODULAR DEVICES FOR USE IN + UNITS & FLEXIBLE UNITS

CAT REF	PRODUCT	MODULE
ME242/230	Staircase timer	1
SMSCD11	Digital time clock 1 channel 1xNO/NC contact 16A	1
TMSCD21	Digital time clock 1 channel 1xNO contact 16A	2
TMTCD22	Digital time clock 2 channel 24 hour 7Day prog	2
MESB-20NO	20A 2 pole contactor	1
MESB-24NO	24A 4 pole contactor	2
MESB-40NO	40A 4 pole contactor	3
MESB-63NO	63A 4 pole contactor	3
MTS8	Bell transformer 12V 8VA	2
MTS6/1	Bell transformer 6V 8VA	1
MTS8/1	Bell transformer 8V 8VA	1
MTS12/1	Bell transformer 12V 8VA	1
TRMSCT31	Disc type time clock 1 channel 1xNC contact 16A	3
TRMSCT11	Disc type time clock 1 channel 1xNC contact 16A	3
SMSCT11	Disc type time clock 1 channel 1xNO contact 16A	1

When fitting in NH Consumer Units contact Wylex technical services department



NH ACCESSORIES

CAT REF	PRODUCT	MODULE
NHB1PP	Blanking plate - Busbar & cover	1
NH00PP	Blanking plate - Twist fit	1
NH00	Blanking plate - Push fit	1
NHET25	25mm Earth Terminal	-
NHLDK	Visor locking kit	
WPL	Padlock for NHLDK & MCBLDX	
NH13CBKIT	13 pin comb busbar c/w labels and 5 protection covers	

CUSTOM BUILT

To meet the ever changing requirements and designs of the modern electrical installation, Wylex offers a service to the electrical installer for all the catalogued NH range of products - Consumer Units, and Distribution Boards to be modified and assembled to their own particular specification and meeting specific customer needs.

The levels of adaptation may vary from the basic pre-population and assembly of outgoing protective devices MCBs, RCBOs into the units with personalised labelling, to the complete customisation and wiring of additional accessory devices within a unit:- for example meters, energy monitors, control switching equipment:- contactors, relays and timers, and over voltage surge protection devices plus almost any other DIN rail mounted piece of electrical accessory equipment that is available.

This Custom Built service can save time on site, reduce labour costs, and help achieve early completion & ultimately save money for the installer of these units.

The following examples are all pre-populated consumer units fitted with various ratings of MCBs and RCBOs plus additional accessory equipment as described:-

Surge protection unit

SURGE PROTECTION DEVICES

Consumer unit fitted with a Wylex Type 2 Surge Protection Device (SPD) connected at the main switch.

Wylex have a range of Type 1 and Type 2 SPDs that can be fitted into any single or three phase distribution unit. These offer protection against over voltage surges from lightning or transient switching voltage surges. This is inline with the new sections 534 and 443 of the amended 17th edition wiring regulations

Wireless Energy Monitored unit

METERING - ENERGY MONITORS

Consumer unit fitted with an 'Efergy' Energy Monitor; connected within the consumer unit is a current transformer and mains fed transmitter that sends the energy usage 'wireless' to a separate 'Efergy' Elite or E2 energy display monitor.

Consumers can see how much energy they are using and cost in real time, which helps them to save energy and reduce their carbon foot print with instantaneous readings as electrical items are switched off or turned down

Plug and play unit

PREWIRED PLUG-IN CONNECTORS

Consumer unit fitted with plug in connectors pre wired to each MCB that has been specifically manufactured for prefabricated wiring / modular wiring systems.

Prefabricated / Offsite constructed buildings are becoming a more popular method of manufacture as developers strive to reduce costs, save energy and time for building construction at site. These prefabricated modular wiring systems commonly known as a "plug and play" wiring, are used extensively for this type of construction allowing quick and instantaneous connection of consumer units & distribution boards within the building .

Custom built duplex unit

COMPLETE ENERGY CONTROL

This High Integrity duplex metal consumer unit fitted with a Type 1 SPD connected at the main switch, a 20A contactor, 7 day digital time clock, 1 channel disc type time clock, and a secondary MID Meter.

The SPD offers protection against lightning strikes as this 3 storey apartment is fitted with a lightning conductor. There was a requirement for outdoor lighting control and timed circuits plus the MID meter was monitoring half the circuits in the consumer unit because these were feeding a sub letting within the property.

NH PHOTO VOLTAIC RANGE

EDITION

For details on the application to meet the 17th edition wiring regulations please refer to page 59.

Wylex have created a number of new consumer units and Photo Voltaic dedicated circuit protection solutions to help installers to economically and efficiently install systems to meet the growing demand of Small Scale Embedded Generators commonly known as Micro Generation of which the most popular for domestic premises is Solar Photovoltaic systems up to 4kW.

- **AC & DC Enclosed Isolators**
- **Combination DC/AC PV inverter Isolators options in single enclosure**
- **Dual Supply PV & Grid Mains supply switch**
- **PV add on extension consumer units**
- **PV ready NH Solution 17 consumer units**
- **Plug in DC solar panel cable connection options available for all units**

All four of the NH Solution 17 Consumer Unit designs are available as PV ready units incorporating the additional equipment necessary to meet the specific regulations for Micro Generation feeds supplied back into the Distribution Network Operator supply.

- **MID approved Generation Meters**
- **Additional Micro Generation independent circuit protection**
- **Additional Micro generation isolation (with padlocking facility)**

NHDSMS

COMBINATION DC & AC PV ISOLATOR

Two isolators DC & AC in a single enclosure that allows the installer to save time by comparison to other methods that utilise two separate enclosures. Class II construction.

- Available with or without local circuit protection devices (MCB, RCD or RCBO)
- Compact combined DC & AC Isolator in one enclosure
- Speeds up installation
- Securable in the Off position
- Robust metal enclosure with Knockout cable entries

CAT REF.	DESCRIPTION
NHDSMS	Dual Isolator
NHDS106B16	Dual Isolator with SP 16A MCB
NSPE-5359/15	Dual Isolator twin string 2 x DC & AC
NSPE-5359/12	Dual Isolator twin string 2 x DC & AC with SP 16A MCB

When circuit protection devices are provided at the inverter output, the installer must ensure that the characteristics of the protective device are suitable for the fault levels at that point in the circuit and will meet required disconnection times

PV supplies (DC & AC) must be arranged so that the converter can be isolated from both supplies for maintenance

NHDSREC4

DUAL SUPPLY PV/MAINS SUPPLY SWITCH

Two isolators in a single enclosure that allows the installer to save time by comparison to other methods that utilise two separate enclosures.

- Allows for the addition of PV supplies using the normal input terminations at each consumer unit
- 4 Pole Switch gives single point for total Isolation of both supplies
- Compact Combined Dual Supply Isolator
- Securable in the OFF position
- Sealable covers for security
- Security Screw can be wire sealed

CAT REF.	DESCRIPTION
NHDSREC4	**REC Isolator** 100A, 230V AC DP 2 Module Isolator, lockable 40A, 230V AC DP 2 Module Isolator, lockable Enclosure with split cover and meter seal and seal-able security screw.

NHB16MPV

PV CONSUMER UNIT

Insulated metered consumer unit supplied with either Main Switch and 16A SP MCB or 16A RCBO with optional MID meter.

- 63A 320V AC DP Isolator
- 16A B Curve SP MCB
- 40A direct read MID Meter.
- Ready assembled consumer unit complete with MID Certified meter
- Combined unit simplifies and speeds up installation
- Complete with Isolator & MCB
- Easy read permanently displayed kWh reading
- Option available with RCBO or MCB

CAT REF.	DESCRIPTION
NHRCBO16BMPV	With DP 16A RCBO (with meter)
NHB16MPV	With SP 16A MCB (with meter)
NSPE-5392/6	With DP 16A RCBO (no meter)
NHB16PV	With SP 16A MCB (no meter)

PV supplies should be connected to a dedicated circuit at the consumer unit (not share a final sub circuit)

PV supplies should be connected to the supply side of the MCB at the consumer unit (not reverse fed)

PV Meters must comply with MID2004/22/EC B&D or B&F

Note: Surge Protection devices and Type B RCDs are available on request

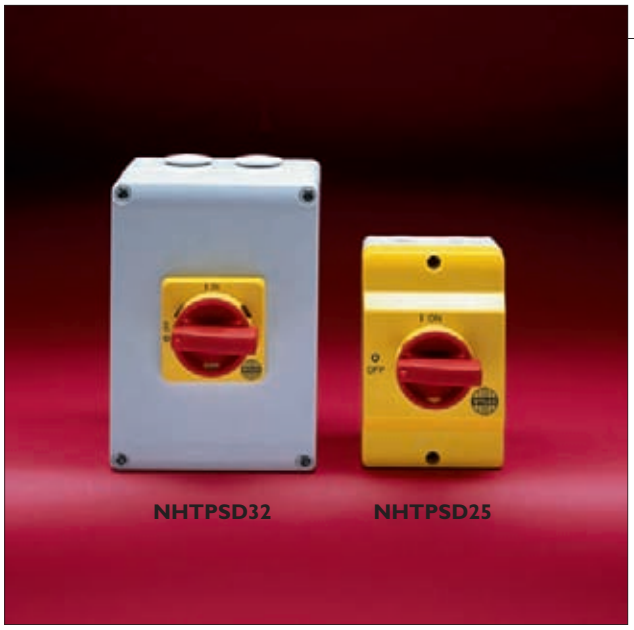
For PV Installation Requirements see page 60/61.

DC ISOLATOR

DC Isolator in an all insulated enclosure with rotary handle and padlock locking Off facility.

- Multi Pole
- 25A, 32A, 40A
- 500V or 600V DC
- Insulated Enclosure
- Rotary Handle & padlock 'Off' facility
- DC - 21B utilization category

CAT REF.	DESCRIPTION
NHDC325004P	32A 500V 4 Pole
NHDC405004P	40A 500V 4 Pole
NHDC256006P	25A 600V 6 Pole
NHDC406006P	40A 600V 6 Pole



AC ISOLATOR

AC Isolator in an all insulated IP65 enclosure with rotary door interlock and padlock locking Off facility.

- Multi Pole
- 16, 25 or 32A, AC 21 & AC 23 rated
- 230V AC
- IP65 Enclosure
- Rotary Handle & padlock 'Off' facility

CAT REF.	DESCRIPTION
NHTPSD16	16A 230V AC 3 Pole
NHTPSD25	25A 230V AC 3 Pole
NHTPSD32	32A 230V AC 3 Pole

MID METERS IN ENCLOSURE

MID B&D certified meters c/w an IP40 insulated enclosure.

- Direct connected kWh meter
- Mechanical barell number or Liquid Crystal Display
- Pulsed output for BMS monitoring
- DIN Rail mounting

CAT REF.	DESCRIPTION
NHSPMTRA	1 Mod MID Meter (Analogue)
NHSPMTRD	1 Mod MID Meter (Digital)

Note: Surge Protection devices and Type B RCDs are available on request

For PV Installation Requirements see page 60/61.


NH14DSRCBMPVF

MAIN SWITCH DUAL SUPPLY PV CONSUMER UNIT WITH MID CERTIFIED GENERATION METER

CAT REF.	DESCRIPTION
NH15DSMPVF	15 Way unit with dual supply isolators & 16A SP MCB
NH10DSMPVF	10 Way unit with dual supply isolators & 16A SP MCB
NH14DSRCBMPVF	14 Way unit with dual supply isolators & 16A DP RCBO
NH9DSRCBMPVF	9 Way unit with dual supply isolators & 16A DP RCBO

MAIN SWITCH DUAL SUPPLY PV CONSUMER UNIT

NH16DSPVF	16 Way unit with dual supply isolators & 16A SP MCB
NH11DSPVF	11 Way unit with dual supply isolators & 16A SP MCB
NH15DSRCBPVF	15 Way unit with dual supply isolators & 16A DP RCBO
NH10DSRCBPVF	10 Way unit with dual supply isolators & 16A DP RCBO

Double Pole MCB options available on request


NH12DSRCBMPVSL

SPLIT LOAD DUAL SUPPLY PV CONSUMER UNIT WITH MID CERTIFIED GENERATION METER

CAT REF.	DESCRIPTION
NH13DSMPVSL	13 Way unit with dual supply isolators & 16A SP MCB
NH8DSMPVSL	8 Way unit with dual supply isolators & 16A SP MCB
NH12DSRCBMPVSL	12 Way unit with dual supply isolators & 16A DP RCBO
NH7DSRCBMPVSL	7 Way unit with dual supply isolators & 16A DP RCBO

SPLIT LOAD DUAL SUPPLY PV CONSUMER UNIT

NH14DSPVSL	14 Way unit with dual supply isolators & 16A SP MCB
NH9DSPVSL	9 Way unit with dual supply isolators & 16A SP MCB
NH13DSRCBPVSL	13 Way unit with dual supply isolators & 16A DP RCBO
NH8DSRCBPVSL	8 Way unit with dual supply isolators & 16A DP RCBO

Double Pole MCB options available on request


NH10DSRCBMPVHI

HIGH INTEGRITY DUAL SUPPLY PV CONSUMER UNIT WITH MID CERTIFIED GENERATION METER

CAT REF.	DESCRIPTION
NH11DSMPVHI	11 Way unit with dual supply isolators & 16A SP MCB
NH10DSRCBMPVHI	10 Way unit with dual supply isolators & 16A DP RCBO

HIGH INTEGRITY DUAL SUPPLY PV CONSUMER UNIT

NH12DSPVHI	12 Way unit with dual supply isolators & 16A SP MCB
NH11DSRCBPVHI	11 Way unit with dual supply isolators & 16A DP RCBO

Double Pole MCB options available on request


NH10DSRCBMPVDR

DUAL RCD DUAL SUPPLY PV CONSUMER UNIT WITH MID CERTIFIED GENERATION METER

CAT REF.	DESCRIPTION
NH11DSMPVDR	11 Way unit with dual supply isolators & 16A SP MCB
NH6DSMPVDR	6 Way unit with dual supply isolators & 16A SP MCB
NH10DSRCBMPVDR	10 Way unit with dual supply isolators & 16A DP RCBO
NH5DSRCBMPVDR	5 Way unit with dual supply isolators & 16A DP RCBO

DUAL RCD DUAL SUPPLY PV CONSUMER UNIT

NH12DSPVDR	12 Way unit with dual supply isolators & 16A SP MCB
NH7DSPVDR	7 Way unit with dual supply isolators & 16A SP MCB
NH11DSRCBPVDR	11 Way unit with dual supply isolators & 16A DP RCBO
NH6DSRCBPVDR	6 Way unit with dual supply isolators & 16A DP RCBO

Double Pole MCB options available on request

Note: Surge Protection devices and Type B RCDs are available on request

For PV Installation Requirements see page 60/61.

NSPE-5359/11

COMBINATION DC & AC PV ISOLATOR WITH SUNCLIX PLUG IN CONNECTORS

A combination of DC and AC Isolators in a single enclosure. The DC Isolator(s) are connected to pre-wired Sunclix PV connectors that allows the installer to save even more time by comparison to other methods that utilise two separate enclosures. Class II construction.

- Available with or without local circuit protection devices (MCB, RCD or RCBO)
- Compact combined DC & AC Isolator in one enclosure
- Speeds up installation
- Outgoing Sunclix connections provided (no crimp tool required)
- Securable in the Off position
- Robust metal enclosure with Knockout cable entries

CAT REF.	DESCRIPTION
NSPE-5359/11	Dual Isolator with SP 16A MCB
NSPE-5359/10	Dual Isolator twin string 2 x DC & AC with SP 16A MCB

When circuit protection devices are provided at the inverter output, the installer must ensure that the characteristics of the protective device are suitable for the fault levels at that point in the circuit and will meet required disconnection times

PV supplies (DC & AC) must be arranged so that the converter can be isolated from both supplies for maintenance

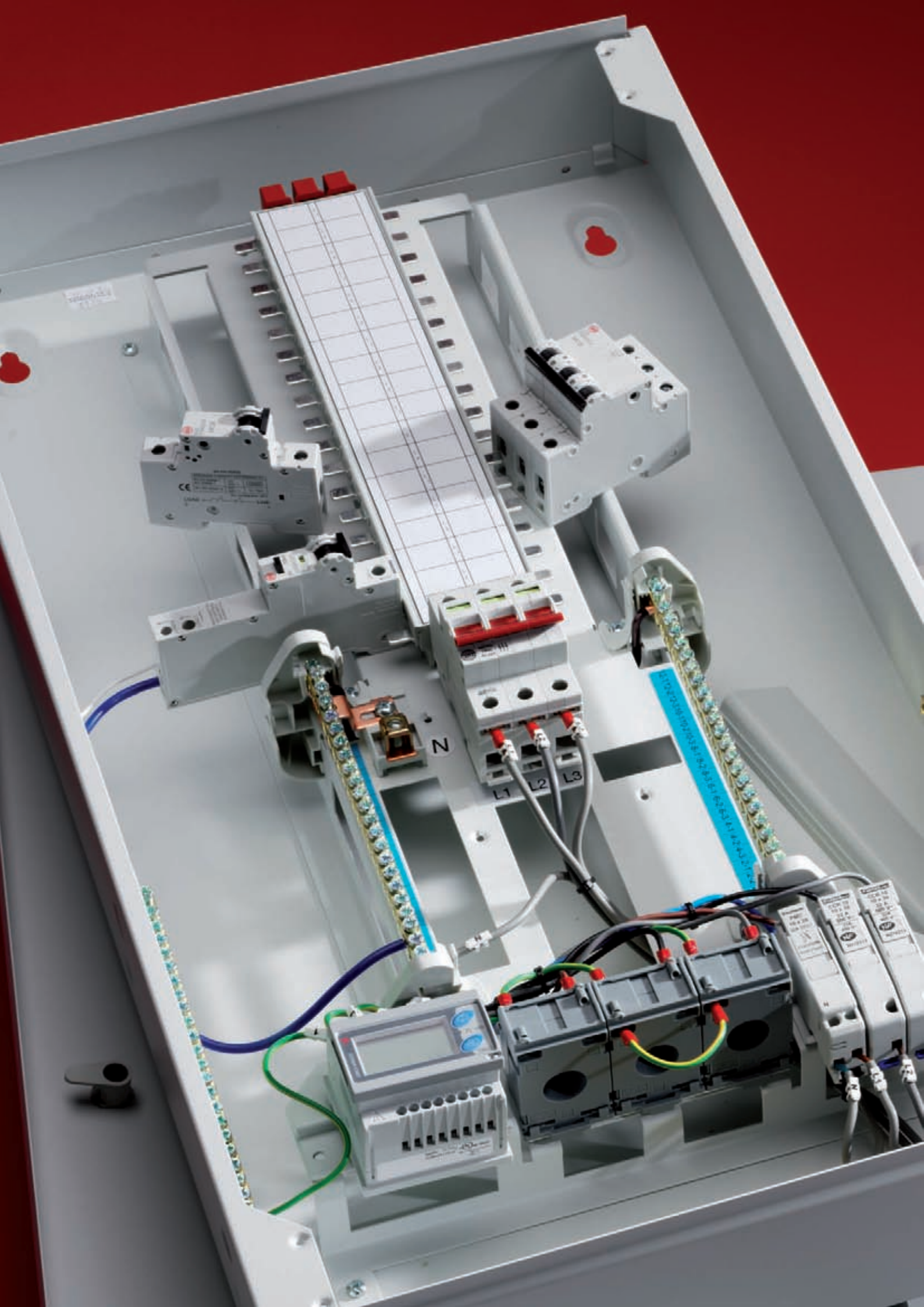
NSPE-5359/10

NSPE-5580

PV-DC TYPE B RCD IN ENCLOSURE

CAT REF.	DESCRIPTION
NSPE-5579	16A 30mA DP RCD
NSPE-5580	40A 30mA DP RCD
NSPE-5581	40A 300mA DP RCD

For PV Installation Requirements see page 60/61.


N
L1
L2
L3

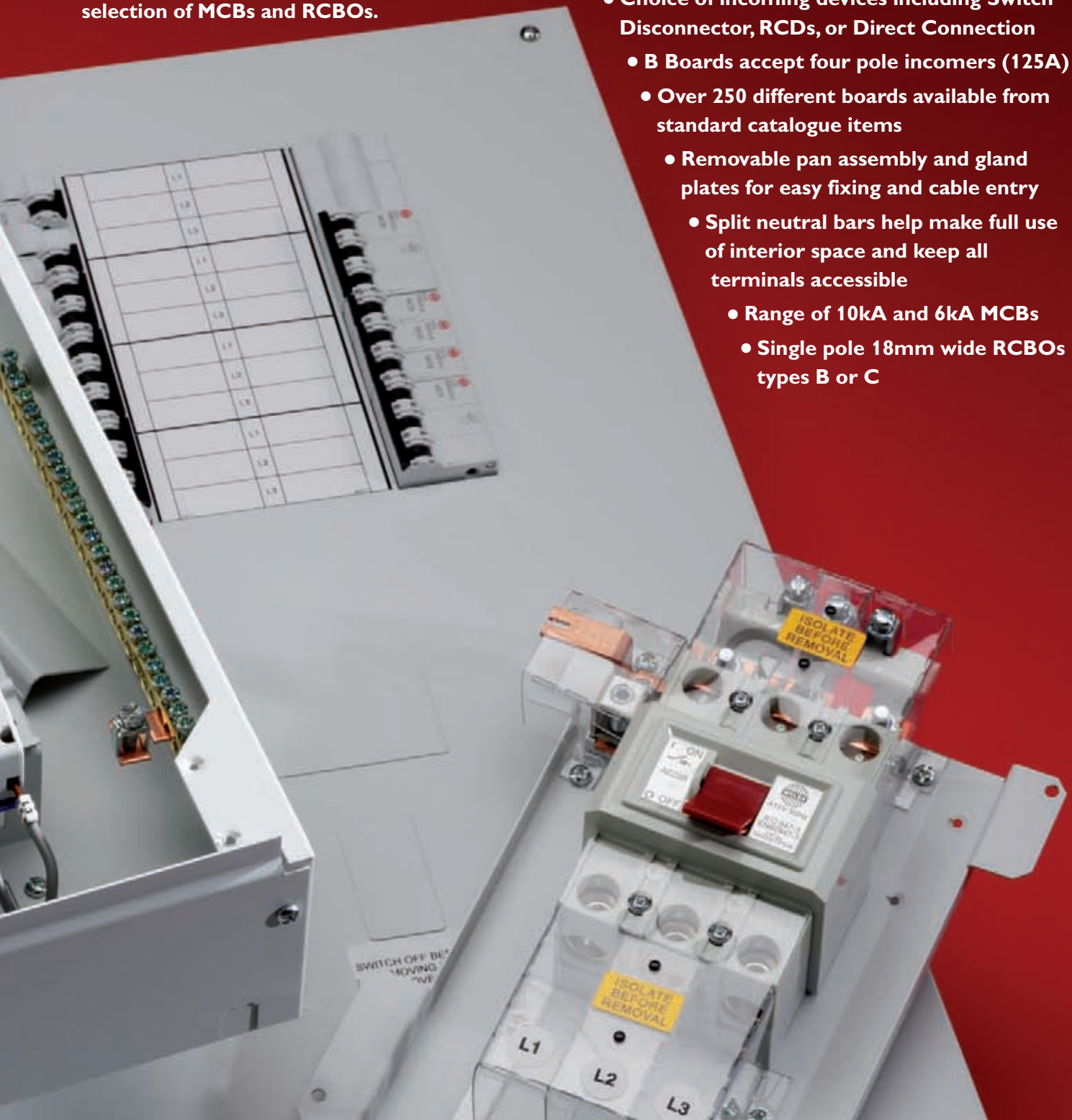
NH METER READY DISTRIBUTION BOARDS

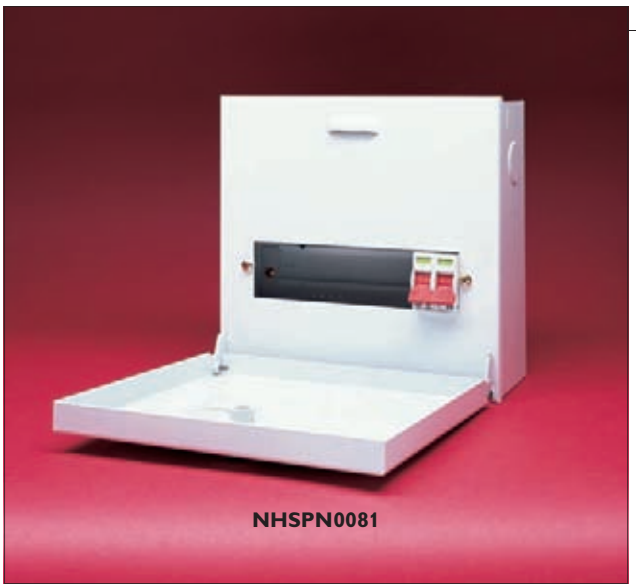
The Wylex range of NH distribution Boards is designed to cater for a variety of industrial and commercial applications.

The wide range of distribution boards is complemented by an extensive choice of incoming devices including direct connection, switch disconnector or RCD. All TP incoming options allow for an integral metering option. Outgoing device options include a broad selection of MCBs and RCBOs.

This comprehensive collection of circuit protection and distribution products allows the contractor to select the most economical and electrically appropriate solutions.

- **Integral metering facility**
- **All metal enclosures for both A Boards and B Boards**
- **Two frame sizes 125A and 250A B Boards**
- **Choice of incoming devices including Switch Disconnector, RCDs, or Direct Connection**
- **B Boards accept four pole incomers (125A)**
- **Over 250 different boards available from standard catalogue items**
- **Removable pan assembly and gland plates for easy fixing and cable entry**
- **Split neutral bars help make full use of interior space and keep all terminals accessible**
- **Range of 10kA and 6kA MCBs**
- **Single pole 18mm wide RCBOs types B or C**




NHSPN0081

TYPE 'A' SP & N DISTRIBUTION BOARD

CAT REF	DESCRIPTION	NO. OF SP WAYS
NHSPN0051	125A Distribution board Including incomer	5
NHSPN0081	125A Distribution board Including incomer	8
NHSPN00111	125A Distribution board Including incomer	11
NHSPN00141	125A Distribution board Including incomer	14
NHSPN00161	125A Distribution board Including incomer	16
NHSPN00191	125A Distribution board Including incomer	19

A wide range of custom built variations are also available.
Contact Wylex Technical for full details.


NHTN4MR

TYPE 'B' TP & N METER READY DISTRIBUTION BOARDS (Excluding Incomer)

CAT REF	DESCRIPTION	NO. OF TP WAYS
NHTN4MR	125A Distribution board Excluding incomer	4
NHTN6MR	125A Distribution board Excluding incomer	6
NHTN8MR	125A Distribution board Excluding incomer	8
NHTN12MR	125A Distribution board Excluding incomer	12
NHTN16MR	125A Distribution board Excluding incomer	16
NHTN20MR	125A Distribution board Excluding incomer	20
NHTN24MR	125A Distribution board Excluding incomer	24

Suitable for use with switch disconnector, RCD or direct connection incomer arrangement
IP66 TP & N MCB Distribution boards are available up to 16 TP ways


NHTN2580MR

TYPE 'B' TP & N DISTRIBUTION BOARDS (Excluding Incomer)

CAT REF	DESCRIPTION	NO. OF TP WAYS
NHTN2540MR	250A Distribution board Excluding incomer	4
NHTN2560MR	250A Distribution board Excluding incomer	6
NHTN2580MR	250A Distribution board Excluding incomer	8
NHTN25120MR	250A Distribution board Excluding incomer	12
NHTN25160MR	250A Distribution board Excluding incomer	16
NHTN25200MR	250A Distribution board Excluding incomer	20
NHTN25240MR	250A Distribution board Excluding incomer	24


WS102

NH TYPE A BOARD INCOMERS

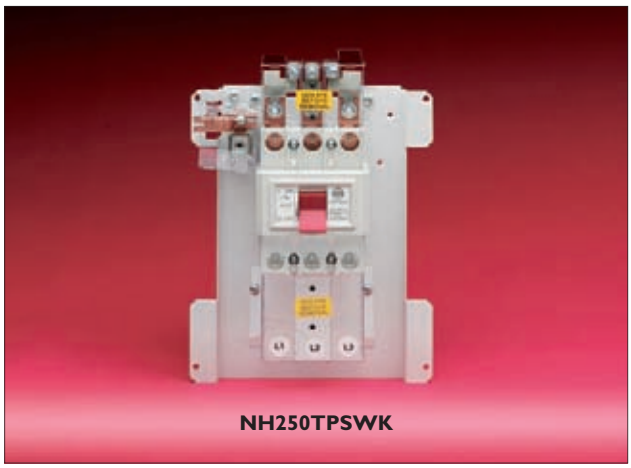
CAT REF	DESCRIPTION	RATING
WS602	2 Pole 2 module switch	63A
WS102	2 Pole 2 module switch	100A
WS122	2 Pole 2 module switch	125A
WRS63/2	Double Pole RCD	63A 30mA
WRS80/2	Double Pole RCD	80A 30mA
WRS100/2	Double Pole RCD	100A 30mA
WRM63/2	Double Pole RCD	63A 100mA
WRM80/2	Double Pole RCD	80A 100mA
WRM100/2	Double Pole RCD	100A 100mA
WRL63/2	Double Pole RCD	63A 300mA
WRL100/2	Double Pole RCD	100A 300mA
NHDPDC	Double Pole direct connection	100A


WS123

NH TYPE B BOARD INCOMERS

CAT REF	DESCRIPTION	RATING
WS603	3 Pole 3 module switch	63A
WS103	3 Pole 3 module switch	100A
WS123	3 Pole 3 module switch	125A
WS104	4 Pole 4 module switch*	100A
WS124	4 Pole 4 module switch*	125A
WRS63/4	Four Pole RCD*	63A 30mA
WRS100/4	Four Pole RCD*	100A 30mA
WRM63/4	Four Pole RCD*	63A 100mA
WRM100/4	Four Pole RCD*	100A 100mA
WRL63/4	Four Pole RCD*	63A 300mA
WRL100/4	Four Pole RCD*	100A 300mA
WRMT100/4	Four Pole Time Delay RCD*	100A 100mA
NH4PINKIT	Four Pole Incomer Connection Kit*	100A
NH250TPSWK	Three Pole switch disconnector+	250A
NHTPDC	Direct connection	125A
NH250DCK	Direct connection+	250A
NHSPAK	Single phase adaptor kit	125A

* Four Pole DIN Incomers require Incomer connection Kit. REF, NH4PINKIT
+ Incomers for NHTN25xx range only


NH250TPSWK


NHAB2

EXTENSION & ACCESSORY BOXES

CAT REF	DESCRIPTION	DIN MODULES
NHEB	Cable extension box (plain)	
NHEB/DIN	DIN accessory box single row (plain)	
NHAB	DIN accessory box single row	18
NHAB2	DIN accessory box two row	36
NHAB3	DIN accessory box three row	54
NHAB4	DIN accessory box four row	72
NHAB5	DIN accessory box five row	90

18 modules per row

ACCESSORIES

CAT REF	DESCRIPTION
NHEP11	Replacement gland plate
NHBL1	1 Module blank
NHBL3	3 Module blank
NHBL6	6 Module blank
NHBL9	9 Module blank
NHBLM1	1 Module MCB dummy blank
NH00PP	Blanking plate - Twist fit
NH18BB1	9 busbar insulators
MCBLDX	Locking device for MCB
WPL	Padlock for MCBLDX
NHPBDL	MCB Board lock
PDDPL	Door lock with padlocking device
NHCEKIT	14 terminal clean earth kit
NHCEKIT20	20 terminal clean earth kit
NHMSL	Locking device for incoming switch
NHBBTOK	Busbar tap off kit

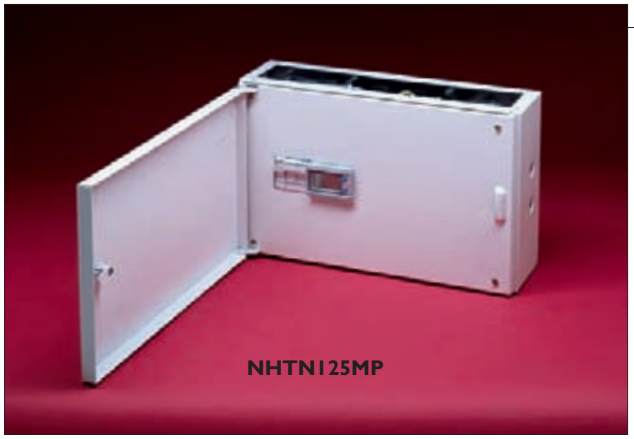
NH DISTRIBUTION BOARD INTEGRAL METER KITS

CAT REF.	DESCRIPTION
NHCM125INMP	125A Std Integral meter kit
NHMID125INMP	125A MID Integral meter kit

- For use with 125A Type B TPN Distribution Boards
- Complete with meter, current transformers & cable loom
- Digital meter with kWh, amps, and volts readout

NHCM250INMP	250A Std Integral meter kit
NHMID250INMP	250A MID Integral meter kit

- For use with 250A Type B TPN Distribution Boards
- Complete with meter, current transformers & cable loom
- Digital meter with kWh, amps, and volts readout



METER KIT EXTENSION BOXES

CAT REF.	DESCRIPTION
NHTN125MP	125A Enclosed meter pack

- For use with 125A Type B TPN Distribution Boards
- Complete with meter, current transformers & cable loom
- Digital meter with kWh, amps, and volts readout

NHTN250MP	250A Enclosed meter pack

- For use with 250A Type B TPN Distribution Boards
- Complete with meter, current transformers & cable loom
- Digital meter with kWh, amps, and volts readout

For MID approved options contact Wylex Technical for full details


NHTN125LP

LIGHT AND POWER METER KIT EXTENSION BOXES

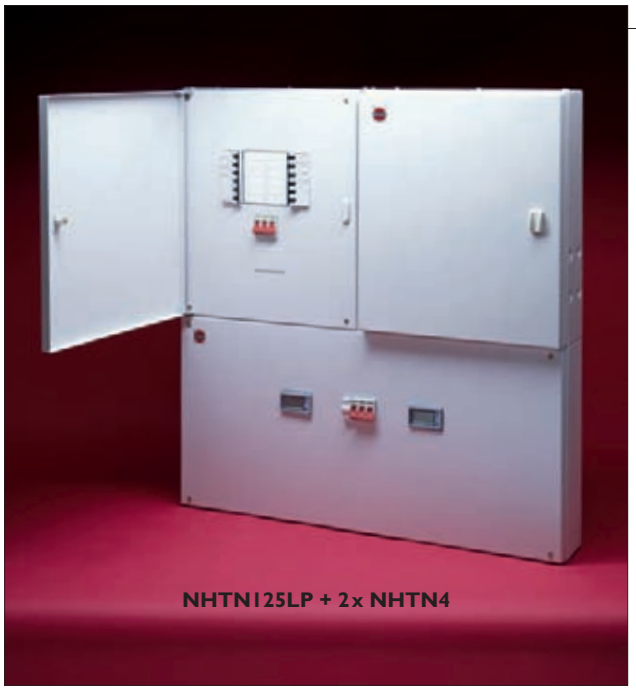
CAT REF.	DESCRIPTION
NHTN125LP	125A Meter extension box

- For use with 125A Type B TPN Distribution Boards
- Complete with meter, current transformers & cable loom
- Digital meter with kWh, amps, and volts readout

NHTN250LP	250A Meter extension box

- For use with 250A Type B TPN Distribution Boards
- Complete with meter, current transformers & cable loom
- Digital meter with kWh, amps, and volts readout

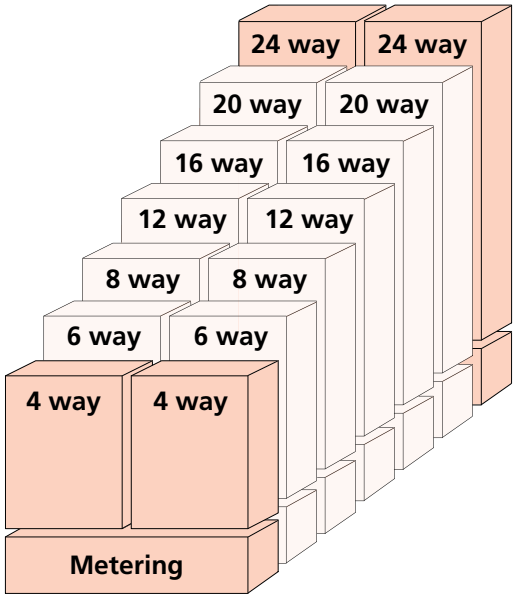
For MID approved options contact Wylex Technical for full details


NHTN125LP + 2x NHTN4

DUAL METERED LIGHT AND POWER BOARDS

- Suitable for use with any size of distribution board of the same rating
- 49 Distribution Board combinations
- Min 2 x 4 TP ways
- Max 2 x 24 TP ways
- Any two standard size distribution boards can be mounted to the L&P metering unit to meet your specific requirements

A wide range of custom built variations are also available contact Wylex Technical for full details



49 different configurations can be achieved from the 7 Triple pole way standard design options – 4w, 6w, 8w, 12w, 16w, 20w and 24way of NH distribution boards.

Any standard size of NH unit can be combined together ranging from the 7 basic even splits options e.g. 4w + 4w plus another 42 uneven split combinations that can be assembled together for example the utmost combination of a 4w + 24w units.

These 49 design combinations give 17 options for the total number of combined triple ways ranging from 8 TP ways - 4w + 4w to a maximum of 48 TP ways - 24w + 24w combination.

A wide range of custom built variations are also available, contact Wylex Technical for full details.

SINGLE POLE MCBs

RATING	POLES	B CURVE	C CURVE	D CURVE
6A 6kA	1	NSB06-B	NSB06-C	NSB06-D
10A 6kA	1	NSB10-B	NSB10-C	NSB10-D
16A 6kA	1	NSB16-B	NSB16-C	NSB16-D
20A 6kA	1	NSB20-B	NSB20-C	NSB20-D
32A 6kA	1	NSB32-B	NSB32-C	NSB32-D
40A 6kA	1	NSB40-B	NSB40-C	NSB40-D
50A 6kA	1	NSB50-B	NSB50-C	NSB50-D
63A 6kA	1	NSB63-B	NSB63-C	NSB63-D
6A 10kA	1	PSB06-B	PSB06-C	PSB06-D
10A 10kA	1	PSB10-B	PSB10-C	PSB10-D
16A 10kA	1	PSB16-B	PSB16-C	PSB16-D
20A 10kA	1	PSB20-B	PSB20-C	PSB20-D
25A 10kA	1	PSB25-B	PSB25-C	PSB25-D
32A 10kA	1	PSB32-B	PSB32-C	PSB32-D
40A 10kA	1	PSB40-B	PSB40-C	PSB40-D
50A 10kA	1	PSB50-B	PSB50-C	PSB50-D
63A 10kA	1	PSB63-B	PSB63-C	PSB63-D

TWO POLE MCBs

RATING	POLES	B CURVE	C CURVE	D CURVE
6A 10kA	2	PSB206-B	PSB206-C	PSB206-D
10A 10kA	2	PSB210-B	PSB210-C	PSB210-D
16A 10kA	2	PSB216-B	PSB216-C	PSB216-D
20A 10kA	2	PSB220-B	PSB220-C	PSB220-D
25A 10kA	2	PSB225-B	PSB225-C	PSB225-D
32A 10kA	2	PSB232-B	PSB232-C	PSB232-D
40A 10kA	2	PSB240-B	PSB240-C	PSB240-D
50A 10kA	2	PSB250-B	PSB250-C	PSB250-D
63A 10kA	2	PSB263-B	PSB263-C	PSB263-D

TRIPLE POLE MCBs

RATING	POLES	B CURVE	C CURVE	D CURVE
6A 6kA	3	NSB306-B	NSB306-C	NSB306-D
10A 6kA	3	NSB310-B	NSB310-C	NSB310-D
16A 6kA	3	NSB316-B	NSB316-C	NSB316-D
20A 6kA	3	NSB320-B	NSB320-C	NSB320-D
32A 6kA	3	NSB332-B	NSB332-C	NSB332-D
40A 6kA	3	NSB340-B	NSB340-C	NSB340-D
50A 6kA	3	NSB350-B	NSB350-C	NSB350-D
63A 6kA	3	NSB363-B	NSB363-C	NSB363-D
6A 10kA	3	PSB306-B	PSB306-C	PSB306-D
10A 10kA	3	PSB310-B	PSB310-C	PSB310-D
16A 10kA	3	PSB316-B	PSB316-C	PSB316-D
20A 10kA	3	PSB320-B	PSB320-C	PSB320-D
25A 10kA	3	PSB325-B	PSB325-C	PSB325-D
32A 10kA	3	PSB332-B	PSB332-C	PSB332-D
40A 10kA	3	PSB340-B	PSB340-C	PSB340-D
50A 10kA	3	PSB350-B	PSB350-C	PSB350-D
63A 10kA	3	PSB363-B	PSB363-C	PSB363-D

SINGLE MODULE RCBO - FOR USE IN NH TYPE A & B DISTRIBUTION BOARDS

RATING	POLES	RCD RATING	B CURVE	C CURVE
6A 10kA	1	30mA	PSBS6-B/1	PSBS6/1
10A 10kA	1	30mA	PSBS10-B/1	PSBS10/1
16A 10kA	1	30mA	PSBS16-B/1	PSBS16/1
20A 10kA	1	30mA	PSBS20-B/1	PSBS20/1
32A 10kA	1	30mA	PSBS32-B/1	PSBS32/1
40A 10kA	1	30mA	PSBS40-B/1	PSBS40/1
50A 10kA	1	30mA	PSBS50-B/1	PSBS50/1

RCBOs with longer incoming neutral flying leads (1.2M) are available - Suffix the Type C list number with LT (e.g. PSBS6/1LT)

ACCESSORIES

CAT REF	DESCRIPTION
NHEP11	Replacement gland plate
NHBL1	1 Module blank
NHBL3	3 Module blank
NHBL6	6 Module blank
NHBL9	9 Module blank
NHBLM1	1 Module MCB dummy blank
NH00PP	Blanking plate - Twist fit
NH18BB1	9 busbar insulators
MCBLDX	Locking device for MCB
WPL	Padlock for MCBLDX
NHPBDL	MCB Board lock
PDDPL	Door lock with padlocking device
NHCEKIT	14 terminal clean earth kit
NHCEKIT20	20 terminal clean earth kit
NHMSL	Locking device for incoming switch
NHBBTOK	Busbar tap off kit

MODULAR DIN RAIL DEVICES

CAT REF.	DESCRIPTION	MODULE
SMSCD11	Digital Timeclock 1 channel 1xNO/NC Contact 16A	1
TMSCD21	Digital Timeclock 1 channel 1xNO Contact 16A	2
TMTCD22	Digital Timeclock 2 channel	2
MESB-20NC	20A 2 Pole Contactor 2 x N/C 240V Coil	1
MESB-20NO	20A 2 Pole Contactor 2 x N/O 240V Coil	1
MESB-24NC	24A 4 Pole Contactor 4 x N/C 240V Coil	2
MESB-24NO	24A 4 Pole Contactor 4 x N/O 240V Coil	2
MESB-40NC	40A 4 Pole Contactor 4 x N/C 240V Coil	3
MESB-40NO	40A 4 Pole Contactor 4 x N/O 240V Coil	3
MESB-63NO	63A 4 Pole Contactor 4 x N/O 240V Coil	3

For use in DIN Enclosures EG: NH ED Range, Flexible CUs or '+' Units

KILOWATT HOUR METERS

CAT REF.	DESCRIPTION	MODULE
NHCM80SP	80A SP kWh Meter	2
NHCM80TP	80A TP kWh Meter	4
NHMID80SP	80A SP kWh (MID Approved) Meter	2
NHMID80TP	80A TP kWh (MID Approved) Meter	4

- Direct Connected Digital kWh meter
- Pulsed output for BMS monitoring
- DIN Rail mounting

For use in DIN enclosures eg: NHAB

MID approval - see Technical section page 75.

NH125 MCCB PANELBOARDS

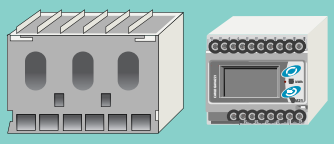
The NH125 Panelboard system offers 250A and 400A rated, fully shrouded busbar systems in a modular enclosure which includes integral incoming metering facility.

The enclosure system combined with NHGG MCCBs, outgoing metering and a range of accessories, provides a competent flexible main or sub-main panelboard.

- **NHGG125 MCCBs 15A-125A ratings**
- **25kA breaking capacity**
- **Max conductor cross sections: up to and including 40 amp rating - 16mm²**
  above 40 amp rating - 50mm²
- **Comprehensive range of accessories**
- **Fully shrouded bus bars**
- **Excellent access to N/E bars for cabling**
- **Full or partial lockable doors**
- **Conforms fully with BSEN 61439-2 form 3b type 2**
- **Enclosure supplied with factory fitted incoming switching unit where applicable**

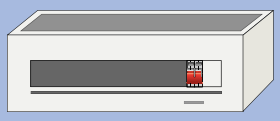
NH125 PANELBOARD SELECTION GUIDE

Integral Incoming Meter Kits



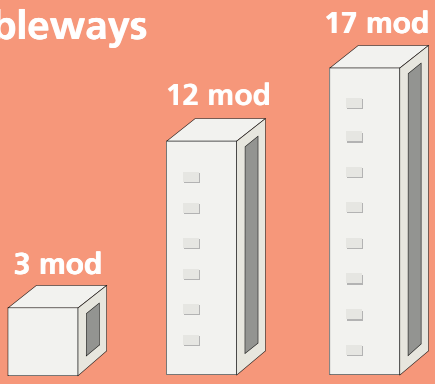
	250A	400A
Std	NHPB250CTINM	NHPB400CTINM
MID	NHPB250CTINMID	NHPB400CTINMID

Add-on Units



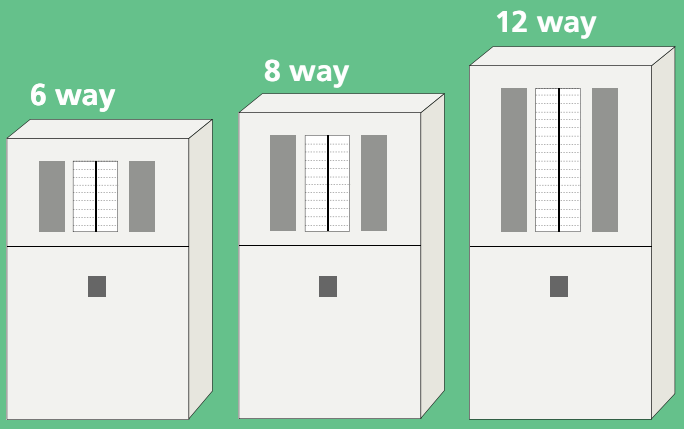
Add-on 100A SPN Distribution Board
Add-on Control Module - 24 mod
Add-on 250A Panelboard Metering Kit
Add-on 400A Panelboard Metering Kit
Cable Spreader Box

Cableways



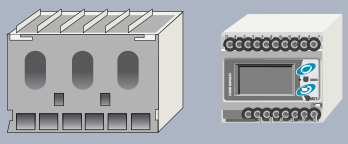
Add-on unit	NHPB3MW
250A 6 Way	NHPB12MW
250A 8 Way	NHPB13MW
400A 6 Way	NHPB14MW
250A 12 Way/400A 8 Way	NHPB15MW
250A 16 Way/400A 12 Way	NHPB17MW
400A 16 Way	NHPB19MW

Panelboards
(includes TP switching unit)



250A	NHPBG6SW250	NHPBG8SW250	NHPBG12SW250
400A	NHPBG6SW400	NHPBG8SW400	NHPBG12SW400

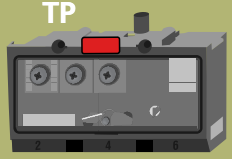
Outgoing Metering



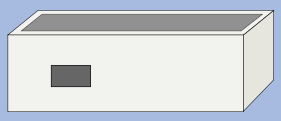
	Standard Meter Kit	MID Meter Kit
63A	NHPB63CTM	-
125A	NHPB125CTM	NHPB125CTMID

Each metering cableway of outgoing meter kits requires power supply cable NHPBOCL

Overcurrent Release Modules
(required for each incomer)

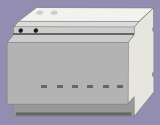


	250A	400A
63A - 160A	NHJ631603ELI	-
100A - 250A	NHJ1002503ELI	NHL1002503ELI
160A - 400A	-	NHL1604003ELI
Switch Disconnector	NHJ2503SWDM	NHL630SWDM



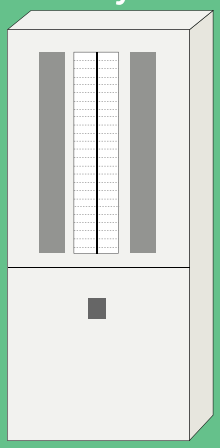
NHPBGDB
NHPBGAB
NHPBG250MP
NHPBG400MP
NHPBGCSB

Integral Lightning / Surge Protection



Combination Kit	NHPBCLSA
Lightning Arrester Kit	NHPBLA
Surge Arrester Kit	NHPBSA

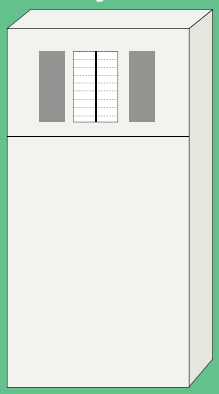
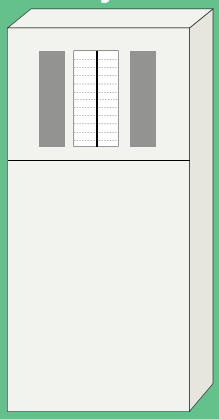
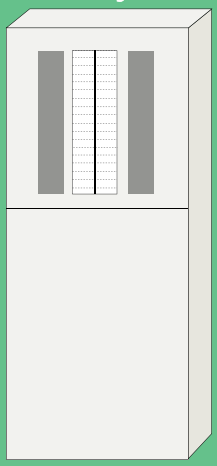
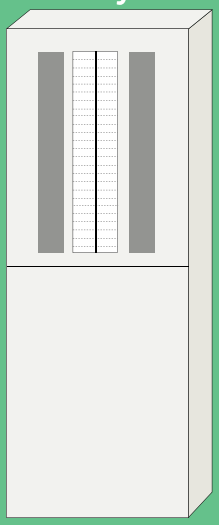
16 way



NHPBG16SW250
NHPBG16SW400

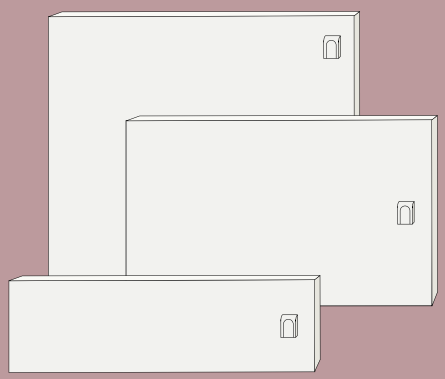
Cableways

Panelboards
(direct connection)

	6 way	8 way	12 way	16 way
				
250A	NHPBG6DC250	NHPBG8DC250	NHPBG12DC250	NHPBG16DC250
400A	NHPBG6DC400	NHPBG8DC400	NHPBG12DC400	NHPBG16DC400

Door Kits

Add-on Units	NHPBG3DR
Half door - 6 Way	NHPBG5DR
Half door - 8 Way	NHPBG6DR
Half door - 250A incomer	NHPBG7DR
Half door - 12 Way	NHPBG8DR
Half door - 400A incomer	NHPBG9DR
Half door - 16 Way	NHPBG10DR
Full door - 250A 6 Way	NHPBG12DR
Full door - 250A 8 Way	NHPBG13DR
Full door - 400A 6 Way	NHPBG14DR
Full door - 250A 12 Way/400A 8 Way	NHPBG15DR




NHPBG6SW250

PANELBOARD WITH TP SWITCHING UNIT (PLUG-IN MODULE REQUIRED)

DESCRIPTION	250A CAT REF.	400A CAT REF.
6 Way	NHPBG6SW250	NHPBG6SW400
8 Way	NHPBG8SW250	NHPBG8SW400
12 Way	NHPBG12SW250	NHPBG12SW400
16 Way	NHPBG16SW250	NHPBG16SW400

Fault rating:	25kA Icc	25kA for 1 sec
Max 4c Incoming Cu Cable Size:	150mm^2	see note below
Max cable lug connection:	see note below	32mm wide


NHJ1002503ELI

PLUG-IN MODULES FOR 250A INCOMER

250A CAT REF.	DESCRIPTION
NHJ631603ELI	63A - 160A Overcurrent release
NHJ1002503ELI	100A - 250A Overcurrent release
NHJ2503SWDM	250A Switch disconnector


NHL1604003ELI

PLUG-IN MODULES FOR 400A INCOMER

400A CAT REF.	DESCRIPTION
NHL1002503ELI	100A - 250A Overcurrent release
NHL1604003ELI	160A - 400A Overcurrent release
NHL630SWDM	400A Switch disconnector


NHPBG8DC400

DIRECT CONNECTED PANELBOARDS

DESCRIPTION	250A CAT REF.	400A CAT REF.
6 Way	NHPBG6DC250	NHPBG6DC400
8 Way	NHPBG8DC250	NHPBG8DC400
12 Way	NHPBG12DC250	NHPBG12DC400
16 Way	NHPBG16DC250	NHPBG16DC400

Fault rating:	25kA Icc	25kA for 1 sec
Max 4c Incoming Cu Cable Size:	see note below	see note below
Available lug connection: on 30mm wide Cu bar	M8	M10

The 400A switching unit accepts cable lug connections up to 32mm wide. Dependant on the size & type of cable lug selected the potential maximum cable capacity of the cable lug can be up to 300mm^2.


NHGGPCB201

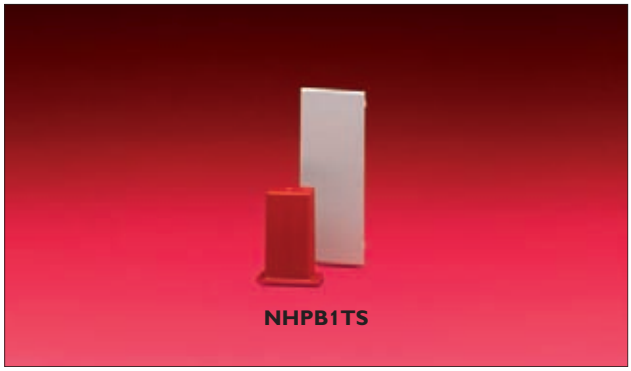
1 POLE OUTGOING G FRAME MCCBs

CAT REF.	DESCRIPTION
NHGGPCB151	15A MCCB
NHGGPCB201	20A MCCB
NHGGPCB251	25A MCCB
NHGGPCB301	30A MCCB
NHGGPCB401	40A MCCB
NHGGPCB501	50A MCCB
NHGGPCB601	60A MCCB
NHGGPCB801	80A MCCB
NHGGPCB1001	100A MCCB
NHGGPCB1251	125A MCCB


NHGGPCB1253

3 POLE OUTGOING G FRAME MCCBs

CAT REF.	DESCRIPTION
NHGGPCB153	15A MCCB
NHGGPCB203	20A MCCB
NHGGPCB253	25A MCCB
NHGGPCB303	30A MCCB
NHGGPCB403	40A MCCB
NHGGPCB503	50A MCCB
NHGGPCB603	60A MCCB
NHGGPCB803	80A MCCB
NHGGPCB1003	100A MCCB
NHGGPCB1253	125A MCCB


NHPB1TS

DOOR BLANKS

CAT REF.	DESCRIPTION
NHPB1TS	NHGG SP MCCB door blank with busbar insulator


NHPB250CTINM

INCOMING INTEGRAL METER KITS

250A CAT REF.	400A CAT REF.	DESCRIPTION
NHPB250CTINM	NHPB400CTINM	Energy Meter Kit - Standard
NHPB250CTINMID	NHPB400CTINMID	Energy Meter Kit - MID

Each kit contains: Digital meter offering Amps, Volts, kWh readout plus pulsed output, block current transformer (MID option - 3CTs), fuses, mounting plates & cable looms. Supplied loose for assembly and connection by others.

Current transformer internal dimensions:

Standard Versions:	MID Versions:
250A - 21mm W x 25mm H slot	250A - 28mm diameter
400A - 31mm W x 36mm H slot	400A - 31mm W x 36mm H slot


NHPBCLSA

INTEGRAL LIGHTNING & SURGE ARRESTERS

CAT REF.	DESCRIPTION
NHPBCLSA	Combination Lightning & Surge Arrester Kit
NHPBLA	Lightning Arrester Kit
NHPBSA	Surge Arrester Kit

Each kit contains: Lightning, Surge or Combination arrester, MCCB, mounting plate & cable loom. Supplied loose for assembly and connection by others. Only one of these three options is possible per panelboard. MCCB mounted in bottom right hand outgoing way.


NHPB125CTM

OUTGOING METER KITS *

STANDARD CAT REF.	MID CAT REF.	DESCRIPTION
NHPB63CTM	-	63A Energy Meter Kit
NHPB125CTM	NHPB125CTMID	125A Energy Meter Kit

* Each metering cableway of outgoing meter kits requires:
NHPBOCL Meter Kit Voltage Supply Cable Loom

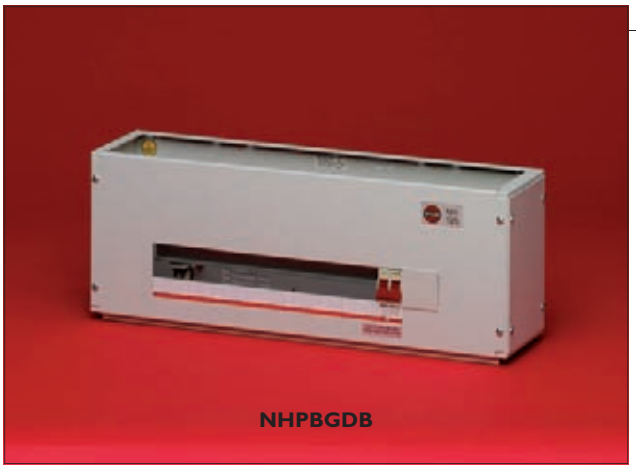
Current transformer internal dimensions:

Standard versions:	MID versions:
63A & 125A - 16mm W x 31mm H slot	125A - 21mm diameter

CABLEWAYS (WITH METER KNOCK-OUTS)

CAT REF.	DESCRIPTION	PANEL BOARD TYPE	AVAILABLE KNOCK-OUTS
NHPB3MW	3 mod	Add-on unit	-
NHPB12MW	12 mod	250A 6 Way	6
NHPB13MW	13 mod	250A 8 Way	6
NHPB14MW	14 mod	400A 6 Way	6
NHPB15MW	15 mod	250A 12W/400A 8 Way	6
NHPB17MW	17 mod	250A 16W/400A 12 Way	8
NHPB19MW	19 mod	400A 16 Way	9

Dimensions: Height as listed, width: 250mm, depth: 180mm



ADD-ON UNITS

CAT REF.	DESCRIPTION
NHPBGDB	Add-on 100A SPN Distribution Board
NHPBGAB	Add-on Control Module - 24 mod
NHPBG250MP	Add-on 250A Panelboard Metering Kit
NHPBG400MP	Add-on 400A Panelboard Metering Kit
NHPBGCSB	Cable Spreader Box

Dimensions: 228mm H x 630mm W x 164mm D

DOOR KITS

CAT REF.	DESCRIPTION	PANEL BOARD TYPE
NHPBG3DR	3 mod	Add-on Units
NHPBG5DR	5 mod	Half door - 6 Way
NHPBG6DR	6 mod	Half door - 8 Way
NHPBG7DR	7 mod	Half door - 250A incomer
NHPBG8DR	8 mod	Half door - 12 Way
NHPBG9DR	9 mod	Half door - 400A incomer
NHPBG10DR	10 mod	Half door - 16 Way
NHPBG12DR	12 mod	Full door - 250A 6 Way
NHPBG13DR	13 mod	Full door - 250A 8 Way
NHPBG14DR	14 mod	Full door - 400A 6 Way
NHPBG15DR	15 mod	Full door - 250A 12 Way/400A 8 Way
NHPBDL	Standard door lock (2 keys)	

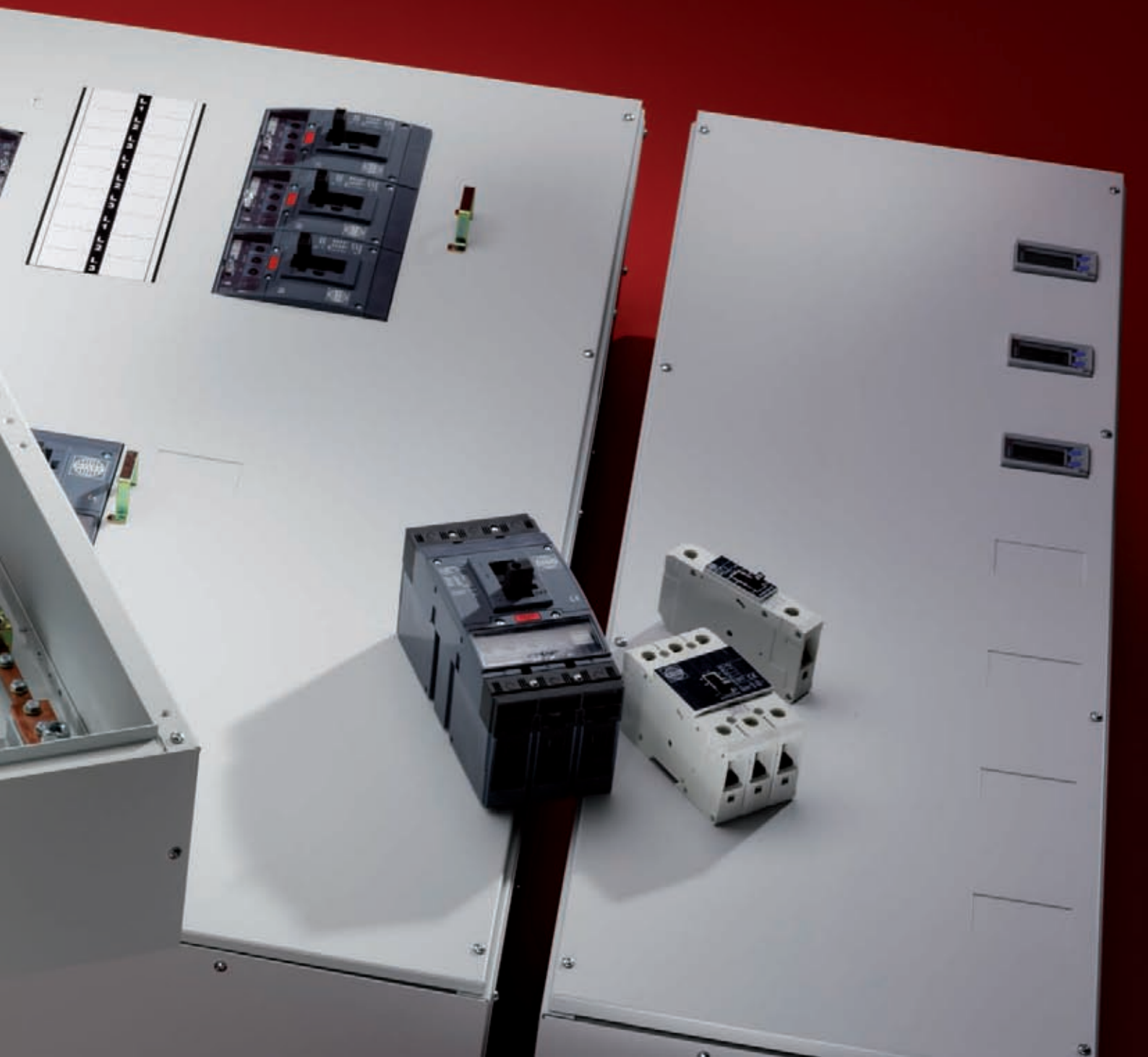

DANGER
400 volts

NH250 MCCB PANELBOARDS

The NH250 Panelboard system offers 400A and 630A rated, fully shrouded busbar systems in a modular enclosure, which includes integral incoming metering facility.

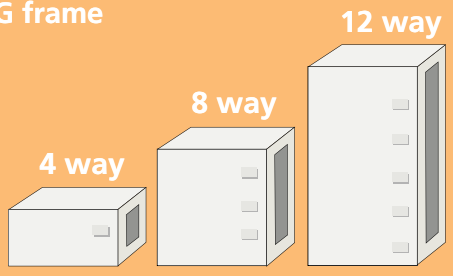
The enclosure system combined with either NHJ or NHGG MCCBs, outgoing metering and a range of accessories, provides a competent flexible main or sub-main panelboard.

- **NHJ250 MCCBs 40A-250A rating J frame with a 36kA or 65kA fault breaking capacity**
- **NHGG125 MCCBs 15A-125A rating G frame with a 25kA fault breaking capacity**
- **Comprehensive range of accessories including sealable terminal covers**
- **Fully shrouded busbars**
- **Excellent access to N/E bars for cabling**
- **Full or partial lockable doors**
- **Conforms fully with BSEN 61439-2 form 3b type 2**

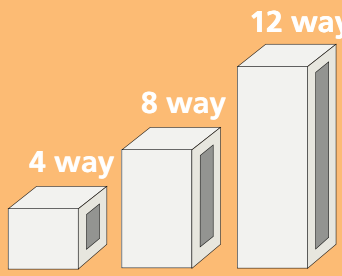


NH250 PANELBOARD SELECTION GUIDE

Extension Cableways
G frame



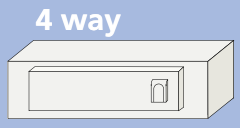
Metered
4 way - NHPBG4MCWA
8 way - NHPBG8MCWA
12 way - NHPBG12MCWA



Standard
4 way - NHPBG4CW
8 way - NHPBG8CW
12 way - NHPBG12CW

Extension Units
G frame

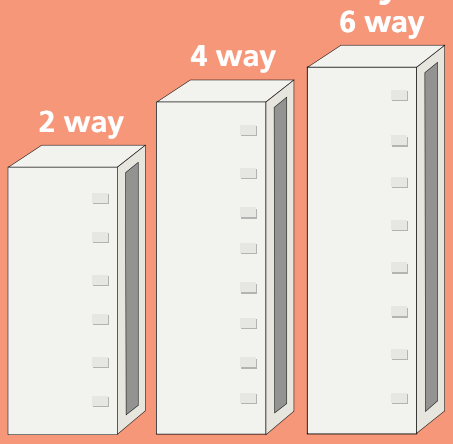
Extension Units rating must match the rating of the Panelboard being extended.



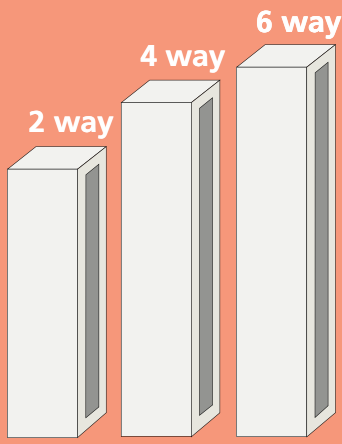
400A	NHPBG4W400AU
630A	NHPBG4W630AU

Outgoing Metering

Panelboard Cableways

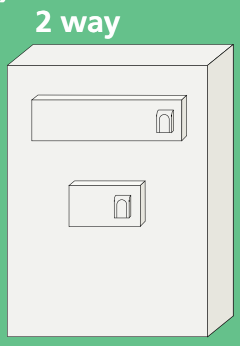


Metered
2 way - NHPBJ2MCW
4 way - NHPBJ4MCW
6 way - NHPBJ6MCW



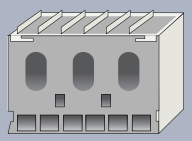
Standard
2 way - NHPBJ2CW
4 way - NHPBJ4CW
6 way - NHPBJ6CW

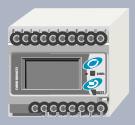
Panelboards
(includes TP or 4P switching unit)



TP	400A	NHPBJ2W400MU3
	630A	NHPBJ2W630MU3
4P	400A	NHPBJ2W400MU4
	630A	NHPBJ2W630MU4

Outgoing Metering





	Standard	MID
63A G frame Meter Kit	NHPBJOMK63	-
125A G frame Meter Kit	NHPBJOMK125	NHPBJMIDOMK125
160A J frame Meter Kit	NHPBJOMK160	NHPBJMIDOMK160
250A J frame Meter Kit	NHPBJOMK250	NHPBJMIDOMK250

Each metering cableway of outgoing meter kits requires power supply cable NHPBOCL

Overcurrent Release Modules
(required for each incomer)

400A
- 100A - 250A
- 160A - 400A
- Switch Disconnector

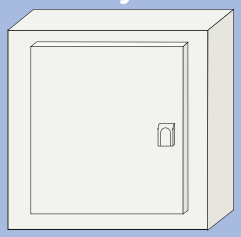
630A
- 100A - 250A
- 160A - 400A
- 250A - 630A
- Switch Disconnector

Extension Unit
J frame

8 way

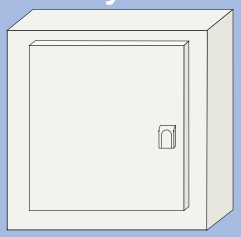
NHPBG8W400AU
NHPBG8W630AU

12 way



NHPBG12W400AU
NHPBG12W630AU

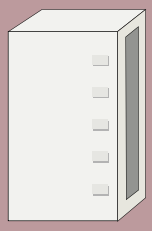
8 way



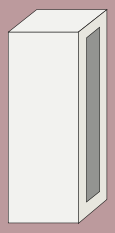
NHPBJ8W400AU 400A
NHPBJ8W630AU 630A

Extension Cableways
J frame only

Metered



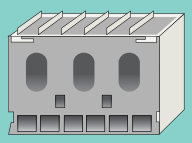
Standard

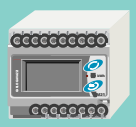


8 way
Metered - NHPBJ8MCWA
Standard - NHPBJ8CW

Outgoing Metering

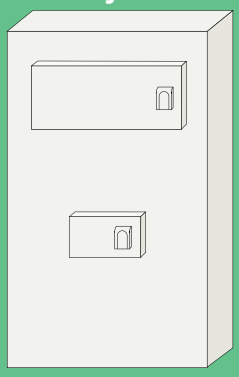
Integral Incoming Meter Kits





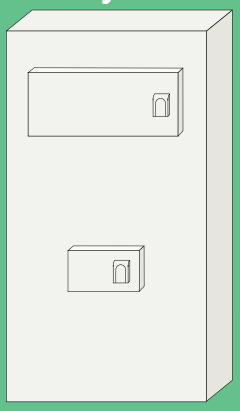
	400A	630A
Std	NHPBJIMK400	NHPBJIMK630
MID	NHPBJMIDIMK400	NHPBJMIDIMK630

4 way



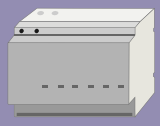
NHPBJ4W400MU3
NHPBJ4W630MU3
NHPBJ4W400MU4
NHPBJ4W630MU4

6 way



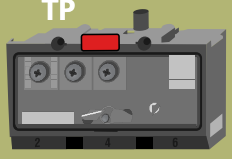
NHPBJ6W400MU3
NHPBJ6W630MU3
NHPBJ6W400MU4
NHPBJ6W630MU4

Integral Lightning / Surge Protection



Combination Kit	NHPBCSAR1/2
Lightning Arrester Kit	NHPBLAR1
Surge Arrester Kit	NHPBSAR2

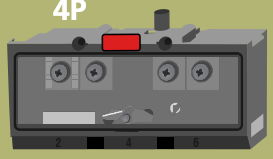
TP



NHL1002503ELI
NHL1604003ELI
NHL630SWDM

NHL1002503ELI
NHL1604003ELI
NHL2506303ELI
NHL630SWDM

4P



NHL1002504ELI
NHL1604004ELI
On Application

NHL1002504ELI
NHL1604004ELI
NHL2506304ELI
On Application

NHPBJ6W630MU3

NHL1002503ELI

PANELBOARD WITH TP SWITCHING UNIT (PLUG-IN MODULE REQUIRED)

DESCRIPTION	400A CAT REF.	630A CAT REF.
2 Way	NHPBJ2W400MU3	NHPBJ2W630MU3
4 Way	NHPBJ4W400MU3	NHPBJ4W630MU3
6 Way	NHPBJ6W400MU3	NHPBJ6W630MU3
Fault rating:	35kA for 1 sec	50kA for 1 sec
Max cable lug connection: see note below	32mm wide	32mm wide

PLUG-IN INCOMER OVERCURRENT RELEASE & SWITCH DISCONNECTOR MODULES

DESCRIPTION	400A CAT REF.	630A CAT REF.
100A - 250A Overcurrent Release	NHL1002503ELI	NHL1002503ELI
160A - 400A Overcurrent Release	NHL1604003ELI	NHL1604003ELI
250A - 630A Overcurrent Release	-	NHL2506303ELI
Switch Disconnector	NHL630SWDM	NHL630SWDM

NHPBJ2W400MU4

NHL160400ELI

PANELBOARD WITH 4P SWITCHING UNIT (PLUG-IN MODULE REQUIRED)

DESCRIPTION	400A CAT REF.	630A CAT REF.
2 Way	NHPBJ2W400MU4	NHPBJ2W630MU4
4 Way	NHPBJ4W400MU4	NHPBJ4W630MU4
6 Way	NHPBJ6W400MU4	NHPBJ6W630MU4
Fault rating:	35kA for 1 sec	50kA for 1 sec
Max cable lug connection: see note below	32mm wide	32mm wide

PLUG-IN INCOMER OVERCURRENT RELEASE & SWITCH DISCONNECTOR MODULES

DESCRIPTION	400A CAT REF.	630A CAT REF.
100A - 250A Overcurrent Release	NHL1002504ELI	NHL1002504ELI
160A - 400A Overcurrent Release	NHL1604004ELI	NHL1604004ELI
250A - 630A Overcurrent Release	-	NHL2506304ELI
Switch Disconnector	On Application	On Application

The 400A/630A switching units accept cable lug connections up to 32mm wide. Dependant on the size & type of cable lug selected the potential maximum cable capacity of the cable lug can be up to 300mm^2.


NHPBJIMK400

INTEGRAL INCOMING METER KITS

400A CAT REF.	630A CAT REF.	DESCRIPTION
NHPBJIMK400	NHPBJIMK630	Energy Meter Kit - Standard
NHPBJMIDIMK400	NHPBJMIDIMK630	Energy Meter Kit - MID

Each kit contains: Digital meter offering Amps, Volts, kWh readout plus pulsed output, block current transformer, fuses, mounting plates & cable looms. Supplied loose for assembly and connection by others.

Cable Connection Information:
30mm x 10mm copper bar - M10 connection


NHPBSAR2

INTEGRAL LIGHTNING & SURGE ARRESTERS

CAT REF.	DESCRIPTION
NHPBCSAR1/2	Combination Lightning & Surge Arrester Kit
NHPBLAR1	Lightning Arrester Kit (Type 1)
NHPBSAR2	Surge Arrester Kit (Type 2)

Each kit contains: Lightning, Surge or Combination arrester, MCCB, mounting plate & cable loom. Supplied loose for assembly and connection by others.

Only one of these three options is possible per panelboard. MCCB mounted in bottom left hand NHJ position.


NHPBJOMK250

OUTGOING METER KITS*

STANDARD CAT REF.	MID CAT REF.	DESCRIPTION
NHPBJOMK63	-	63A Energy Meter Kit - G frame
NHPBJOMK125	NHPBJMIDOMK125	125A Energy Meter Kit - G frame
NHPBJOMK160	NHPBJMIDOMK160	160A Energy Meter Kit - J frame
NHPBJOMK250	NHPBJMIDOMK250	250A Energy Meter Kit - J frame

Each kit contains: Digital meter offering Amps, Volts, kWh readout plus pulsed output, block current transformer (MID option - 3 separate CTs), fuses, mounting plates & cable looms. Supplied loose for assembly and connection by others.

* Each metering cableway of outgoing meter kits requires:
NHPBOCL Meter Kit Voltage Supply Cable Loom

Current transformer internal dimensions

Standard versions:
63A & 125A - 16mm W x 31mm H slot
160A & 250A - 21mm W x 25mm H slot

MID versions:
125A & 160A - 21mm diameter
250A - 28mm diameter

OUTGOING J FRAME MCCBs

CAT REF.	DESCRIPTION
NHJ2503VTX	36kA rated TP MCCBs 250A TP Switching Unit *
NHJS2503VTX	65kA rated TP MCCBs 250A TP Switching Unit *

*The switching unit must be fitted with a Plug-In Overcurrent Release module

PLUG-IN OVERCURRENT RELEASE MODULES

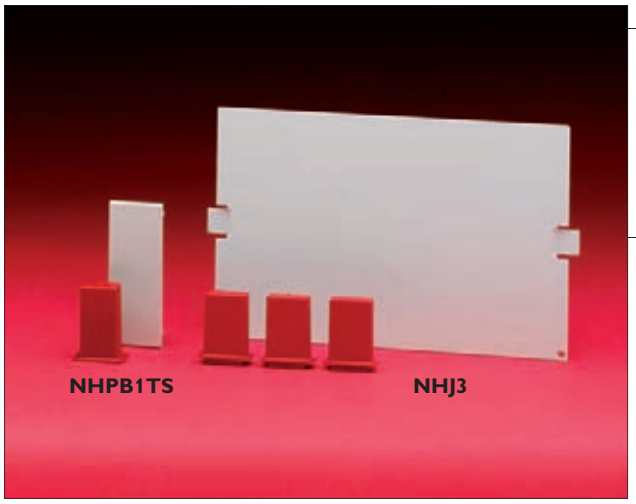
CAT REF.	DESCRIPTION
NHJ401003ELI	40A - 100A Overcurrent Release
NHJ631603ELI	63A - 160A Overcurrent Release
NHJ1002503ELI	100A - 250A Overcurrent Release

OUTGOING J FRAME MCCBS SELECTION 36kA

RATING	TRIP UNIT	+	36kA SWITCHING UNIT
40A, 50A, 63A, 80A, 100A	NHJ401003ELI		NHJ2503VTX
125A, 160A	NHJ631603ELI		NHJ2503VTX
200A, 220A, 250A	NHJ1002503ELI		NHJ2503VTX

OUTGOING J FRAME MCCBS SELECTION 65kA

RATING	TRIP UNIT	+	65kA SWITCHING UNIT
40A, 50A, 63A, 80A, 100A	NHJ401003ELI		NHJS2503VTX
125A, 160A	NHJ631603ELI		NHJS2503VTX
200A, 220A, 250A	NHJ1002503ELI		NHJS2503VTX

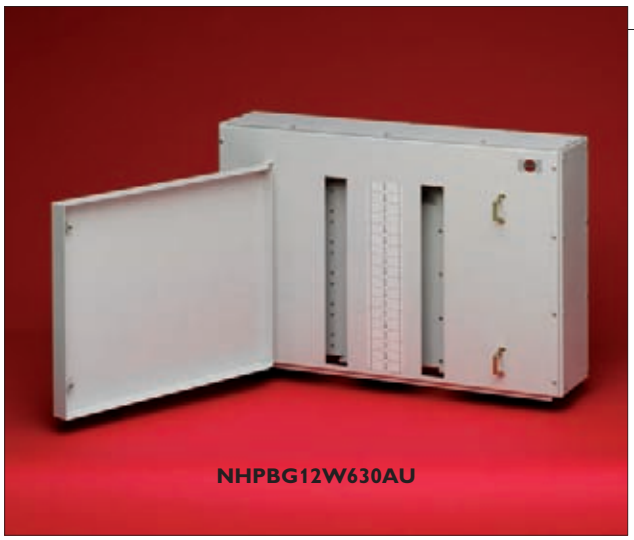


DOOR BLANKS

CAT REF.	DESCRIPTION
NHPB1TS	NHGG SP MCCB door blank with busbar insulators
NHJ3	NHJ TP MCCB door blank with busbar insulators

ACCESSORIES

CAT REF.	DESCRIPTION
NHJVT3TS	3P terminal shields J frame
NHJLAUXCO	Auxiliary contact
NHJLUVR110230	110/230V undervoltage release
NHJLUVR230	230V undervoltage release
NHJLD	Handle padlock for J frame 250A
NHLLD	Handle padlock for L frame 400/630A
NHJLST2448	24/48 shunt trip
NHJLST230	230V shunt trip


NHPBG12W630AU

NH250 ADD-ON EXTENSION UNITS

DESCRIPTION	400A CAT REF.	630A CAT REF.
4 Way G Frame Extension Unit	NHPBG4W400AU	NHPBG4W630AU
8 Way G Frame Extension Unit	NHPBG8W400AU	NHPBG8W630AU
12 Way G Frame Extension Unit	NHPBG12W400AU	NHPBG12W630AU
Fault rating:	25kA for 1 sec	25kA for 1 sec

Outgoing MCCB G Frame selection see below.

DESCRIPTION	400A CAT REF.	630A CAT REF.
8 Way J Frame Extension Unit	NHPBJ8W400AU	NHPBJ8W630AU
Fault rating:	35kA for 1 sec	50kA for 1 sec

Outgoing MCCB J Frame selection page 42.


NHGGPCB201 NHGGPCB1253

OUTGOING G FRAME MCCBs

SINGLE POLE CAT REF.	TRIPLE POLE CAT REF.	DESCRIPTION
NHGGPCB151	NHGGPCB153	15A MCCB
NHGGPCB201	NHGGPCB203	20A MCCB
NHGGPCB251	NHGGPCB253	25A MCCB
NHGGPCB301	NHGGPCB303	30A MCCB
NHGGPCB401	NHGGPCB403	40A MCCB
NHGGPCB501	NHGGPCB503	50A MCCB
NHGGPCB601	NHGGPCB603	60A MCCB
NHGGPCB801	NHGGPCB803	80A MCCB
NHGGPCB1001	NHGGPCB1003	100A MCCB
NHGGPCB1251	NHGGPCB1253	125A MCCB


NHPBJ4CW NHPBJ4MCW
NHPBG8CW NHPBG8MCW

CABLE WAYS

STANDARD CAT REF.	METER KNOCK-OUTS CAT REF.	DESCRIPTION
NHPBJ2CW	NHPBJ2MCW	2 Way Panelboard
NHPBJ4CW	NHPBJ4MCW	4 Way Panelboard
NHPBJ6CW	NHPBJ6MCW	6 Way Panelboard
NHPBG4CW	NHPBG4MCWA	4 Way G Frame Extension
NHPBG8CW	NHPBG8MCWA	8 Way G Frame Extension
NHPBG12CW	NHPBG12MCWA	12 Way G Frame Extension
NHPBJ8CW	NHPBJ8MCWA	8 Way J Frame Extension

NH FUSE-COMBINATION UNITS

NH Fuse combination units are designed with features that ensure compliance with EN60947 while also providing an economical and high quality range of industrial switchgear products.

With ratings from 20A to 200A and a choice of single pole or three pole configurations, NH fuse combination units have a utilisation category of AC23A, and fused short circuit capacity of 80kA.

- **Robust steel enclosures with cable glanding plate supplied top and bottom**
- **Removable door opens through 180° for ease of access**
- **Easy access fuse link fixings**
- **Neutral fully rated**
- **Fully shrouded terminals**
- **Handle padlocking facility locks switch & door in off position**
- **Large cable terminal capacity**
- **Ingress protection to IP4X**
- **Positive indication of On and Off**


NHSPSF32

NH FUSE COMBINATION UNIT 20A-32A

CAT REF.	AMPERAGE	MODULES	TYPE	SUPPLIED WITH FUSES
NHSPSF20	20A	4	SP & N	YES
NHTPSF20	20A	4	TP & N	YES
NHSPSF32	32A	4	SP & N	YES
NHTPSF32	32A	4	TP & N	YES

Fuse Combination Units Technical Specification
EN 60947-3
IEC 947-3
80kA RMS Fused Short Circuit Capacity
415V ac Rated Voltage
Full Uninterrupted Duty
AC23A Utilisation Category


NHTPSF63

NH FUSE COMBINATION UNIT 63A-125A

CAT REF.	AMPERAGE	MODULES	TYPE	SUPPLIED WITH FUSES
NHSPSF63	63A	5	SP & N	YES
NHTPSF63	63A	5	TP & N	YES
NHSPSF100	100A	5	SP & N	YES
NHTPSF100	100A	5	TP & N	YES
NHTPSF125	125A	6	TP & N	YES

ACCESSORIES

CAT REF.	DESCRIPTION	
NHCIL2	63A	Copper Isolator links
NHCIL3	100A to 200A	Copper Isolator links
NHCSB2	63A to 100A	Cable Spreader Box
NHCSB3	125A	Cable Spreader Box

For fuse types see page 50


NHTPSF160

NH FUSE COMBINATION UNIT 160A-800A

CAT REF.	AMPERAGE	MODULES	TYPE	SUPPLIED WITH FUSES
NHTPSF160	160A	6	TP & N	NO
NHTPSF200	200A	6	TP & N	NO
NHTPSF315	315A	8	TP & N	NO
NHTPSF400	400A	8	TP & N	NO
NHTPSF630	630A	12	TP & N	NO
NHTPSF800	800A	12	TP & N	NO

ACCESSORIES

CAT REF.	DESCRIPTION	
NHCIL3	100A to 200A	Copper Isolator links
NHCSB3	125A to 200A	Cable Spreader Box
NHCIL4	315A & 400A	Copper Isolator links
NHCSB4	315A & 400A	Cable Spreader Box
NHCIL5	630A & 800A	Copper Isolator links
NHCSB5	630A & 800A	Cable Spreader Box

For fuse types see page 50

Cable spreading room is allowed for at one end only. To fit a 4 core cable at both ends an additional cable spreader box will be required.

BUS BAR CHAMBER

CAT REF.	AMPERAGE	MODULES	TYPE
NHSFBBC400	400A	16	TP & N
NHSFBBTM250	250A	Each	Busbar Terminal


160CM 110M

METAL-SWITCH FUSE

CAT REF.	CURRENT RATING	NO. OF WAYS
106	45A	1
106RED	45A	1
108M	60A	1
160CM*	60A	1
110M/63*	63A	1
110M/80*	80A	1
110M*	100A	1

*Supplied complete with cartridge fuse

SWITCH DISCONNECTORS & ISOLATORS

Wylex provide a range of isolators designed for applications where local isolation is required. The modular WS range of switches can be independently configured to provide a variety of live and neutral arrangements up to 4 poles.

In addition Wylex offer a range of enclosed switch disconnector isolators suitable for commercial and industrial applications up to 125A.

Rotary isolators can be locked in the off position and have facility for up to 3 padlocking devices for added safety and security.

TRIPLE POLE & NEUTRAL 415V, 50HZ AC

CAT REF.	DESCRIPTION	CURRENT RATING
921E	With switched neutral, surface mounting in a metal enclosure	32A
921X	With switched neutral, for loose mounting in an enclosure (Non DIN)	32A

NH ISOLATOR SWITCHES STEEL ENCLOSURE

TP&N/SP&N	RATING	BOX SIZE
NHSW320	20A	1
NHSW332	32A	1
NHSW340	40A	1
NHSW363	63A	1
NHSW363X	63A	2
NHSW3100	100A	2
NHSW3125	125A	2

SUPPLY AUTHORITY ISOLATOR ASSEMBLIES

CAT REF.	DESCRIPTION	CURRENT RATING
REC2S	Slimline & DP Switch Enclosure	100A
REC2	DP Isolator & 4 Mod Enclosure	100A
REC3	TP Isolator & 4 Mod Enclosure	100A
REC4	4P Isolator & 4 Mod Enclosure	100A

SUPPLY AUTHORITY TWIN TERMINAL ISOLATOR ASSEMBLIES

CAT REF.	DESCRIPTION	CURRENT RATING
REC2STT	DP Isolator Hex Socket Screw & 2 Mod Enclosure	100A
RECSW2S	DP Isolator Combi Screw & 2 Mod Enclosure	100A
RECSW3	TP Isolator Combi Screw & 4 Mod Enclosure	100A
RECSW4	4P Isolator Combi Screw & 4 Mod Enclosure	100A

A wide range of custom built variations is also available. Contact Wylex Technical for full details.

WS RANGE OF MODULAR ISOLATORS

CAT REF.	DESCRIPTION	CURRENT RATING
WS601	1 Pole, 1 module	63A
WS101	1 Pole, 1 module	100A
WS121	1 Pole, 1 module	125A
WS602	2 Pole, 2 module	63A
WS102	2 Pole, 2 module	100A
WS122	2 Pole, 2 module	125A
WS603	3 Pole, 3 module	63A
WS103	3 Pole, 3 module	100A
WS123	3 Pole, 3 module	125A
WS604	4 Pole, 4 module	63A
WS104	4 Pole, 4 module	100A
WS124	4 Pole, 4 module	125A


L
ON
RCD
OFF
100A 30mA
WRS100/2
L
ON
RCD
OFF
32A 30mA
WRS32/2
L
ON
RCD
OFF
80A 30mA
WRS80/2

LIFELINE RANGE

Residual Current Devices are a critical device of the Solution17 offer that help installers meet the latest amendments of the wiring regulations, guarding circuits and offering additional 30mA personal protection against electric shock 24/7, 365 days of every year.

These loose RCDs and enclosures are ideal for installations with an existing consumer unit that require an upgraded, additional or modified circuit that has to comply to the latest wiring regulations; where 30mA additional protection is required for almost every new circuit which is beyond the levels sensed by a traditional overcurrent device such as fuses or miniature circuit breakers installed in the existing consumer unit.

One of the largest ranges available in the UK today offers other features which include:-

- **Fully shrouded terminals**
- **Contact position indication on the dolly handle**
- **Both AC and Type A (DC sensitive) devices available**
- **A range of enclosures from IP20 up to IP65**
- **Time delay versions available in 2 and 4 pole configurations**

17th
1st AMENDMENT

EDITION

For details on the application to meet the 17th edition wiring regulations please refer to page 59.

2 POLE RCDs – TYPE AC

CAT REF.	RATED CURRENT	SENSITIVITY
WRS16/2	16A	30mA
WRS25/2	25A	30mA
WRS32/2	32A	30mA
WRS40/2	40A	30mA
WRM40/2	40A	100mA
WRS63/2	63A	30mA
WRM63/2	63A	100mA
WRL63/2	63A	300mA
WRS80/2	80A	30mA
WRM80/2	80A	100mA
WRS100/2	100A	30mA
WRM100/2	100A	100mA
WRL100/2	100A	300mA

2 POLE RCDs DC SENSITIVE – TYPE A

CAT REF.	RATED CURRENT	SENSITIVITY
WRDVS32/2	32A	10mA
WRDS40/2	40A	30mA
WRDM40/2	40A	100mA
WRDS63/2	63A	30mA
WRDS80/2	80A	30mA
WRDS100/2	100A	30mA
WRDM100/2	100A	100mA

4 POLE RCDs – TYPE AC

CAT REF.	RATED CURRENT	SENSITIVITY
WRS32/4	32A	30mA
WRS40/4	40A	30mA
WRM40/4	40A	100mA
WRS63/4	63A	30mA
WRM63/4	63A	100mA
WRL63/4	63A	300mA
WRS100/4	100A	30mA
WRM100/4	100A	100mA
WRL100/4	100A	300mA

4 POLE RCDs DC SENSITIVE – TYPE A

CAT REF.	RATED CURRENT	SENSITIVITY
WRDS40/4	40A	30mA
WRDM40/4	40A	100mA
WRDS63/4	63A	30mA
WRDM63/4	63A	100mA
WRDS100/4	100A	30mA
WRDM100/4	100A	100mA

TIME DELAY UNITS (100ms) TYPE S

CAT REF.	DESCRIPTION	RATED CURRENT	SENSITIVITY
WRMT100/2	2P	100A	100mA
WRMT100/4	4P	100A	100mA

TYPE B DC SENSITIVE RCD

CAT REF.	DESCRIPTION
NSPE-5579	16A 30mA DP RCD
NSPE-5580	40A 30mA DP RCD
NSPE-5581	40A 300mA DP RCD

NSBS RCBO (combined MCB/RCD device)

C CURVE	CURRENT RATING	RCD RATING	POLES	MODULES
WRCBX6C2	6A	30mA	2	2
WRCBX10C2	10A	30mA	2	2
WRCBX16C2	16A	30mA	2	2
WRCBX20C2	20A	30mA	2	2
WRCBX32C2	32A	30mA	2	2
WRCBX40C2	40A	30mA	2	2

DIN ENCLOSURES

CAT REF. INSULATED	CAT REF. METAL	DIN MODULES	IP RATING
ESE2	ESM6	2	IP40
ESi2S	-	2	IP40
ESE2L*	-	2	IP40
-	ESM7	2	IP54
ESE4	-	4	IP20
ESi4	ESM8	4	IP40
-	ESM11	4	IP54
-	ESM13**	4	IP54

* Supplied with earth connection link
** Enclosure for larger cables

IP65 DIN ENCLOSURES AND ACCESSORIES

CAT REF.	DESCRIPTION
WBE3	2/3 module enclosure
WBE4	4 module enclosure
WBE3/EK	Earth block
WBE3/NK	Neutral block
WBE4/EK	Earth block
WBE4/NK	Neutral block
WBE/BS	Blanks

NH INSULATED DIN ENCLOSURES

CAT REF.	DESCRIPTION
NH4ED4	4 modules
NH7ED4	7 modules
NH10ED4	10 modules
NH13ED4	13 modules
NH16ED4	16 modules
NH21ED4	21 modules

Supplied with earth & neutral terminal bars cover and visor

NH METAL DIN ENCLOSURES

CAT REF.	DESCRIPTION
NH4ED6	4 modules
NH7ED6	7 modules
NH10ED6	10 modules
NH13ED6	13 modules
NH16ED6	16 modules
NH21ED6	21 modules

Supplied with earth & neutral terminal bars cover and visor


WYLEX
SWITCH OFF BEFORE HANDLING FUSES
N
WYLEX
B32 ON
3000 OFF
240V~
BSEN60898
B16 ON
3000 OFF
240V~
BSEN60898

STANDARD RANGE

The Wylex Standard range of consumer units remains one of the most widely used ranges in domestic circuit protection applications.

Originally designed with fuses in mind, standard consumer units can easily be upgraded to current standards by using the plug in range of MCBs.

This time saving feature offers installers an economical alternative to full consumer unit replacement.

The range also includes SP&N switch fuses up to 100A allowing for submain circuit installation or system extensions/additions to be easily completed.

104

INSULATED - SWITCH FUSE

CAT REF.	CURRENT RATING	NO. OF WAYS
104	45A	1
108	60A	1
160C	60A	1

'C' models supplied with cartridge fuse

204

INSULATED - MAIN SWITCH ISOLATOR

CAT REF.	ISOLATOR RATING	NO. OF WAYS
204	45A	2
304	60A	3
404	60A	4
604	100A	6
804	100A	8


160CM 110M

METAL - SWITCH FUSE

CAT REF.	CURRENT RATING	NO. OF WAYS
106	45A	1
106RED	45A	1
108M	60A	1
160CM*	60A	1
110M/63*	63A	1
110M/80*	80A	1
110M*	100A	1

*Supplied complete with cartridge fuse


106 206

METAL - MAIN SWITCH ISOLATOR

CAT REF.	ISOLATOR RATING	NO. OF WAYS
206	45A	2
306	60A	3
406	60A	4
606	100A	6

MCBs

CAT REF.	CURRENT RATING	CONTACT SHIELD COLOUR
B6	6A	WHITE
B10	10A	GREY
B16	16A	BLUE
B20	20A	YELLOW
B32	32A	RED
B40	40A	ORANGE

May be used as a direct replacement for rewirable fuses part ref R5, R15, R20 and R30

CARTRIDGE FUSES (Including contact shield)

CAT REF.	CURRENT RATING	CONTACT SHIELD COLOUR
C5	5A	WHITE
C15	15A	BLUE
C20	20A	YELLOW
C30	30A	RED
C35	35A	ORANGE
C40	40A	ORANGE
C45	45A	GREEN

CAT REF.	CURRENT RATING	
L45	45A	for use with 108, 145 & 160 type switch fuses
L60	60A	

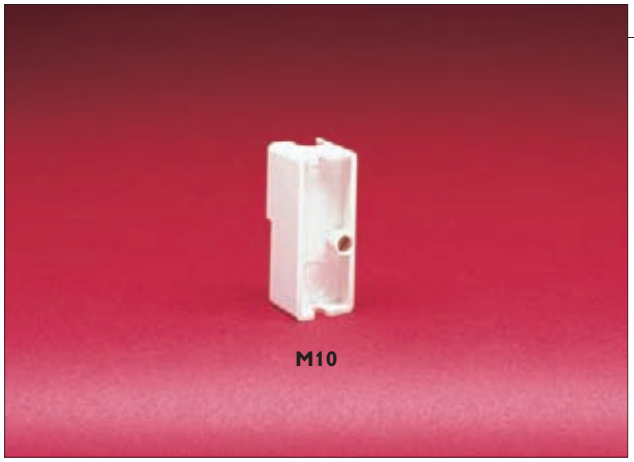
May be used as a direct replacement for rewirable fuses part ref R5, R15, R20 and R30

CARTRIDGE FUSE LINKS

CAT REF.	CURRENT RATING	CONTACT SHIELD COLOUR
CFL05	5A	WHITE
CFL10	10A	BLUE
CFL15	15A	BLUE
CFL20	20A	YELLOW
CFL30	30A	RED
CFL35	35A	ORANGE
CFL40	40A	ORANGE
CFL45	45A	GREEN

CARTRIDGE FUSE LINKS

CAT REF.	CURRENT RATING	
LFL45	45A	for use with 108 or 108M
LFL60	60A	
LFL63	63A	for use with 110M units only
LFL80	80A	
LFL100	100A	

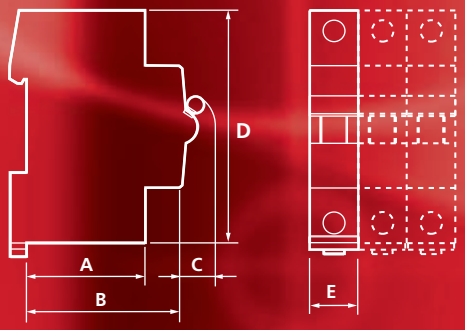


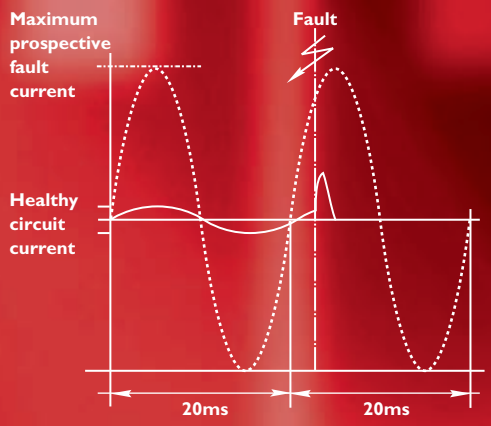
ACCESSORIES

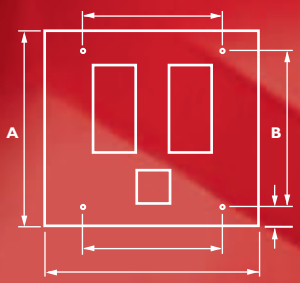
CAT REF.	DESCRIPTION
FWC*	Fusewire card 1m 5A, 15A, 30A
M10	Blank shield for unused ways

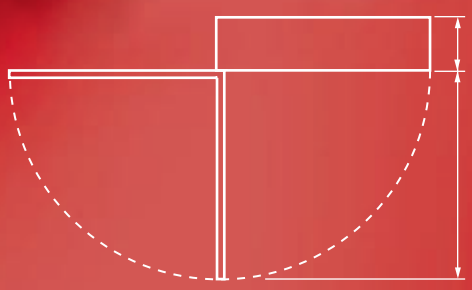
* Rewirable fuses replaced by Bxx Plug in MCBs or Cxx Cartridge fuses above

TECHNICAL DATA & DIMENSIONS

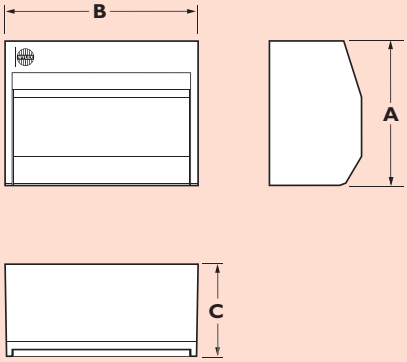








INSULATED CONSUMER UNITS20



DIMENSIONS
A=160mm(6.3"),B=117mm(4.6"),C=102mm(4")
4 MODULE

NH204/40	NHRM204/40
NH204/63	NHRM204/63
NHRS204/40	NH4ED4
NHRS204/63	NHB16MPV
NHB16PV	NHRCBO16BPV

DIMENSIONS
A=230mm(9"),B=187mm(7.5"),C=120mm(4.7")
7 MODULE

NH504	NHRM504
NHRS504	NHTM504
NH7ED4	NHRCBO16BMPV

DIMENSIONS
A=230mm(9"),B=239mm(9.6"),C=120mm(4.7")
10 MODULE

NH804	NHRS3304
NHRS804	NHRS4204
NHRM804	NH504+3
NHSTM2404	NHRS504+3
NHSTM3304	NHTM804
NHSTM4204	NH10ED4
NHRS2404	NHIIX3304
NHIIX2404	
NHRS6SL	

DIMENSIONS
A=230mm(9"),B=290mm(11.5"),C=120mm(4.7")
13 MODULE

NH1104	NHRS9SL	NHRS23204
NHRS1104	NHRS3604	NHRS7SSLHI
NHRM1104	NHRS6304	NHP-7HIFWLK
NHSTM3604	NHIIX5404	
NHSTM4504	NHIIX4504	
NHSTM5404	NH804+3	
NHSTM6304	NHRS804+3	
NHRS5404	NHTM1104	
NHRS4504	NH13ED4	

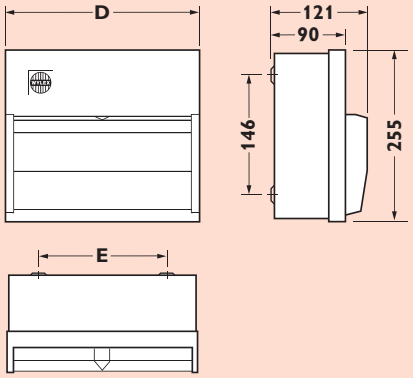
DIMENSIONS
A=230mm(9"),B=340mm(13.5"),C=120mm(4.7")
16 MODULE

NH1404	NHRS9304	
NHRS1404	NHIIX7504	
NHRM1404	NHIIX6604	
NHSTM3904	NHIIX5704	
NHSTM4804	NHRSX5704	
NHSTM5704	NHRSX6604	
NHSTM6604	NHRSX7504	
NHIIX3904	NHTM1404	
NHIIX4804	NH804+6	
NHSTM7504	NH1104+3	
NHSTM8404	NHRS804+6	
NHSTM9304	NHRS1104+3	
NHRS3904	NH16ED4	
NHRS4804	NHISS5504	
NHRS6604	NHISS10SL	
NHRS5704	NHRS10SSLHI	
NHRS7504	NHRS44204	
NHRS8404	NHRS43304	
NHRS12SL	NHRS33404	
NH10DSMPVF	NH9DSRCBMPVF	
NH8DSMPVSL	NH7DSRCBMPVSL	
NH6DSMPVDR	NH5DSRCBMPVDR	
NH11DSPVF	NH10DSRCBPVF	
NH9DSPVSL	NH8DSRCBPVSL	
NH7DSPVDR	NH6DSRCBPVDR	
NHP-10HIFWLK		

DIMENSIONS
A=230mm(9"),B=435mm(17.3"),C=120mm(4.7")
21 MODULE

NH1904	NHRS9804	NHISS15SL
NHRS1904	NHRS8904	NHRS15SSLHI
NHRM1904	NHRS51204	NHRS76204
NHSTM12504	NHIIX9804	NHRS66304
NHSTM11604	NHIIX8904	NHRS46504
NHSTM8904	NHRSX8904	NHRS55504
NHSTM9804	NHRSX9804	NHRS45604
NHSTM10704	NHRS6504+6	NH15DSMPVF
NHSTM71004	NHRS5604+6	NH14DSRCBMPVF
NHSTM61104	NHRS7704+3	NH13DSMPVSL
NHSTM51204	NHRS8604+3	NH12DSRCBMPVSL
NHRS12504	NHRS6804+3	NH11DSMPVHI
NHRS11604	NHTM1904	NH10DSRCBMPVHI
NHRS10704	NH21ED4	NH11DSMPVDR
NHRS61104	NHISS8704	NH10DSRCBMPVDR
NHRS17SL	NHIIX11604	NH16DSPVF
NHRS71004	NHIIX51204	NH15DSRCBPVF
NH14DSPVSL	NH13DSRCBPVSL	NH12DSPVHI
NHP-15HIFWLK	NH11DSRCBPVHI	NH12DSPVDR

METAL CONSUMER UNITS



DIMENSIONS
184(H) 117(W) 90(D) 120(D)
4 MODULE

NH206/40	NHRS206/40
NH206/63	NHRS206/63

DIMENSIONS
D=188mm(7.4"), E=107mm(4.2")
7 MODULE

NH506	NHRS506
NHTM506	NHRM506
NH7ED6	

DIMENSIONS
D=241mm(9.5"), E=160mm(6.3")
10 MODULE

NHRM806	NH806
NH10ED6	NHRS806
NHRS2406	NHSTM2406
NHRS3306	NHSTM3306
NHRS4206	NHTM806
NHRS6SLM	

DIMENSIONS
D=292mm(11.5"), E=210mm(8.3")
13 MODULE

NHRM1106	NHRS806+3	NHRS23206
NHSTM3606	NHRS1106	
NHRS7SSLMHI		
NH1106	NHRS806+3	
NHRS4506	NHRS5406	
NHSTM5406	NH13ED6	
NH806+3	NHSTM4506	
NHRS5406	NHRS6306	
NHRS9SLM	NHTM1106	
NHIIX2406	NHIIX3306	

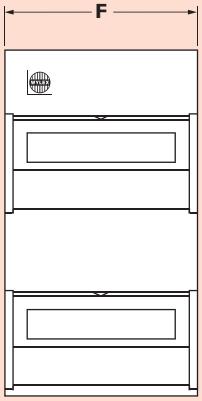
DIMENSIONS
D=353mm(13.5"), E=260mm(10.2")
16 MODULE

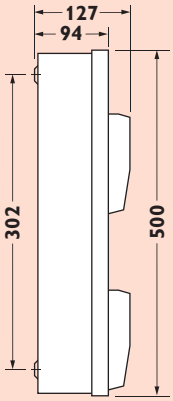
NH1406	NHSTM6606	NHISS10SLM
NHRS1106+3	NHRS3906	NHRS44206
NHRS4806	NHSTM7506	NHRS43306
NHRS1406	NHRM806+6	NHRS33406
NHRM1106+3	NHTM1406	
NHRS6606	NHRS12SLM	NHRS10SSLMHI
NH16ED6		
NHRM1406	NH1106+3	
NH806+6	NHSTM8406	
NHRS7506	NHISS5506	

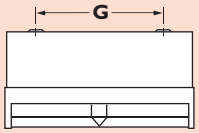
DIMENSIONS
D=438mm(17.2"), E=235.7mm(10.1")
21 MODULE

NH1906	NHRS1906	NHISS8706
NHRS61106	NHRS8906	NHISS15SLM
NHRS9806	NHSTM71006	NHRS76206
NHRS17SLM	NHSTM9806	NHRS66306
NHSTM9806	NHRS5606+6	NHRS46506
NH21ED6	NHTM1906	NHRS55506
NHSTM8906	NHIIX51206	NHRS45606
	NHIIX11606	NHRS15SSLMHI

DUPLEX METAL







DIMENSIONS
F=241mm (9.5"), G=160mm (6.3")
10 MODULE

NHDIS88	NHDRS12HI
NHDIIX88	NHDRS14SSLHI
NHDISX88	

DIMENSIONS
F=292mm (11.5"), G=210mm (8.3")
13 MODULE

NHDIS1111	NHDRS18HI
NHDIIX1111	NHDRS20SSLHI
NHDISX1111	NHDISS119

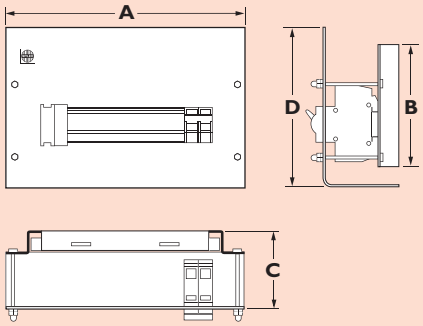
DIMENSIONS
F=343mm (13.5"), G=260mm (10.2")
16 MODULE

NHDIS1414	NHDRS24HI
NHDIIX1414	NHDRS26SSLHI
NHDISX1414	NHDISS1214

DIMENSIONS
F=430mm (17.2"), G=235mm (10.1")
21 MODULE

NHDIS1919	NHDRS34HI
NHDIIX1919	NHDRS36SSLHI
NHDISX1919	

SKELETON



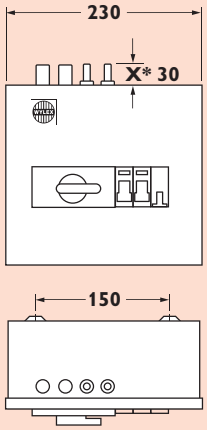
DIMENSIONS
A=333mm (13.2"), B=165mm (6.5"), C=90mm (3.5")
D=230mm (9")

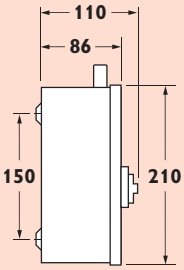
FALNHRS8SSL	FALNHISS5506
FALNHISS4606	FALNHISS10SL
FALNHRS10SL	FALNH806

DIMENSIONS
A=444mm (17.5"), B=165mm (6.5"), C=90mm (3.5")
D=230mm (9")

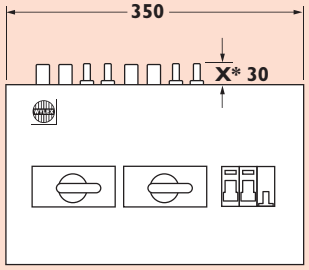
FALNHRS13SSL	FALNHISS8706	
FALNHISS15SL	FALNHRS46506	
FALNHRS55506	FALNHRS66306	
FALNHRS76206	FALNHRS15SL	FALN1206
FALNH1706		

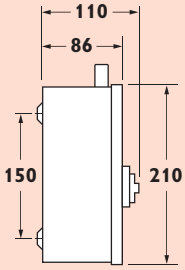
PV NH RANGE

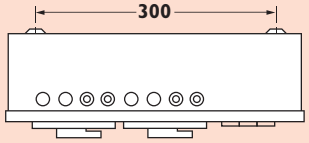




NHDSMS
NHDS106B16
NSPE-5359/11* dimension X applies

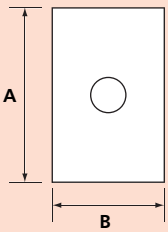


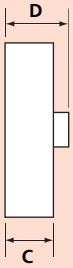




NSPE-5359/15
NSPE-5359/12
NSPE-5359/10* dimension X applies

PV AC ISOLATORS





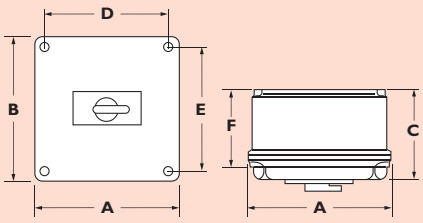
DIMENSIONS
A=130mm, B=85mm,
C=75mm, D=105mm

NHTPSD16
NHTPSD25

DIMENSIONS
A=175mm, B=125mm,
C=100mm, D=137mm

NHTPSD32

PV DC ISOLATORS



DIMENSIONS
A=160mm, B=160mm,
C=92mm, D=140mm,
E=140mm, F=69mm

NHDC325004P
NHDC405004P
NHDC256006P
NHDC406006P

STANDARDS

Consumer units Designed to BS5486 Part 13: 1989 Factory Built Assemblies BSEN60439-3 when fully assembled.
Degree of protection IP2X to BS EN60529. Switches BS5419. Double pole 240V 50Hz. Category of duty AC21 or BS EN 60947-3.
RCDs 30mA BS EN 61008. RCBOs 30mA BS EN 61009. MCBs B,C,D Switching Curve BS EN 60898.

THE 17th EDITION WIRING REGULATIONS

Under the latest 17th edition wiring regulations certain installations require "additional protection" on many MCB circuits that were not previously protected by the supplementary use of 30mA RCDs.

Extracts from the regulations and examples of these 'newly' protected RCD circuits are given in the summary table below.

SUMMARY TABLE

REGULATIONS	RELATING TO:	EXAMPLES	ADDITIONAL PROTECTION
411.3.3*	Sockets up to 20A rating for general use by ordinary persons	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 in 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 ****
522.6.101 522.6.102 522.6.103 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 ****

Note: Each circuit may have more than one reason for additional protection by 30mA RCD eg: firstly because of the equipment ie: a socket outlet and secondly because of the cable installation method. Additional protection is provided as additional protection. It does not obviate the need for circuit protection by circuit breakers or fuses.

* Regulation 411.3.3 socket outlets with a rated current not exceeding 20A that are for general use by ordinary persons (exemption may be permitted).

** 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 522.6.101 522.6.102 522.6.103 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.

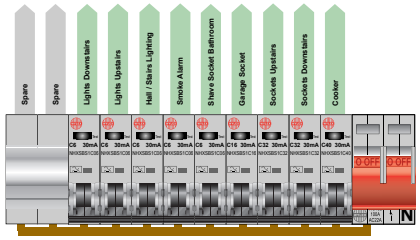
In addition Chapter 51 requires designers/installers to take account of all relevant British Standards and manufacturers instructions. For example BS5839 Part 6 is the British Standard for fire detection and alarm systems in dwellings. It states that power supplies to Grade D smoke alarms should be an independent circuit at the consumer unit, or a separately electrically protected local lighting circuit.

British Standards and IEE regulations are subject to change and amendments. This guide to Wylex consumer units is not a substitute for the regulations which should always be used for all types of electrical installation design and installation work.

WYLEX **Solution 17**

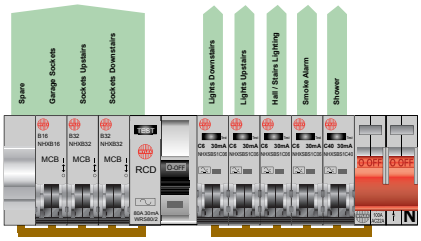
CONSUMER UNIT SELECTION GUIDE

ALL INDEPENDENT CIRCUITS



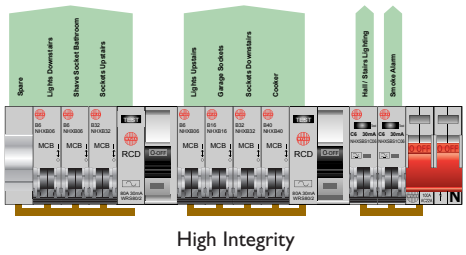
Main Switch - RCBOs

HALF INDEPENDENT CIRCUITS



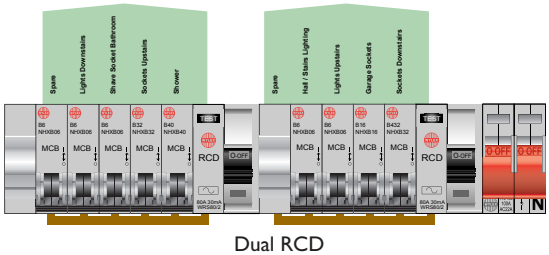
Split Load

SOME INDEPENDENT CIRCUITS



High Integrity

NO INDEPENDENT CIRCUITS



Dual RCD

30mA Earth leakage Protection

Solar Voltaics in Domestic Installations

Cables with a power supply at each end need special considerations.

Using Double pole RCBOs on a dedicated circuit could be the simplest answer.

1. Circuit protection for both power supplies may be required (subject to inverter operating characteristics)
2. PV supplies with an RCD providing additional protection for the final circuit must be DP and disconnect Line and Neutral conductors (e.g. Double pole RCBO). Use of DP RCBOs may negate the need to take account of inverter shut down times
3. PV supplies require DC and AC Isolators so that the inverter can be isolated from both supplies for maintenance
4. PV supplies should be connected to a dedicated circuit at the consumer unit (not share a final sub circuit)
5. PV Meters must comply with MID2004/22/EC B&D or B&F

A new range of Wylex products is available to help installers meet the above

Combination DC/AC PV Isolator

Dual Supply PV /Main Supply Switch

PV Ready Consumer Unit (with meter)

PV Ready Consumer Unit (with DP RCBO & meter)

A 411.3.2.2
The maximum disconnection time shown in Table 41.1 applies to circuits not exceeding 32A. 0.4 s TN System & 0.2 s TT Systems.

B 551.4.1
Fault protection shall be provided for of each source of supply or combination of sources of supply.
(Also, refer to chapter 55, regulation group 551 - Low Voltage Generating Sets)

C 551.5.1
Over current protection should be located as near as practical to the generator terminals (where required).

D 712.537.2.1.1
To allow maintenance of the PV Inverter, means of isolating the PV inverter from the DC side and the AC side shall be provided.
(Also, refer to chapter 53, regulation group 537 - Isolation and Switching)

E 712.434.1
The PV supply cable (AC side) shall be protected against fault current by an overcurrent protective device installed at the connection to the AC mains. Also, refer to Part 7, all regulations in Section 712 - Solar Photovoltaic (PV) Power Supply Systems)

F 712.411.3.2.1.1
The PV Supply cable (on the AC side) shall be connected to the supply side of the protective device for automatic disconnection of circuits supplying current - using equipment.

G 314.1
Every installation shall be divided into circuits as necessary to: (ii) facilitate safe inspection testing & maintenance (vi) prevent the indirect energising of a circuit intended to be isolated.

H 314.4
In an installation comprising more than one final circuit, each final circuit shall be connected to a separate way in a distribution board.
The wiring of each final circuit shall be electrically separate from that of every other final circuit, so as to prevent the indirect energising of a final circuit intended to be isolated.

I 522.6.101 522.6.102 & 522.6.103
Installers must consider the need for Additional Protection by 30mA RCD in accordance with regulations (Previously 522.6.6 & 522.6.8) that relate to concealed cables in walls & partitions.

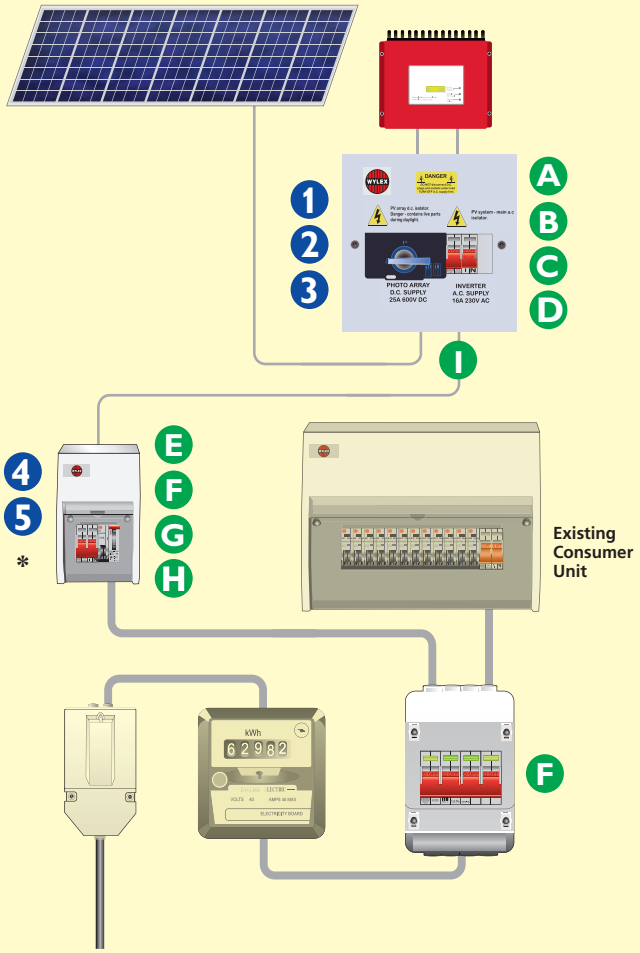
Wylex have created a number of new PV dedicated products to help installers to economically and efficiently install Solar Photovoltaic (PV) Systems up to 4kW, including:

- AC & DC Enclosed Isolators
- Combination DC/AC PV Isolator in a single enclosure
- Dual Supply PV & Grid Mains Supply Switch
- PV Consumer Units (all 17th edition models available)

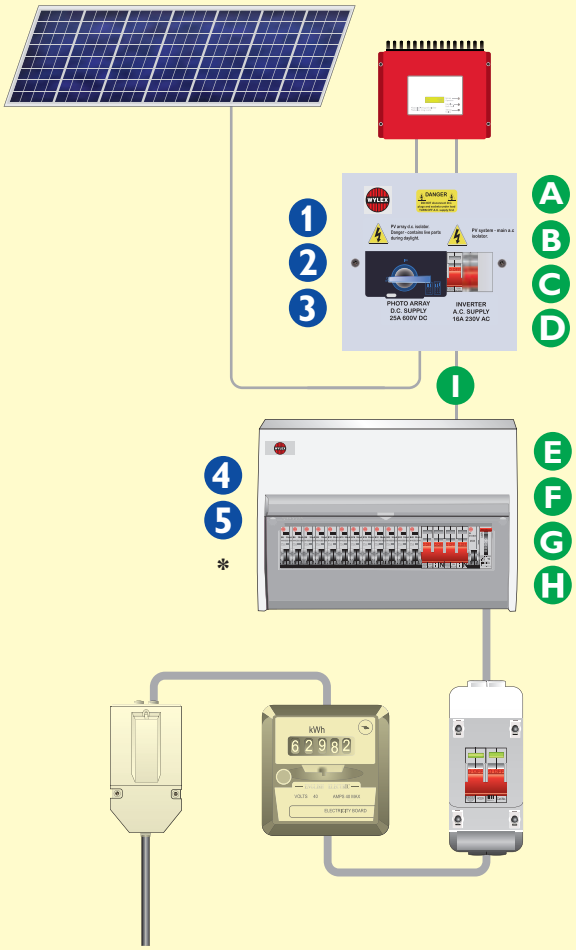
The equipment is designed to allow the installer to make parallel power connections simply and easily.

Typical Installation Diagrams

Adding PV to an Existing Installation



Complete New Installation



Recommended methods for meeting requirements 1-5 & A to I
* Class B RCDs may be required with certain types of inverter.

Class B RCDs & Surge Protection Devices also available

This guide to Wylex circuit protection & switchgear products is not a substitute for the IET 17th Edition wiring regulations (BS 7671:2011 Requirements for Electrical Installations amendment 1) which should always be used for design and installation work. Always check with manufacturers of all components of the PV System (including Solar-Panel & Inverter manufacturers) before selecting and installing circuit protection devices.

Other relevant documents include:
DTI publication Photovoltaics in Buildings, Guide to the installation of PV systems 2nd Edition publication number URN 06/1972,
The Microgeneration Certification Scheme installation standard MIS 3002 Solar PV,
Electrical Safety Council best practice guide 3 Connecting a Microgeneration system to a domestic or similar electrical installation,
Approved building regulation Document P

Isolation - Locked Consumer units

Although Wylex in the past have offered a lockable consumer unit (access to the devices MCBs /RCBOs and Isolating Switch is covered by a lockable door); this unit can only be specified and used in certain mitigating circumstances for example power to fire alarm circuits is locked in the 'On' position (via interlocks) to ensure the safety circuit is never isolated unless authorised (via interlocking procedure).

Wylex's view on "lockable consumer units" is inline with good safety practice; in that you should object to locking power in an "On" position without the means of local isolation, especially in the case of an 'Emergency' to achieve immediate electrical shut down. The Main Switch / Isolator provided in a consumer unit is deemed the main isolation point for the installation and is automatically classed as the Emergency Switching point for isolating the complete installation in an crisis situation.

In the case of an emergency and the immediate need to isolate the power; if the Main Switch of the consumer unit can only be actuated (turned off) by obtaining a key (kept separate away from the unit) to unlock the door, to gain access to the switch, this can be interpreted by its numerous operations as against good safety practice.

Extracts from various regulations that support this view are as follows:-

BS 7671:2008 17th Edition wiring regulations: Incorporating amendment No1:2011

CHAPTER 13 FUNDAMENTAL PRINCIPLES

132.15.1 Effective means, suitably placed ready for operation, shall be provided so that all voltage may be cut off from every installation, from every circuit thereof and from all equipment, as may be necessary to prevent or remove danger.

537 ISOLATING AND SWITCHING

537.1.3 Each installation shall have the provision for disconnection from supply.

537.1.4 A main linked switch or linked circuit-breaker shall be provided as near as practicable to the origin of every of every installation as a means of switching the supply on load and as a means of isolation. A main switch intended for operation by ordinary persons, e.g. of a household or similar installation, shall interrupt both live conductors of a single-phase supply.

537.4 Emergency Switching

537.4.1.1 Means shall be provided for emergency switching of any part of an installation where it may be necessary to control the supply to remove an unexpected danger.

537.4.1.3 Means for emergency switching shall act as directly as possible on the appropriate supply conductors. The arrangement shall be that one single action only will interrupt the appropriate supply.

537.4.1.4 The arrangement of the emergency switching shall be such that its operation does not introduce a further danger or interfere with the complete operation necessary to remove the danger.

537.4.2.7 A device for emergency switching shall so be placed and durably marked so as to be readily identifiable and convenient for the intended use.

ELECTRICAL SAFETY COUNCIL: (ADVICE TAKEN FROM THEIR WEB SITE/ LITERATURE).

A consumer unit or fusebox is used to control and distribute electricity around our homes.

They usually contain:

A) Mains switch, B) Fuses or Circuit Breakers, C) Residual Current Device

Mains Switch

The mains switch allows you to turn off the electricity supply to your electrical installation. Some electrical installations have more than one mains switch, for example, if your home is heated by electric storage heaters, you may have a separate consumer unit (fuse box) for them. The consumer unit should be easy to get to, so find out where the mains switch is to turn the electricity off in an emergency.

LOCKING A CONSUMER UNIT TO STOP UNAUTHORISED ACCESS / ACTUATION OF THE PROTECTION DEVICES.

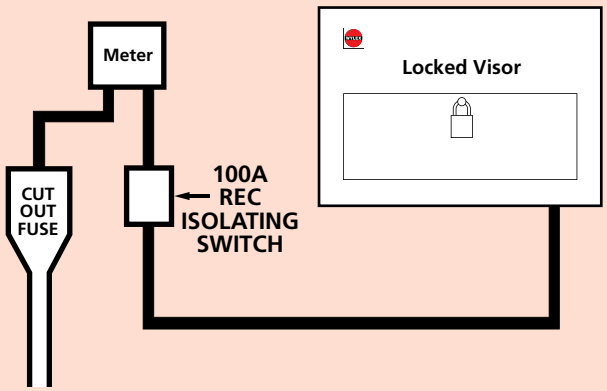
A request is sometimes made to lock the consumer unit because the installer / user don't want unauthorised access to switch devices 'On' and/or 'Off'. In this case, the isolation point to switch 'Off' the installation and Emergency Switching requirements still applies to the consumer unit and may be achieved in several ways. Wylex offer 3 cost effective options as follows:-

Option 1. Use a standard consumer unit with a MCB/ RCBO locking device and padlock on the individual outgoing circuits to lock in the 'On' or 'Off' position's. When locked in the 'On' position the MCB / RCBO will still 'trip' due to a fault condition on the circuit. (Note: you will need to open the padlock and remove the locking device to reset a tripped unit). The Main Switch Isolator is still accessible on the consumer unit to isolate the installation under emergency conditions.

Option 2. Have all the outgoing protection devices MCBs / RCBOs under a separate lockable door / cover to stop unauthorized access / operation of the individual circuits. The operation of the Main Switch Isolator is 'outside' of this lockable door / cover; via a protruding toggle switch or door interlocked rotary handle connected to the Main Switch Isolator. The operation of the Main Switch Isolator is still accessible / unhindered on the consumer unit to isolate the installation under emergency conditions.

Option 3. Have a lockable door on the complete consumer unit stopping unauthorised access to all the outgoing devices and Main Switch Isolator fitted into the unit. In this case, the Consumer unit must also be fed by a separate Isolation Point that is "still local" (near as practicable) to the consumer unit. This separate Isolation Device is used to isolate the installation under emergency conditions. This Isolation Point /Device should have easy access and is marked as the Emergency / Isolation Point for the particular consumer unit. The consumer unit should also be marked in a way to indicate the emergency isolation point is separate / next to the unit and not part of the consumer unit. In this case, because it is not intuitive that the Isolation Point is not within / accessible directly on this consumer unit; Instructions should be given to each user of the installation on how to isolate in emergency conditions using the separate Isolation Point device.

Typical arrangement with REC Isolating Switch



GENERAL CONSTRUCTION

Wylex MCBs are of the thermal-magnetic current limiting type.
MCBs have an easy to operate handle with a trip-free toggle mechanism – so even when the handle is held in the 'on' position the MCB is free to trip.

AMBIENT TEMPERATURE CONSIDERATIONS

Wylex MCBs are calibrated to meet the requirements of BS EN 60898, 30°C Ref Calibration Temperature.
At other temperatures the following rating factors should be used:

At 60°C 0.9 At 20°C 1.0 At 0°C 1.1

Adjacent thermal-magnetic MCBs should not be continuously loaded at or approaching their nominal rated currents when mounted in enclosures. It is good engineering practice to apply generous derating factors or make provision for adequate free air between devices.
In these situations, and in common with other manufacturers, we recommend a 66% diversity factor is applied to the MCB nominal rated current where it is intended to load the MCBs continuously (in excess of 1 hour).

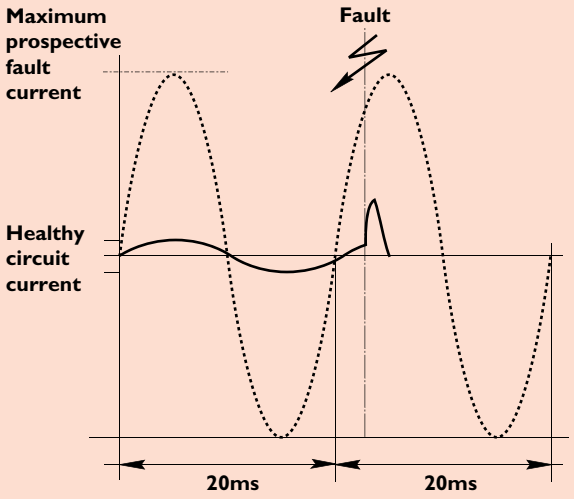
METHOD OF OPERATION

1 Moderate overload conditions
Detection of moderate overload conditions is achieved by the use of a thermo-metal element which deflects in response to the current passing through it. The thermo-metal element moves against the trip bar releasing the trip mechanism.
2 Short circuit conditions
When the current flowing through the MCB reaches a predetermined level, the solenoid directly pulls in the plunger which forcibly separates the contacts and simultaneously releases the trip mechanism.
3 Establishment of arc between fixed and moving contacts
As the moving contact moves away from the fixed contact, an arc is established. The arc runs along the arc runner to the arc chamber where it is split up between the plates and extinguished.
The low inertia and consequent high speed of the moving contact has a limiting effect on the flow of fault current. The rapid development of the arc, together with its accelerated extinction in the arc chamber, BS EN 60898-2 gives a typical operating time of 3.5-5 milliseconds for a type B curve MCB.

CURRENT LIMITING ACTION

The high speed current limiting action ensures that the MCB operates before the full prospective fault current is allowed to develop.
Under fault conditions, damage can be sustained to the installation and associated equipment due to the amount of energy that passes before the current is completely interrupted. The total energy let-through depends on the value of current and the time for which it flows, and is denoted by the symbol I^2t. The high speed current limiting action of MCBs ensures that the energy let-through and any subsequent damage is minimised. This reduced energy let-through assists greatly with both back-up and discrimination considerations.

CURRENT LIMITING EFFECT

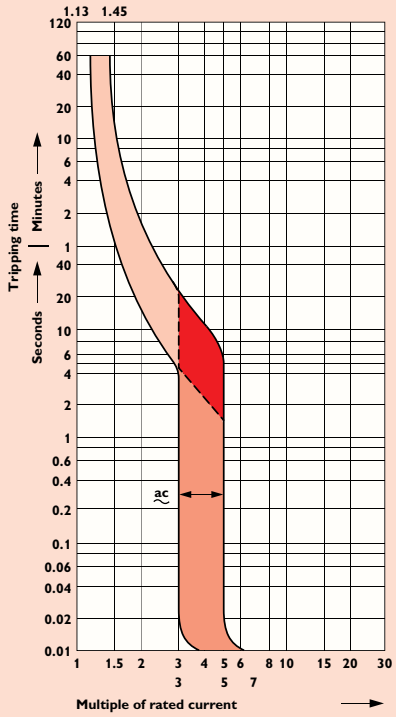


BACK-UP PROTECTION

Back-up protection is required only if the prospective short circuit current at the point of installation exceeds the breaking capacity of the MCB. When providing back-up protection consideration must be given to discrimination between the MCB and fuse.

DISCRIMINATION

It is desirable that the protective device nearest the fault should operate first. The low energy let through of modern MCBs provides better discrimination with HRC fuse back-up than is given by earlier types of MCBs.



NHX, NSB AND PSB DISTRIBUTION BOARD MCBs

Standards	BSEN 60898-2: 2006
Rated Voltage	230/400 Volts
Tripping characteristics	Type B, C and D
Short circuit rating	6kA and 10kA
Reference calibration temperature	30°C
Terminal capacity - outgoing cable	0.75 to 25mm²

NHXSBS, NSBS & PSBS RCBO (COMBINED MCB/RCD)

Standards	BSEN 61009-2: 1995 BSEN 61009-1: 2004
Rated Voltage	230 Volts -1 2004
SP or SP with switched neutral Tripping characteristics	NSBS = B, C PSBS = C
Short circuit rating	6kA and 10kA
Reference calibration temperature	30°C
Rated residual operating current	30mA
Single module	Type A
Two module	Type AC
Terminal capacity - outgoing cable	0.5 to 16mm²

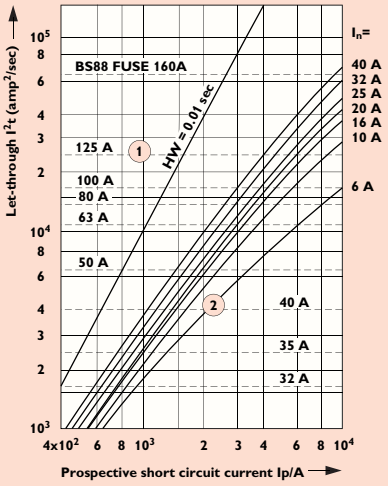
Unique live side busbar combi-terminal allows connection of cable up to 25mm²

Maximum neutral cable size 25mm²

CONSUMER UNIT MCBs

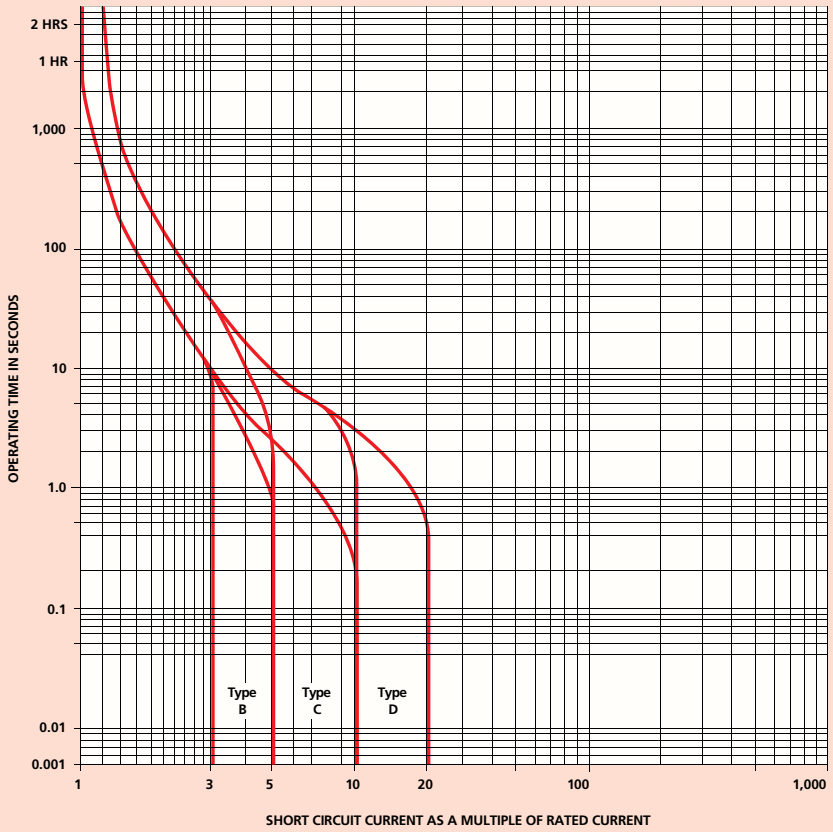
Standards	BS EN 60898-2: 2006
Rated voltage (single pole)	240V
Tripping characteristics	Type B, C
Short circuit rating	6kA
Reference calibration temperature	30°C
Terminal capacity – outgoing cable	0.75 to 25mm²

CAT REF	C CURVE	RATING
NHXB06	NHXC06	6A
NHXB10	NHXC10	10A
NHXB16	NHXC16	16A
NHXB20	NHXC20	20A
NHXB32	NHXC32	32A
NHXB40	NHXC40	40A
NHXB50	NHXC50	50A



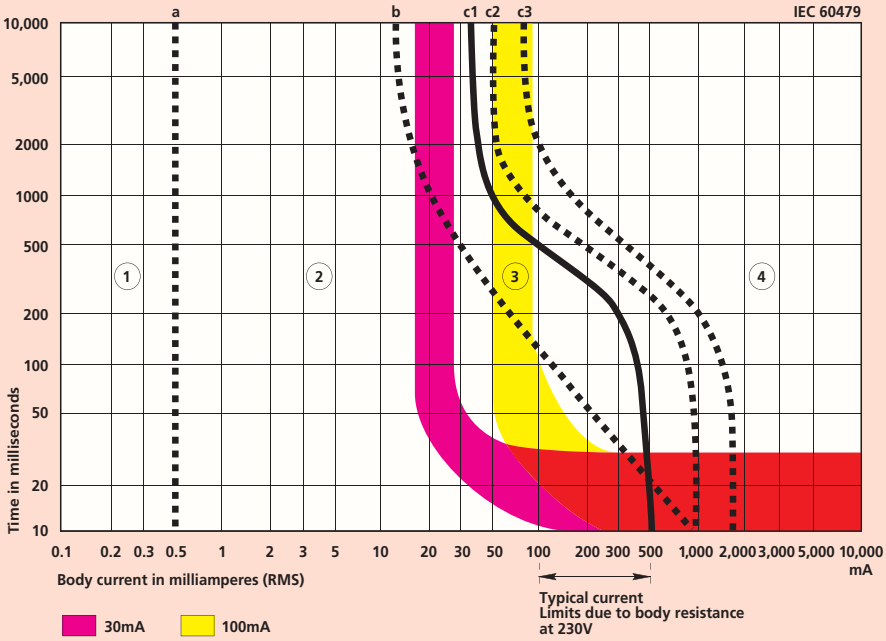
(1) min melting pt (pre-arching) eg I_n=125A BS 88

(2) max let-through I^2t of MCB eg 6A



IEC PUBLICATION (60479) CURVES WITH WYLEX RCD CHARACTERISTICS SUPERIMPOSED

TIME/CURRENT ZONES OF EFFECT OF AC CURRENT (15–100Hz) ON PERSONS



Zone Physiological effects

1. Usually no reaction effects (no danger).
2. Usually no harmful physiological effects (usually no effects).
3. Usually no organic damage to be expected. Likelihood of muscular contraction and difficulty of breathing, reversible disturbances of formation and conduction of impulses in the heart, and transient cardiac arrest without ventricular fibrillation increases with current magnitude and time.
4. In addition to the effects of zone 3, probability of ventricular fibrillation increased up to 5% (Curve C2), up to 50% (Curve C3) and above 50% beyond Curve C3. Increasing with magnitude and time, pathyphysiological effects such as cardiac arrest, breathing arrest and heavy burns may occur.

FAULT CURRENT SENSITIVITY

As the equipment is fed from the mains electrical supply, in the event of an earth fault the presence of semi-conductors may result in the normal ac waveform being replaced by a non-sinusoidal fault current. In some cases the waveform may be rectified or chopped. These waveforms are said to contain a pulsating dc component which can either partially desensitise or totally disable a standard Type AC RCD.
International standards IEC 61008 (RCCBs) and IEC 61009 (RCBOs) divide RCDs into two performance classes:

Type AC
RCDs for which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly arising.

Type A
RCDs for which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly arising.

OPERATION

The RCD employs the current balance principle which involves the supply conductors to the load (phase and neutral) being wound onto a common transformer core to form the primary windings. Under healthy circuit conditions, the current in the phase conductor is equal to the current in the neutral, and the vector sum of the current is zero.
In the event of an earth fault, an amount of current will flow to earth, creating an out of balance situation in the transformer assembly.
This out of balance is detected by the secondary winding of the transformer and at a pre-determined level of out of balance will activate the trip mechanism.
Single phase and neutral or three phase and neutral units (suitable for 3 or 4 wire systems) are available, the latter being suitable for balanced or unbalanced 3 phase loads.
The RCD trip mechanism will operate at a residual current of between 50–100% of its rating tripping current (sensitivity).

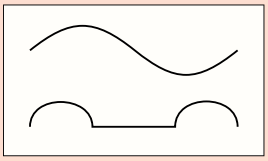
TRANSIENT EARTH LEAKAGE CURRENTS

All Wylex residual current devices incorporate a high level of immunity to tripping when subjected to transient earth leakage currents.
Such transients can occur when there is a significant level of capacitance to earth as can result from cable capacitance (particularly MICC) or RF filter networks. Wylex RCDs are therefore less susceptible to nuisance tripping due to transient earth leakage currents.

To ensure the correct level of protection, check for the following symbols:

TYPE AC
normal ac sensitivity

TYPE A
pulsating dc sensitivity



Wylex RCDs are available as both Type AC and Type A devices.

Technical details for Type B RCDs available on request.

RESIDUAL TRIPPING CURRENTS

10mA-
Used in special applications where additional protection against contact is essential due to the nature of the installation.

30mA-
Tripping current designated by the IEE Wiring Regulations to provide additional protection.

100mA-
Suitable for use where protection is provided to guard against firehazard, etc, rather than to provide additional protection to personnel, and where the earthing requirements need supplementing by RCD protection.

100mA time delay-
Suitable for use when total RCD protection is required to supplement the system earthing and where local 30mA RCDs are used to give additional protection. The time delay RCD will discriminate with the 30mA RCD.

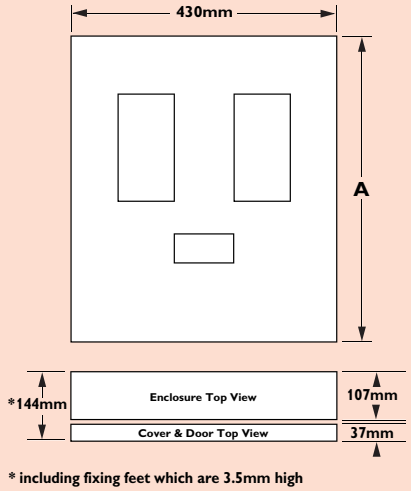
300mA-
For use in large installations where plant and equipment protection are the main considerations and high levels of earth leakage are experienced.

If using RCDs in series, discrimination can only be achieved by using Type S devices in series with Types A or AC. See chart below.

BSEN61008-1:1995 RCBOs BSEN61009-1:1995

Type of RCD	Rated Residual Current (In) RCD to Trip between 50%-100% In	Tripping times 1x In	2x In	5x In	500Amps	Scope
Standard A & AC	Any Value, eg 10, 30, 100mA	300ms	150ms	40ms	40ms	Maximum-Trip
Time Delay (S)	Greater than 30mA, eg 100mA	500ms 130ms	200ms 60ms	150ms 50ms	150ms 40ms	Maximum-Trip Minimum-Non Trip

STANDARDS



*** including fixing feet which are 3.5mm high**

Switches	Multipole: 415V 50Hz BSEN 60947-3 1992 Category of duty AC22A
MCBs	BSEN 60898: 1991 Type B, C and D
Short circuit rating	6 & 10kA
Distribution Boards	BS EN 60439-3
Degree of Protection.	For indoor use only (IP3X)

CONSTRUCTION

Wylex NH MCB distribution board enclosures are fabricated in heavy gauge steel and are rust protected and highly resistant to both weathering and mechanical damage. Incorporated in the distribution boards are multi-terminal dual earth and neutral bars. They are designed for ease of installation and have ample wiring space.

The WYLEX PSB miniature circuit breakers are rated at 10kA and are of the fault limiting type.

When a short circuit occurs, the current operates a solenoid which trips the mechanism and forces the moving contact away from the fixed contact. The arc generated is forced into an arcing chamber which incorporates splitter plates, to divide and cool it, reducing the total operating time to less than 5ms, This high speed operation substantially reduces the 'let through' energy (I^2t) keeping additional damage at the point of the fault to a minimum. Additionally this allows discrimination with HRC fuses at high fault levels.

125A DISTRIBUTION BOARDS

CAT REF	DIMENSION A mm
NHTN4MR	490
NHTN6MR	570
NHTN8MR	650
NHTN12MR	815
NHTN16MR	895
NHTN20MR	1000
NHTN24MR	1140

Depth 165mm - all sizes

250A DISTRIBUTION BOARDS

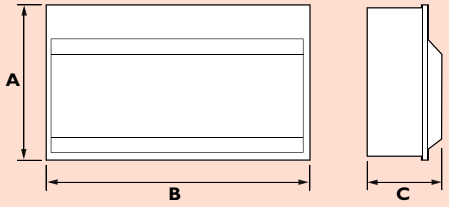
CAT REF	DIMENSION A mm
NHTN2540MR	769
NHTN2560MR	823
NHTN2580MR	877
NHTN25120MR	985
NHTN25160MR	1093
NHTN25200MR	1201
NHTN25240MR	1309

NHTN METER PACKS (EXTENSION)

CAT REF	DIMENSIONS A mm	B mm	C mm
NHTN125MP	245	430	144
NHTN250MP	245	430	144

NHAB DIN ACCESSORY BOXES

CAT REF	DIN MODULES	DIMENSION A mm
NHEB	-	240
NHEB/DIN	18	240
NHAB	18	240
NHAB2	36	387
NHAB3	54	544
NHAB4	72	756
NHAB5	90	856



SINGLE PHASE DISTRIBUTION BOARDS

CAT REF	DIMENSIONS A mm	B mm	C mm
NHSPN0051	210	188	105
NHSPN0081	210	242	105
NHSPN00111	210	293	105
NHSPN00141	210	343	105
NHSPN00161	210	394	105
NHSPN00191	210	394	105

NH125 PANELBOARD DIMENSIONS (mm)

250A PANELBOARD

	DIMENSIONS H	W	D	Modules
6 Way	912	630	164	12
8 Way	988	630	164	13
12 Way	1140	630	164	15
16 Way	1292	630	164	17

250A CABLE WAYS

6 Way	912	250	180	12
8 Way	988	250	180	13
12 Way	1140	250	180	15
16 Way	1292	250	180	17

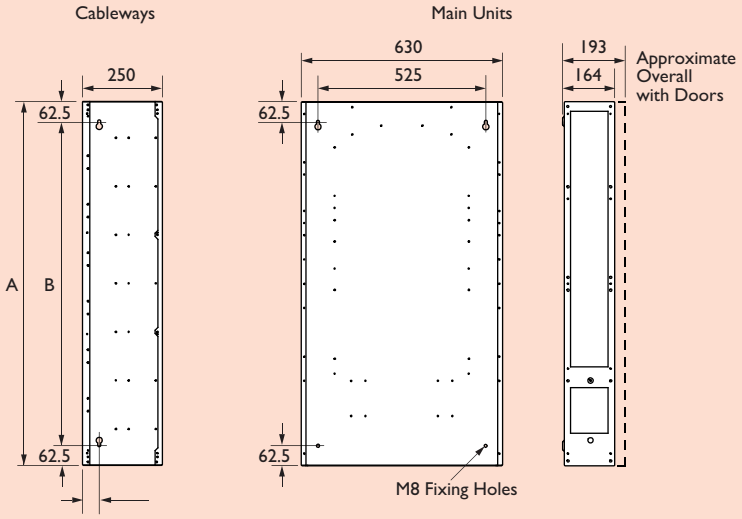
400A PANELBOARD

	DIMENSIONS H	W	D	Modules
6 Way	1064	630	164	14
8 Way	1140	630	164	15
12 Way	1292	630	164	17
16 Way	1444	630	164	19

400A CABLE WAYS

6 Way	1064	250	180	14
8 Way	1140	250	180	15
12 Way	1292	250	180	17
16 Way	1444	250	180	19

MAIN UNITS



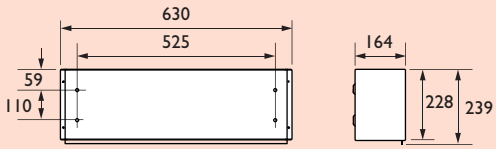
MAIN UNITS 250A

	DIMENSIONS A	B
6 Way	912	787
8 Way	988	863
12 Way	1140	1015
16 Way	1292	1167

MAIN UNITS 400A

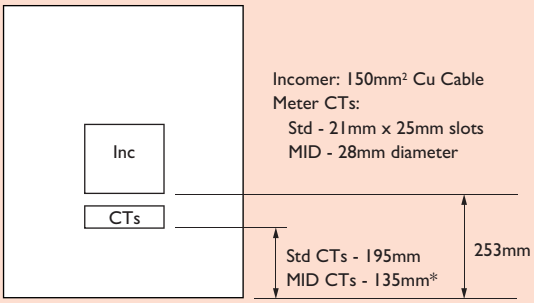
6 Way	1064	939
8 Way	1140	1015
12 Way	1292	1167
16 Way	1444	1319

ADD-ON UNITS

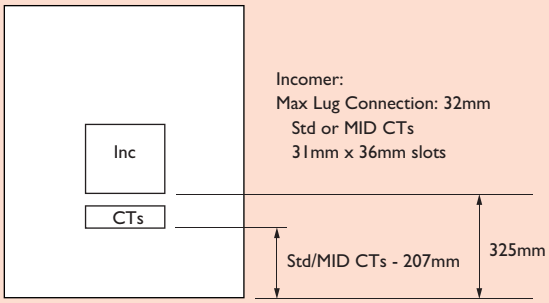


AVAILABLE SPREADING ROOM FOR INCOMING CABLES

NH125-250A Incomer



NH125-400A Incomer



* We would recommend the use of a cable spreader box for incoming 4c copper cables in excess of 70mm² when used in conjunction with the 250A integral MID meter option

NH250 PANELBOARD DIMENSIONS (mm)

400A PANELBOARD

	DIMENSIONS		
	H	W	D
2 Way	1050	900	250
4 Way	1155	900	250
6 Way	1260	900	250

400A STANDARD CABLE WAYS

2 Way	1050	250	185
4 Way	1155	250	185
6 Way	1260	250	185

400A METERED CABLE WAYS

2 Way	1050	400	185
4 Way	1155	400	185
6 Way	1260	400	185

630A PANELBOARD

	DIMENSIONS		
	H	W	D
2 Way	1050	900	250
4 Way	1155	900	250
6 Way	1260	900	250

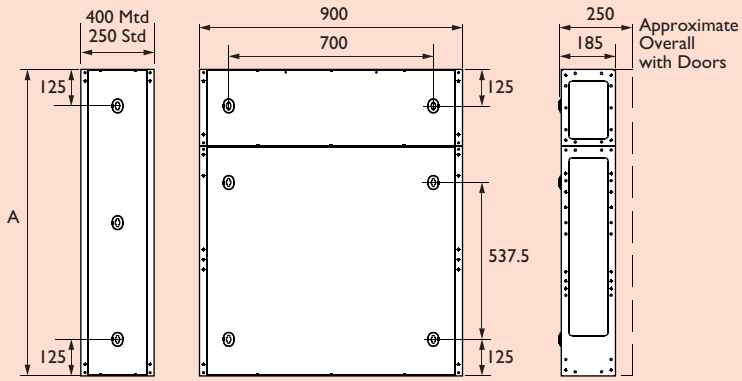
630A STANDARD CABLE WAYS

2 Way	1050	250	185
4 Way	1155	250	185
6 Way	1260	250	185

630A METERED CABLE WAYS

2 Way	1050	400	185
4 Way	1155	400	185
6 Way	1260	400	185

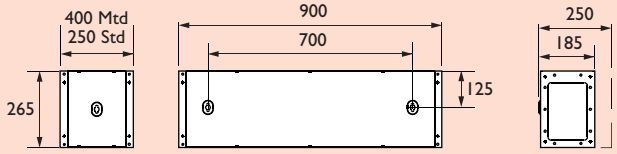
MAIN UNITS



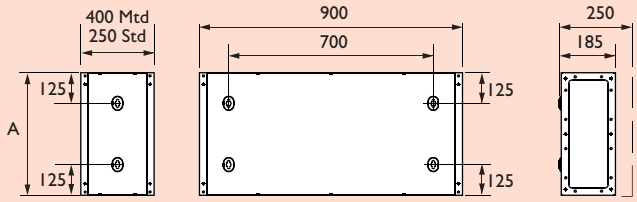
MAIN UNITS

	DIMENSION A
2 Way	1050
4 Way	1155
6 Way	1260

4 WAY NGG EXTENSION UNIT



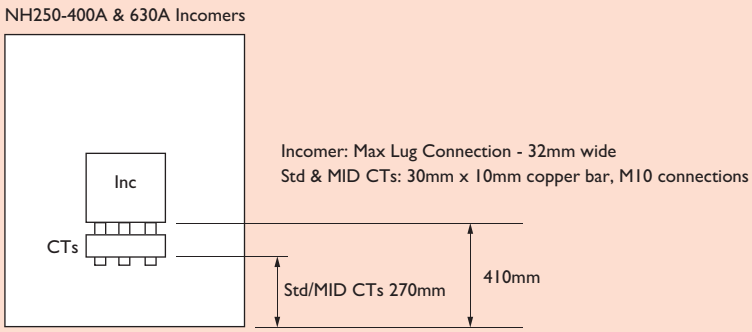
8 & 12 WAY EXTENSION UNIT



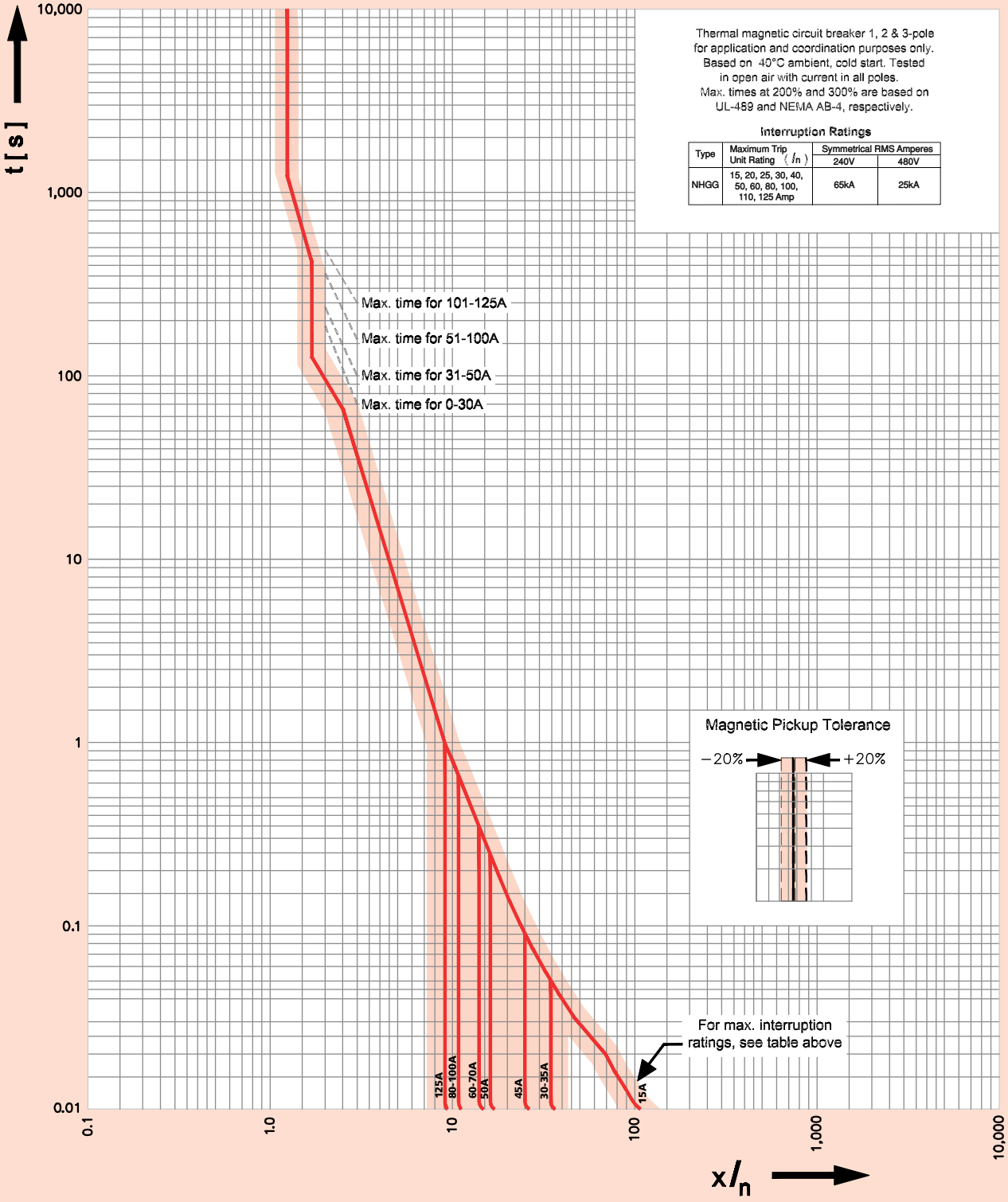
EXTENSION UNITS

	DIMENSION A
8 Way NHGG	420
12 Way NHGG	580
8 Way NHJ	580

AVAILABLE SPREADING ROOM FOR INCOMING CABLES



NHGG TIME / CURRENT CHARACTERISTICS

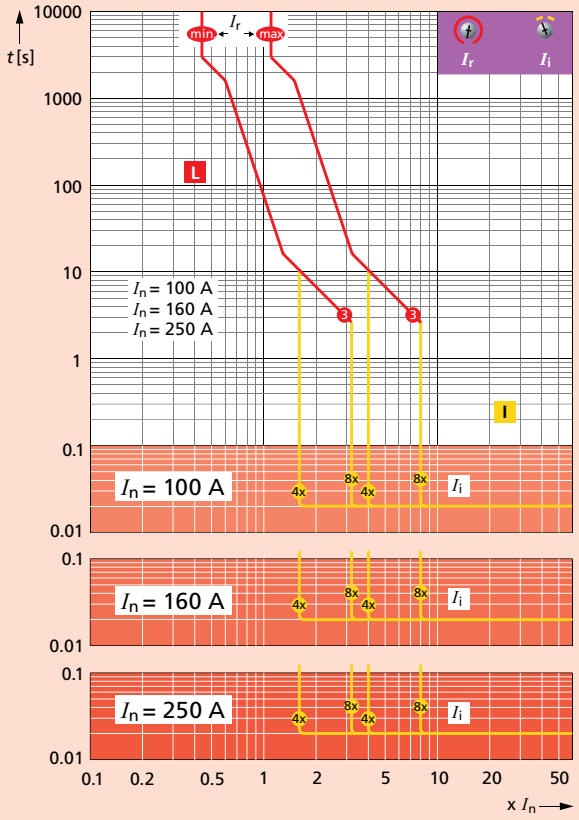


FROM THE 5 SEC VALUE FOR THE 125A BREAKER, THE ABOVE CURVE SUGGESTS A OHMIC VALUE OF 0,33 OHMS

5 SEC VALUES (230V / 5.5X IN) FOR OTHER RATINGS ARE AS FOLLOWS

Ampere	20	25	30	40	50	60	80	100	125
Ohm	2.09	1.67	1.39	1.05	0.84	0.70	0.52	0.42	0.33

NHJ TIME / CURRENT CHARACTERISTICS



IR & II SET AT MINIMUM

AMPS	CURRENT VALUE (A) 0.4 SECONDS	5 SECONDS	VOLTAGE	OHMIC VALUE 0.4 SECONDS	5 SECONDS
100	150A	150A	230V	1.533Ω	1.533Ω
160	240A	240A	230V	0.958Ω	0.958Ω
250	375A	375A	230V	0.613Ω	0.613Ω

IR SET AT MINIMUM & II SET AT MAXIMUM

100	320A	230A	230V	0.719Ω	1.000Ω
160	512A	368A	230V	0.449Ω	0.625Ω
250	800A	575A	230V	0.288Ω	0.400Ω

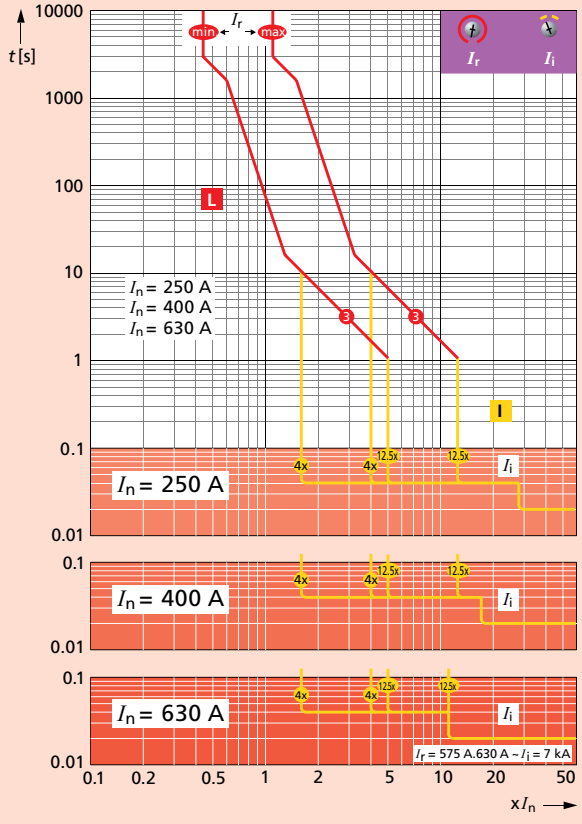
IR & II SET AT MAXIMUM

100	800A	600A	230V	0.288Ω	0.383Ω
160	1280A	960A	230V	0.180Ω	0.240Ω
250	2000A	1500A	230V	0.115Ω	0.153Ω

IR SET AT MAXIMUM & II SET AT MINIMUM

100	400A	400A	230V	0.575Ω	0.575Ω
160	640A	640A	230V	0.359Ω	0.359Ω
250	1000A	1000A	230V	0.230Ω	0.230Ω

NHL TIME / CURRENT CHARACTERISTICS



IR & II SET AT MINIMUM

AMPS	CURRENT VALUE (A) 0.4 SECONDS	5 SECONDS	VOLTAGE	OHMIC VALUE 0.4 SECONDS	5 SECONDS
250	375A	375A	230V	0.613Ω	0.613Ω
400	600A	600A	230V	0.383Ω	0.383Ω
630	945A	945A	230V	0.243Ω	0.243Ω

IR SET AT MINIMUM & II SET AT MAXIMUM

250	1250A	575A	230V	0.184Ω	0.400Ω
400	2000A	920A	230V	0.115Ω	0.250Ω
630	3150A	1449A	230V	0.073Ω	0.159Ω

IR & II SET AT MAXIMUM

250	3125A	1500A	230V	0.074Ω	0.153Ω
400	5000A	2400A	230V	0.046Ω	0.096Ω
630	7875A	3780A	230V	0.029Ω	0.061Ω

IR SET AT MAXIMUM & II SET AT MINIMUM

250	1000A	1000A	230V	0.230Ω	0.230Ω
400	1600A	1600A	230V	0.144Ω	0.144Ω
630	2520A	2520A	230V	0.091Ω	0.091Ω

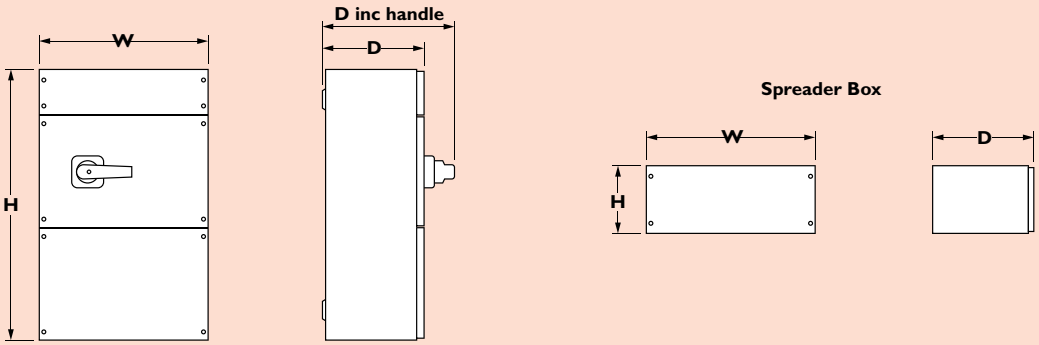
CONTACTORS

TYPE	POWER (W)	C(µF)	I(A)	MESB-20NC MESB-20NO	MESB-24NC MESB-24NO	MESB-40NC MESB-40NO	MESB-63NC MESB-63NO
Incandescent Lamps	60	-	0.26	23	29	65	85
	100	-	0.43	14	16	40	50
	200	-	0.87	7	8	20	25
	500	-	2.17	3	3	8	10
	1000	-	4.35	1	1	4	5
Fluorescent Lamps uncorrected and Series correction	18	-	0.37	22	24	90	140
	24	-	0.35	22	24	90	140
	36	-	0.43	17	20	65	95
	58	-	0.67	14	17	45	70
Fluorescent Lamps lead-lag circuit	18	-	0.11	2 x 30	2 x 40	2 x 100	2 x 150
	24	-	0.14	2 x 24	2 x 31	2 x 78	2 x 118
	36	-	0.22	2 x 17	2 x 24	2 x 65	2 x 95
	58	-	0.35	2 x 10	2 x 14	2 x 40	2 x 60
Fluorescent Lamps Parallel correction	18	4.5	0.12	7	8	48	73
	24	4.5	0.15	7	8	48	73
	36	4.5	0.2	7	8	48	73
	58	7	0.32	4	5	31	47
Fluorescent Lamps with electronic ballast units (EVG)	1 x 18	-	0.09	25	35	100	140
	1 x 36	-	0.16	15	20	52	75
	1 x 58	-	0.25	14	19	50	72
	2 x 18	-	0.17	12	17	50	70
	2 x 36	-	0.32	7	10	26	38
	2 x 58	-	0.49	7	9	25	36
High-pressure Mercury-vapour Lamps uncorrected	50	-	0.61	14	18	38	55
	80	-	0.8	10	13	29	42
	125	-	1.15	7	9	20	29
	250	-	2.15	4	5	10	15
	400	-	3.25	2	3	7	10
	700	-	5.4	1	2	4	6
	1000	-	7.5	1	1	3	4
High Pressure Mercury-vapour Lamps Parallel correction	50	7	0.28	4	5	31	47
	80	8	0.41	4	5	27	41
	125	10	0.65	3	4	22	33
	250	18	1.22	1	2	12	18
	400	25	1.95	1	1	9	13
	700	45	3.45	-	-	5	7
	1000	60	4.8	-	-	4	5
Halogen metal-vapour Lamps uncorrected	35	-	0.53	18	22	43	60
	70	-	1	10	12	23	32
	150	-	1.8	5	7	12	18
	250	-	3	3	4	7	10
	400	-	3.5	3	3	6	9
	1000	-	9.5	1	1	2	3
	2000	-	16.5	-	-	1	1
Halogen metal-vapour Lamps Parallel correction	35	6	0.25	5	6	36	50
	70	12	0.45	2	3	18	25
	150	20	0.75	1	1	11	15
	250	33	1.5	-	1	6	9
	400	35	2.5	-	1	6	8
	1000	95	5.8	-	-	2	3
	2000	148	11.5	-	-	1	2
High-pressure Sodium-vapour Lamps uncorrected	150	-	1.8	5	6	17	22
	250	-	3	3	4	10	13
	400	-	4.7	2	2	6	8
	1000	-	10.3	-	1	3	3
High-pressure Sodium-vapour Lamps parallel	150	20	0.83	1	1	11	16
	250	33	1.5	-	1	6	10
	400	48	2.4	-	-	4	6
	1000	106	6.3	-	-	2	3
Low-pressure Sodium-vapour Lamps uncorrected	18	-	0.35	22	27	71	90
	35	-	1.5	7	9	23	30
	55	-	1.5	7	9	23	30
	90	-	2.4	4	5	14	19
	135	-	3.5	3	4	10	13
	180	-	3.3	3	4	10	13
Low-pressure Sodium-vapour Lamps Parallel correction	18	5	0.35	6	7	44	66
	35	20	0.31	1	1	11	16
	55	20	0.42	1	1	11	16
	90	26	0.63	1	1	8	12
	135	45	0.94	-	-	4	7
	180	40	1.16	-	-	5	8

		Thermal Rating per Pole	Motor Rating AC3 (kW) 230V	400V
MESB-20NC	MESB-20NO	20	1.3	-
MESB-24NC	MESB-24NO	24	2.2	4
MESB-40NC	MESB-40NO	40	5.5	11
-	MESB-63NO	63	8.5	15

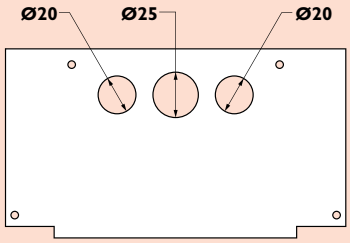
AC Ratings in accordance with BSEN60947-5-1 and BSEN 60947-4-1
Definitions: **AC1** Primarily Resistive Load but may be slightly inductive **AC3** Medium-Starting-duty motors, starting and switching off of squirrel-cage motors

DIMENSION DETAILS

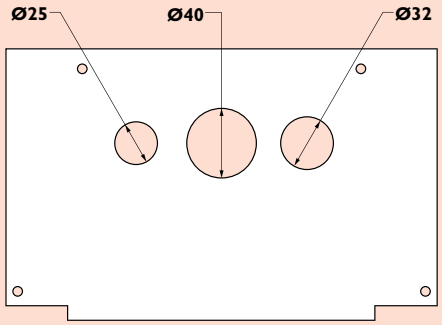


HOUSED UNIT DIMENSIONS (mm)

HOUSED UNIT	H	W	D	D inc. handle		H	W	D
20-32A	220	210	135	200				
63-100A	420	262	188	258	SPREADER BOX	105	262	183
125-200A	525	315	240	273	SPREADER BOX	105	315	210
315-400A	735	420	240	305	SPREADER BOX	210	420	240
630-800A	850	620	293	355	SPREADER BOX	210	620	262



20/32A Gland Plates



63-100A Gland Plates

All Dimensions in mm

SPECIFICATION

- BSEN947-3
- Range of ratings 20A-400A
- Pole configurations SP & N, and TP & N
- Voltage rating 415V ac
- Frequency rating 50/60 Hz
- Fuse type BS88

TECHNICAL DATA

	20–32A	63A	100A	125A	160A	200A	315A	400A	630	800
Mechanical Endurance	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	8,000	8,000
Fused s/c Current kA RMS	80	80	80	80	80	80	80	80	80	80
Ratings	A kW	A kW	A kW	A kW	A kW	A kW	A kW	A kW	A kW	A kW
415V Ie/pe	32 15	63 30	100 55	125 75	160 90	200 110	315 160	400 220	630 353	800 450
Isolator links	-	NHCIL2	NHCIL3	NHCIL3	NHCIL3	NHCIL3	NHCIL4	NHCIL4	NHCIL5	NHCIL5

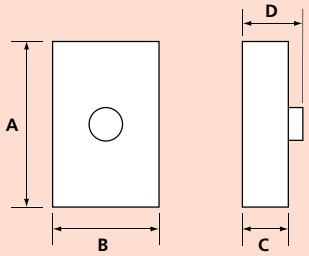
FUSE COMPARISON DATA

CURRENT RATING	BS 88 REFERENCE	LAWSON	GEC	BUSSMAN
20/32A	A1	NIT	NIT	NITD
63A	A3,A2	TIS	TIS	BAO
100A	A4	TCP	TCP	CEO
125A	A4	CTFP	TCP	DEO
160A	A4	CTFP	TCP	DEO
200A	A4	CTFP	TCP	DEO
315A	B3	TKF	TKF	ED
400A	B4, B3, B2,B1	TFM	TFM	ED
630A	C1, C2	TTM,TM	TTM,TM	FF, EF
800A	C1, C2, C3	TLM,TTM,TM	TLM,TTM,TM	GF, FF, EF

TECHNICAL INFORMATION

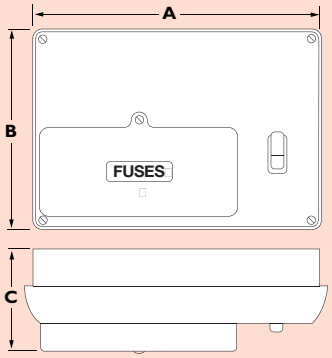
	Sheet Steel Enclosure						
RATING IN AMPS	20A	32A	40A	63A	63A*	100A	125A
Rated Insulation Voltage Ui (V)	800	800	800	800	800	800	800
Dielectric Strength (kV) 50 Hz 1min	3	3	3	3	3	3	3
Shock Resistance Uimp (kV)	8	8	8	8	8	8	8
OPERATIONAL CURRENT IE (A)							
415 V AC - AC21A / AC21B	20	32	40	63	80	100	125
AC22A / AC22B	20	32	40	63	80	100	125
AC23A / AC23B	20	32	40	63	80	80	80
500 V AC - AC21A / AC21B	20	32	40	63	80	100	125
AC22A / AC22B	20	32	40	63	80	100	125
AC23A / AC23B	20	32	40	40	63	63	63
690 V AC - AC20A / AC20B	20	32	40	63	80	100	125
AC21A / AC21B	20	32	40	63	80	100	125
AC22A / AC22B	20	32	40	63	80	100	100
AC23A / AC23B	20	25	25	25	50	50	50
MOTOR POWER (KW) AC 23							
415 V AC	7.5	11	11	15	18.5	37	40
500 V AC	7.5	11	15	18.5	22	37	37
690 V AC	11	11	18.5	18.5	25	30	30
FUSE TYPES TO BS88							
OVERLOAD CAPACITY							
Fuse rating gG	20	32	40	63/40	63	100	125
Short circuit current with fuses (kA Rms)	50	50	50	20/50	50	20	15
Asymmetric short time rating current (kA peak)	6	6	6	9	9	9	9
Admissible short time current 1 s. (kA Rms)	1.26	1.26	1.26	1.5	1.5	1.5	1.5
MAKING & BREAKING CHARACTERISTICS							
Breaking capacity (A Rms) 415 V AC 23 A	160	256	320	504	504	640	640
Making capacity (A Rms) 415 V AC 23 A	200	320	400	630	630	800	800
WITHSTAND							
Mechanical (number of operations) x 1000	100	100	100	100	30	30	30
Electrical (number of operations at 415V AC 23A) x 1000	3	3	3	3	1.5	1.5	1.5
CONNECTION							
Maximum Cu cable section (mm^2) Ith	16	16	16	16	50	50	50
using stranded cable (mm^2)							
WEIGHT (KG)							
3 pole	2.00	2.00	2.00	2.00	2.50	2.50	2.50
4 pole	2.00	2.00	2.00	2.00	2.50	2.50	2.50

DIMENSIONS



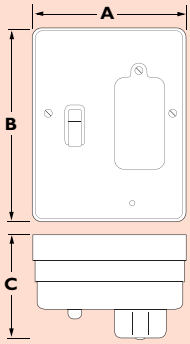
CAT REF	BOX SIZE	HEIGHT (A)	WIDTH (B)	DEPTH (C)	TOTAL DEPTH (D)
NHSW320	1	220mm	158mm	136mm	172.5mm
NHSW332	1	220mm	158mm	136mm	172.5mm
NHSW340	1	220mm	158mm	136mm	172.5mm
NHSW363	1	220mm	158mm	136mm	172.5mm
NHSW363X	2	325mm	158mm	136mm	172.5mm
NHSW3100	2	325mm	158mm	136mm	172.5mm
NHSW3125	2	325mm	158mm	136mm	172.5mm

STANDARD RANGE



INSULATED - MAIN SWITCH ISOLATOR

CAT REF	DIMENSIONS A	B	C
104	98	121	68
204	125	120	70
304	190	155	95
404	190	155	95
604	272	186	103
804	323	186	103
108/160/160C	143	178	99



METAL - MAIN SWITCH ISOLATOR

CAT REF	DIMENSIONS A	B	C
206	140	131	93
306	210	153	99
406	210	153	99
606	293	210	104

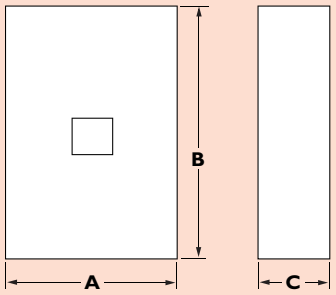
METAL - 45A AND 60A SWITCHFUSES

CAT REF	DIMENSIONS A	B	C
106	112	131	80
108M/160CM	172	242	98

METAL - 100A DOUBLE POLE SWITCHFUSE

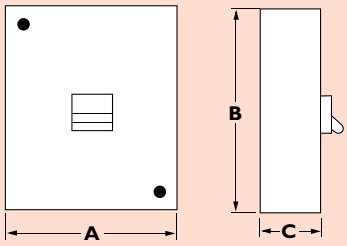
CAT REF	DIMENSIONS A	B	C
110M	178	305	76
110M/80	178	305	76
110M/63	178	305	76

ENCLOSURES



CAT REF	IP RATING	DIMENSIONS A	B	C
ESE2	IP40	60	153	60
ESE2L	IP20	60	140	60
WBE3	IP65	85	160	114
ESI4	IP40	100	150	68
ESM6	IP40	90	225	62
ESM7	IP54	90	225	89
ESE4	IP20	77	140	65
WBE4	IP65	110	160	114
ESM11	IP54	120	225	95
ESM13	IP54	137	318	104
ESM8	IP40	120	225	70

ISOLATORS



CAT REF	DIMENSIONS A	B	C	Terminal Capacity
832A	62	76	30	10
860A	57	79	29	25

CAT REF	DIMENSIONS A	B	C	Terminal Capacity
921X	72	45	48	10
921E	114	133	61	10
REC2S	78	150	65	50
REC2	100	150	65	50
REC3	100	150	65	50
REC4	100	150	65	50

MID approval

Under the Electricity Act 1989 all electricity meters used for billing purposes must be approved.
The approval for these meters is obtained by conforming to the European Measuring Instruments Directive (MID) 2004/22/EC (replacing OFGEM approval). This directive covers a number of different Instruments that are used to measure products or services for reselling. Therefore not only does it apply to Electrical Meters but you may see MID approval on a range of items such as the charge meter in a taxi, beer and wine glasses (the volume measurement line) in a Public House or on the petrol pumps when you are filling up your vehicle.

Who should be using MID certified meters?

By Law, anyone who is taking a meter reading that is then used for billing purposes and for which they subsequently receive a payment from the user for the electricity consumed.

Some typical examples:

- A Retail shopping centre owner wants to measure the individual consumption of all the store owners in his shopping mall and send them separate invoices for the electricity that each has used to run their business.
- A Landlord who wants to measure the electricity used by tenants renting apartments in his building and then send them a bill for the electricity they have used.
- A caravan/mobile home Leisure Park wants to measure the consumption of its customers and charge them an exact amount for the electricity used at the end of their rental period.

All of these examples must have the electricity consumption reading taken from a certified MID approved meter. The MID certification validates that the meter is manufactured using quality components, assures the meter is accurate for electricity billing purposes and that it maintains this accuracy over time for consistent readings.

Standard Meters - Non MID approved

If a meter is being used purely for a "check meter reading" and not being used to resell or charge for electricity consumed, then a standard meter that is reasonably accurate may be used to measure energy used at that point in time. For example, a check meter reading is required to meet L2 Building Regulations and Chartered Institution of Building Services Engineers TM39 guide to Building Energy Metering. The reading taken is used as a 'check point' to help reduce energy consumption.

METERING - TECHNICAL DATA

Single Phase and Three Phase Measuring Devices
Direct Connected kW Meters - No external current transformers required.
Standard reading or MID calibrated options.
All meters have pulsed output for Building Management Systems. (BMS)


80 A SP


80 A TP

General Characteristics		
Housing Width	2 modules DIN	4 modules DIN
Mounting	35mm DIN rail	35mm DIN rail
Depth	70mm	70mm
Reference standard	EN 50470-1-3 ***(B)***, EN 62053-23-31	EN 50470-1-3 ***(B)***, EN 62053-23-31
Operating Features		
Connectivity	2	2-3-4
Storage of energy values and configuration	yes	yes
Display tariffs identifier	T1 and T2	T1 and T2
Supply		
Rated control supply voltage Un	230 VAC	230 VAC
Operating range voltage	184 … 276 V	184 … 276 V
Rated frequency fn	50 Hz	50 Hz
Rated power dissipation (max.) Pv	≤8 (0.6) VA (W)	≤8 (0.6) VA (W)
Display (readouts)		
Connection errors and phase out	-	PHASE Err
Display type LCD - Digits	7 (1 decimal) - 6mm x 3mm	8 (1 decimal) - 6mm x 3mm
Active energy: 1 display, 7-digit	000000.0 … 999999.9 kWh	0000000.0 … 999999.9 kWh
+ display import or export (arrow)	999999.9 … 000000.0 kWh	9999999.9 … 000000.0 kWh
Reactive energy: 1 display, 7-digit	000000.0 … 999999.9 kWh	0000000.0 … 999999.9 kWh
+ display import or export (arrow)	999999.9 … 000000.0 kWh	9999999.9 … 000000.0 kWh
Instantaneous active power: 1 display, 3-digit	000 … 999 W, kW or MW	000 … 999 W, kW or MW
Instantaneous reactive power: 1 display, 3-digit	000 … 999 var, kvar or Mvar	000 … 999 var, kvar or Mvar
Instantaneous tariff measurement	1 display, 1 digit T1 or T2	1 display, 1 digit T1 or T2
Display period refresh (seconds)	1	2
Measuring accuracy		
Active energy and power	±1% ***(B)***	±1% ***(B)***
Reactive energy and power	±2 %	±2 %
Pulse output SO		
Pulse output	yes	yes
Pulse quantity	1000 imp/kWh	500 imp/kWh
Pulse duration	30 ±2 ms	30 ±2 ms
Required voltage	5 … 230 ±5% (5 …300) VAC (DC)	5 … 230 ±5% (5 …300) VAC (DC)
Permissible current	90 mA	90 mA
Permissible current	1µA	1µA

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