



**Palazzoli**  
GROUP



Now **included**  
in the range:

Extension Boxes  
Metering Kits  
Surge Suppression

and more!

# TP&N DISTRIBUTION BOARD TYPE B RANGE

**A comprehensive distribution board range  
for modern commercial & industrial installations**

# TP&N DISTRIBUTION BOARD - TYPE B



- **Designed & Engineered in the UK**
- **Compliant to BS EN 61439-3:2012**
- **Supplied unpopulated for maximum design flexibility**
- **Compatible with the Lewden 6kA & 10kA MCB's & RCBO range**
- **Four modular sizes available: 4, 8, 12 & 16 TP outgoing ways**

## TP&N Distribution Boards

The complete solution to managing the distribution of electricity in commercial premises such as offices, warehouses, factories, schools, hospitals etc.

Lewden distribution boards provide the flexibility required allowing engineers to design a functional distribution system that protects the electrical installation in a compact, modern enclosure. Each board has been designed to save space and provide quick and easy connection.

Each Board has an all steel construction finished with a low smoke powder coated finish to RAL 9003, white.



## Attractive and ergonomic profile designed for commercial premises



- Optimal space for simple and safe wiring.
- Earth and neutral termination on both the left and right hand side of board for clear identification of load circuit connections.



- Supplied with lock and key for security

- Suitable for use with 6kA\* or 10kA MCB's & RCBO's (\*when used in conjunction with the relevant accessories)



- Detachable undrilled gland plates (top and bottom)

### Main features:

- Heavy gauge (1.2mm) robust & modular steel construction, suitable for wall mounting
- Complies to BS7671:2008 + Amendment 3:2015
- Optimal cabling space
- Rigid construction prevents distortion
- Lockable hinged access door for safety and security
- Removable top and bottom gland plates
- Powder coated texture finish to RAL 9003 white

# LIMITLESS DESIGN OPTIONS FOR BESPOKE CONFIGURATIONS

Our new range of extension boxes allow engineers to customise their design to meet the requirements of larger distribution networks with an ingress protection rating of IP2XC. Designed to simply bolt on to the top and bottom of Lewden TPN boards, they provide greater cabling space and can be used to increase the number of circuits that are protected. Multiple extension boxes can be utilised simultaneously to accommodate meters, time clocks, contactors, terminals etc.



E-TPN LW Board with TPN-MKSI metering panel



E-TPN LW Board with SRG3V1G surge protector installed in TPN-EXT19 19 module extension box

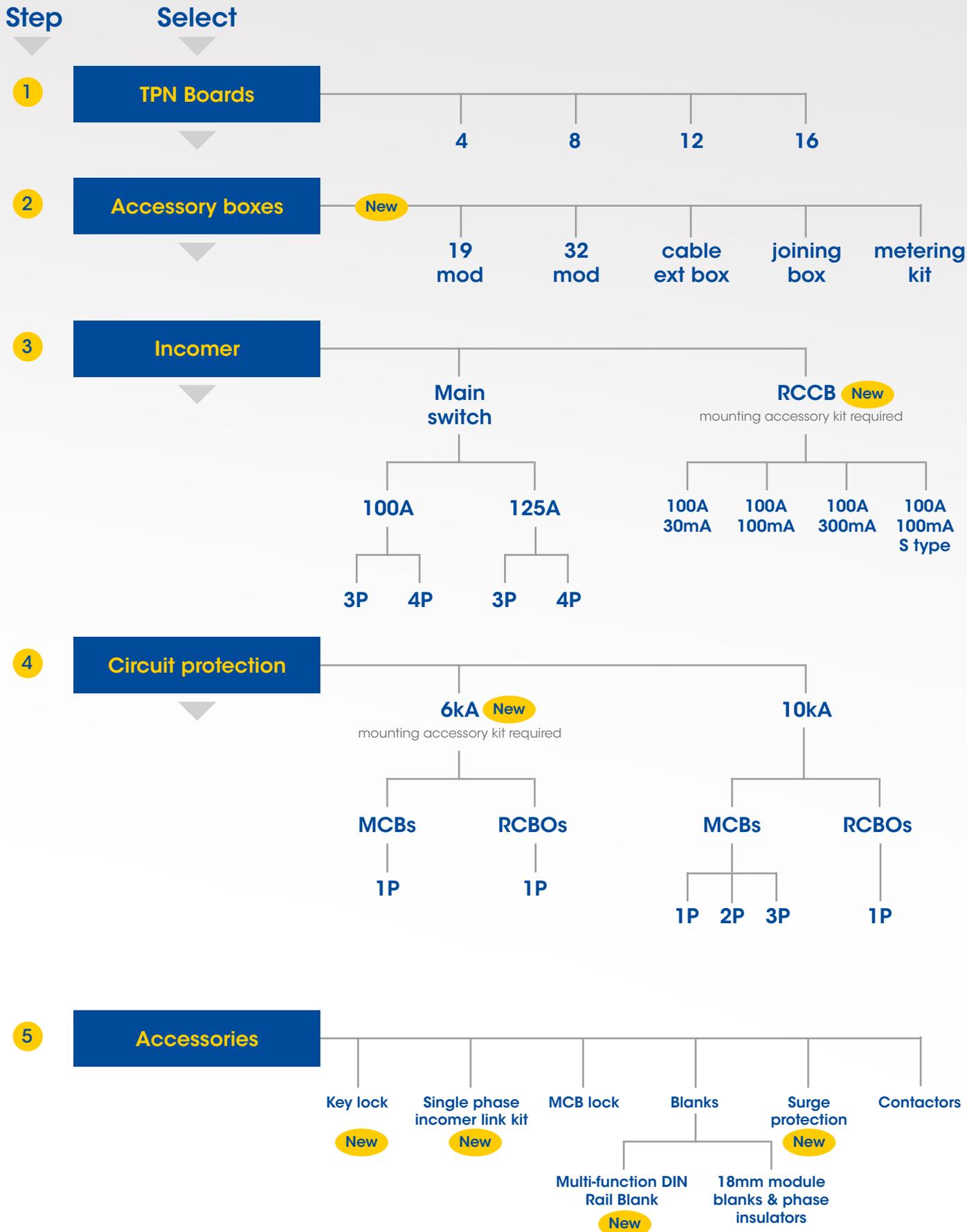


E-TPN LW Board with TPN-JB125 Joining Box & QFS-MC32ENC 32 Module Extension Box



E-TPN LW Board utilized with joining & cabling box

# BUILD A FUNCTIONAL DESIGN TO SUIT YOUR INSTALLATION



# TP&N DISTRIBUTION BOARDS - TYPE B



PART NUMBERS	DESCRIPTION	OUTGOING WAYS	DRAWING REFERENCE
E-TPN04LW	4 way, 125A, Type B, without incomer	4 x TP / 12 x SP	MODULE 4
E-TPN08LW	8 way, 125A, Type B, without incomer	8 x TP / 24 x SP	MODULE 8
E-TPN12LW	12 way, 125A, Type B, without incomer	12 x TP / 36 x SP	MODULE 12
E-TPN16LW	16 way, 125A, Type B, without incomer	16 x TP / 48 x SP	MODULE 16

The board is supplied complete with mounting brackets to suit 100/125A main switch and 10kA circuit protection devices. For other devices, mounting accessory kits will be required.

## Technical Data

Busbar Rating	Rated Operational Voltage Ue	IP Rating	Rated Conditional Short Circuit Current ICC:	Standards
200A	230V/400V 50Hz	IP2XC	16kA RMS (backed up by a 125A fuse)	BS EN 61439-3

## EXTENSION BOXES New

	PART NUMBERS	DESCRIPTION	DRAWING REFERENCE
	TPN-EXT19	19 Module Extension Box with key lockable door and DIN Rail	MODULE 19
	QFS-MC32ENC	32 Module Extension Box (to be used in conjunction with TPN-JB125)	MODULE 32
	TPN-EXTCB	Cable Extension Box with screw on cover and internal equipment mounting plate	EXTENSION
	TPN-JB125	Joining box	JOINING

## METERING KIT New

	PART NUMBERS	DESCRIPTION	DRAWING REFERENCE
	TPN-MKSI	Multi-function Metering Panel	MODULE 19

### METER KIT INFORMATION (TPN-MSKI)

Easy to read backlit LCD screen • Suitable for single or 3 phase four wire networks • Built in pulsed output and RS485 modbus communication • 3ph 140-460VAC / 1ph 80-265V measured voltage • CT ratio 160A / 330mV with RJ45 connection cable • Wide range of measured parameters: - Voltage L-N L-L - Current per phase - Power factor - Frequency - Active and reactive power - Max demand

## MAIN SWITCH



RATED CURRENT	POLE	PART NUMBERS
100	3	EMS-1003P
	4	EMS-1004P
125	3	EMS-1253P
	4	EMS-1254P

## Technical Data

Rated Operational Voltage (Ue)	Category of Duty	Terminal Capacity	Standards
230/400V, 50Hz	AC22B	50mm <sup>2</sup>	EN60947-3

## RCCB - 4 Pole New



RATED CURRENT	TRIPPING THRESHOLD	PART NUMBERS
100	30mA	RCD10-100/30/4a
	100mA	RCD10-100/100/4a
	100mA time delayed	RCD10-100/100/4s
	300mA	RCD10-100/300/4a

## Technical Data

Part No.	Type	Rated Operational Voltage (Ue)	Standard Tripping Time 1 x IΔn	Standard Tripping Time 5 x IΔn	Terminal Capacity	Standards
RCD10-100/30/4a RCD10-100/100/4a RCD-100/300/4a	A	400V, 50Hz	<300ms	<40ms	35mm <sup>2</sup>	EN61008-1
RCD10-100/100/4s	S	400V, 50Hz	130-500ms	50 - 150ms	35mm <sup>2</sup>	EN61008-1

Where an RCCB is to be used as incoming device, mounting accessory kit TPN-RCCBAK is required (see page 10).

# CIRCUIT PROTECTION - 10kA

## MCB's



RATED CURRENT	10 kA - B TYPE		10 kA - C TYPE			10 kA - D TYPE		
	1 POLE	3 POLES	1 POLE	2 POLES	3 POLES	1 POLE	2 POLES	3 POLES
6A	E10-1B06	E10-3B06	E10-1C06	E10-2C06	E10-3C06	E10-1D06	E10-2D06	E10-3D06
10A	E10-1B10	E10-3B10	E10-1C10	E10-2C10	E10-3C10	E10-1D10	E10-2D10	E10-3D10
16A	E10-1B16	E10-3B16	E10-1C16	E10-2C16	E10-3C16	E10-1D16	E10-2D16	E10-3D16
20A	E10-1B20	E10-3B20	E10-1C20	E10-2C20	E10-3C20	E10-1D20	E10-2D20	E10-3D20
25A	E10-1B25	E10-3B25	E10-1C25	E10-2C25	E10-3C25	E10-1D25	E10-2D25	E10-3D25
32A	E10-1B32	E10-3B32	E10-1C32	E10-2C32	E10-3C32	E10-1D32	E10-2D32	E10-3D32
40A	E10-1B40	E10-3B40	E10-1C40	E10-2C40	E10-3C40	-	-	-
50A	E10-1B50	E10-3B50	E10-1C50	E10-2C50	E10-3C50	-	-	-
63A	E10-1B63	E10-3B63	E10-1C63	E10-2C63	E10-3C63	-	-	-

## Technical Data

Type	Rated Operational Voltage (Ue)	Terminal Capacity	Standards
AC	230/400V 50/60Hz	25mm <sup>2</sup>	EN60898-1 & EN60947-2

## RCBO's - 1 Pole + unswitched neutral

Suitable for use in TN-S, TN-C-S & TT network systems



RATED CURRENT	10 kA - B TYPE 30mA	10 kA - C TYPE 30mA
6A	RCBO10-06/30/1M/B	RCBO10-06/30/1M/C
10A	RCBO10-10/30/1M/B	RCBO10-10/30/1M/C
13A	RCBO10-13/30/1M/B	RCBO10-13/30/1M/C
16A	RCBO10-16/30/1M/B	RCBO10-16/30/1M/C
20A	RCBO10-20/30/1M/B	RCBO10-20/30/1M/C
25A	RCBO10-25/30/1M/B	RCBO10-25/30/1M/C
32A	RCBO10-32/30/1M/B	RCBO10-32/30/1M/C
40A	RCBO10-40/30/1M/B	RCBO10-40/30/1M/C

## Technical Data

Class	Rated Operational Voltage (Ue)	Standard Tripping Time 1 x IΔn	Standard Tripping Time 5 x IΔn	Terminal Capacity	Neutral Lead Length	Standards
AC	230V, 50Hz	<300ms	<40ms	25mm <sup>2</sup>	600mm	EN61009-1

# CIRCUIT PROTECTION - 6kA

## MCB's - 1 Pole



RATED CURRENT	6 kA - B TYPE	6 kA - C TYPE
6A	G06-1B06	G06-1C06
10A	G06-1B10	G06-1C10
16A	G06-1B16	G06-1C16
20A	G06-1B20	G06-1C20
32A	G06-1B32	G06-1C32
40A	G06-1B40	G06-1C40
50A	G06-1B50	G06-1C50

For fitting of 6kA devices a mounting kit is required (see page 9).

### Technical Data

Type	Rated Operational Voltage (Ue)	Terminal Capacity	Standards
AC	230V, 50Hz	16mm <sup>2</sup>	EN60898-1

## RCBO's - 1 Pole + unswitched neutral

Suitable for use in TN-S and TN-C-S & TT network systems



RATED CURRENT	6 kA - B TYPE 30mA	6 kA - C TYPE 30mA
6A	RCBO-06/30/SP	RCBO-06/30/1M/C
10A	RCBO-10/30/SP	RCBO-10/30/1M/C
16A	RCBO-16/30/SP	RCBO-16/30/1M/C
20A	RCBO-20/30/SP	RCBO-20/30/1M/C
32A	RCBO-32/30/SP	RCBO-32/30/1M/C
40A	RCBO-40/30/SP	RCBO-40/30/1M/C
50A	RCBO-50/30/SP	RCBO-50/30/1M/C

For fitting of 6kA devices a mounting kit is required (see page 9).

### Technical Data

Type	Rated Operational Voltage (Ue)	Standard Tripping Time 1 x IΔn	Standard Tripping Time 5 x IΔn	Terminal Capacity	Neutral Lead Length	Standards
AC	230V, 50Hz	300ms	40ms	16mm <sup>2</sup>	360mm	EN61009-1

# SURGE PROTECTION New

Suitable for use with TN-S / TT network systems



PART NUMBERS	DESCRIPTION
SRG1V1G	2 Module, Type 2 for TP&N Single Phase (TT/TN-S)

For use when the TPN board is arranged for single phase 230VAC incoming supply. When installed within an E-TPN LW board it must be used in conjunction with part no. E10-1C32 (MCB).



PART NUMBERS	DESCRIPTION
SRG3V1G	4 Module, Type 2 for TP&N Three Phase (TT/TN-S)

For use when the TPN board is arranged for three phase 400VAC incoming supply. When installed within an E-TPN LW board it must be used in conjunction with part no. E10-3C32 (MCB).

## Technical Data

Type	Rated Operational Voltage (Ue)	Nominal discharge current (In)(80/20)	Operating Temperature	Terminal Capacity	Standards
2	230V/400V	20kA (L/N) 20kA (N/PE)	-40° to 80°C	10-35mm <sup>2</sup>	EN61643-11

## ACCESSORIES

### TPN 6kA MCB/RCBO Mounting Kit New

Enables the use of 6kA circuit breakers within the TPN board



PART NUMBERS	DESCRIPTION
E-TPNZB04	FOR USE WITH 4 WAY TP&N BOARD (E-TPN04LW)
E-TPNZB08	FOR USE WITH 8 WAY TP&N BOARD (E-TPN08LW)
E-TPNZB12	FOR USE WITH 12 WAY TP&N BOARD (E-TPN12LW)
E-TPNZB16	FOR USE WITH 16 WAY TP&N BOARD (E-TPN16LW)

Note that the TPN board can be set up for either 10kA or 6kA devices according to the short circuit rating of the electrical supplier network. 10kA and 6kA circuit protection devices cannot be mixed.

# ACCESSORIES

## RCCB Accessory Kit New

TPN-RCCBAK is required where an RCCB is to be used as the incoming device



PART NUMBER
TPN-RCCBAK

## Single phase supply kit

Converts TPN board to a single phase incoming 125A supply. For installation to the supply side of 3 or 4 pole incoming device.



PART NUMBER
TPN-SPL

## MCB / RCBO Padlock

Suitable for 6kA and 10kA MCB and RCBO in the "ON" or "OFF" position. Includes yellow, hazard indicator. Not suitable for incoming devices.



PART NUMBER
MCB LOCK

## Door Barrel Key Lock New

For extra security, supplied with 2 keys. Direct replacement for standard double bar locks on TPN boards and extension boxes.



PART NUMBER
E-TPNKL

## Phase insulators

For blanking of unused outgoing ways Pack Qty: 100  
Fits directly to outgoing ways. For use in conjunction with CU-BL blanking strips



PART NUMBER
PI

## Multi-Function Din Rail Blank New

Increased safety blanks. Conceals unused ways. Fits directly in place of 1Pole MCB/RCBO to shroud unused outgoing ways. Suitable for use with both 6kA and 10kA breaker sets. Also compatible with Lewden single phase consumer units.



PART NUMBER
MFDRB

## 18mm module blanks

For door cut out 2 x 6 ways strips



PART NUMBER
CU-BL

## Installation Contactors

DIN Rail Mounted



RATED CURRENT	VOLTS	POLES	PART NUMBER
20A	230V	2 N/O	IC20
40A		2 N/O	IC40/2
63A		4 N/O	IC63/4

IC20 max cable: 4mm sq  
IC40/2 max cable: 10mm sq  
IC63/4 max cable: 16mm sq



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# PROTECTS YOUR INSTALLATION IN THE HARSHTEST OF ENVIRONMENTS



Such as factories, outdoor environments,  
food industry, workshops, automotive body shops etc.



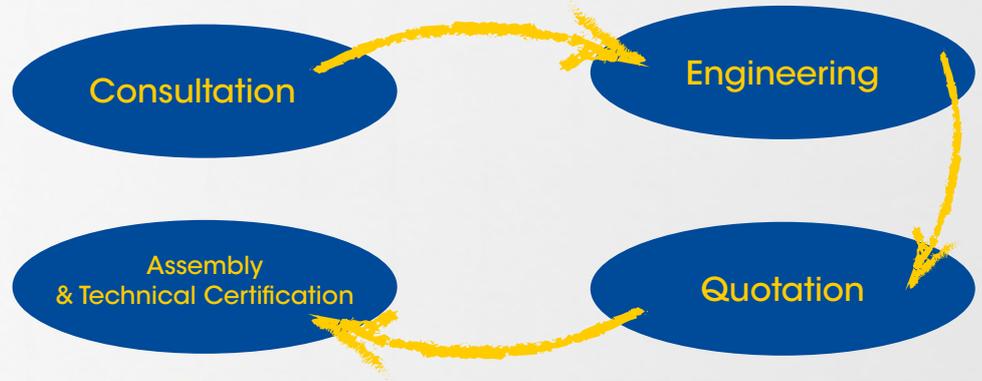
- **IP66 high protection rating resistant to strong water jets and dust ingress**
- **U.V. resistant for outdoor use**
- **Constructed from durable GRP thermosetting enclosure for application in tough environments**
- **Wide and spacious design**
- **Available with blind or transparent door**



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# LEWDEN CUSTOM DESIGN AND BUILD SERVICE

Pre-made/Pre-wired electrical solutions made to customer requirements



## Where

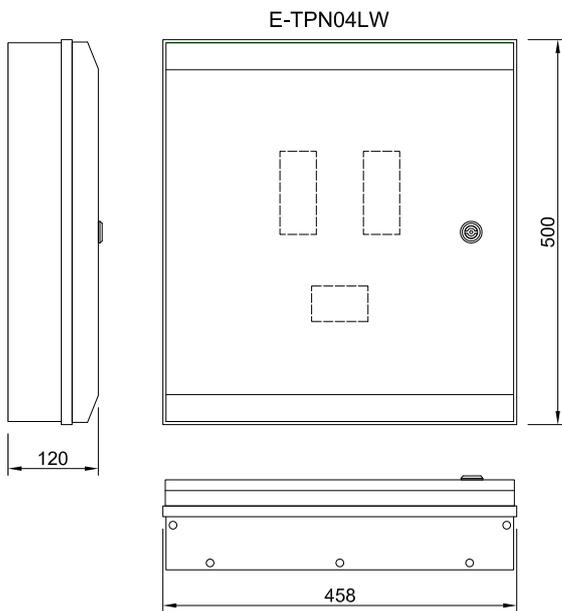
- Factory Installations
- Temporary Events & Entertainment
- Construction Sites
- Dockyards & Ship Building
- Test Laboratories
- Food Processing
- Caravan / Camping Parks & Marinas
- Military Camps & Air Force Bases
- Local Authorities
- Tunneling, Mining & Quarrying
- Substation

## What

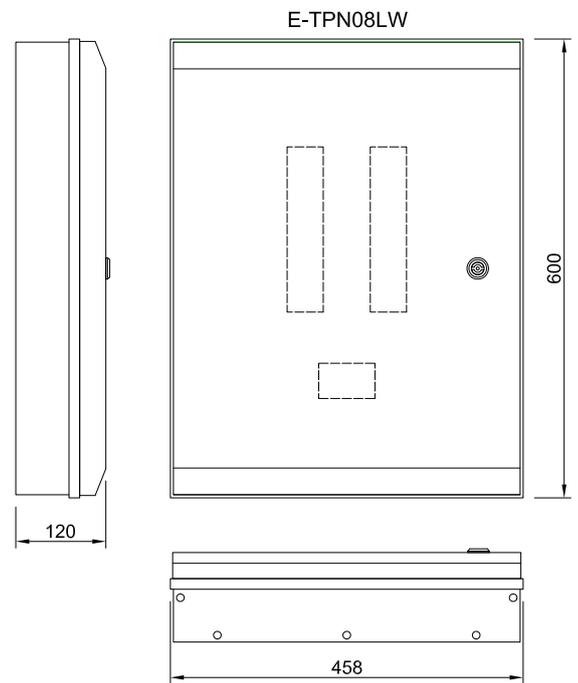
- Industrial Socket Assemblies
- Pre-wired Consumer Units Domestic AMD3
- Industrial Power and Control
- Changeover Switch Assemblies
- Earth Monitoring
- Free Standing Kiosks
- Hazardous Area
- High Current Connectors
- Lighting Controls
- Site Electrics

# DIMENSIONAL DRAWINGS

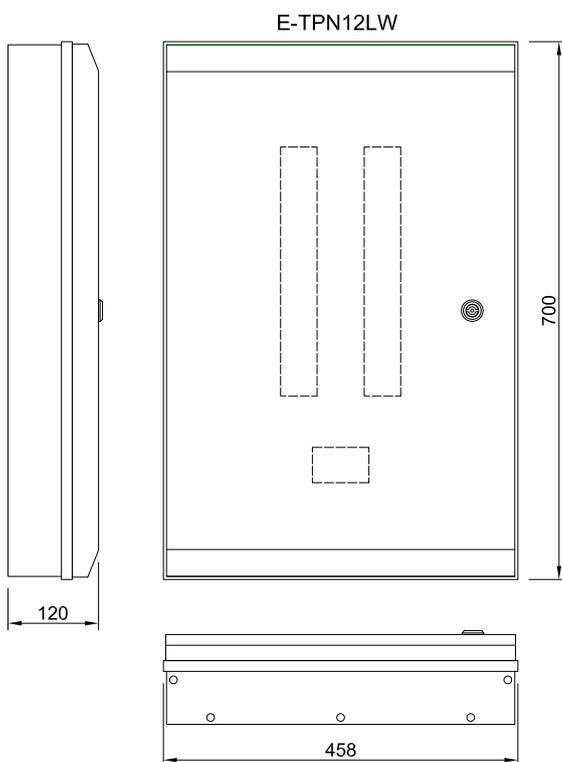
## MODULE 4



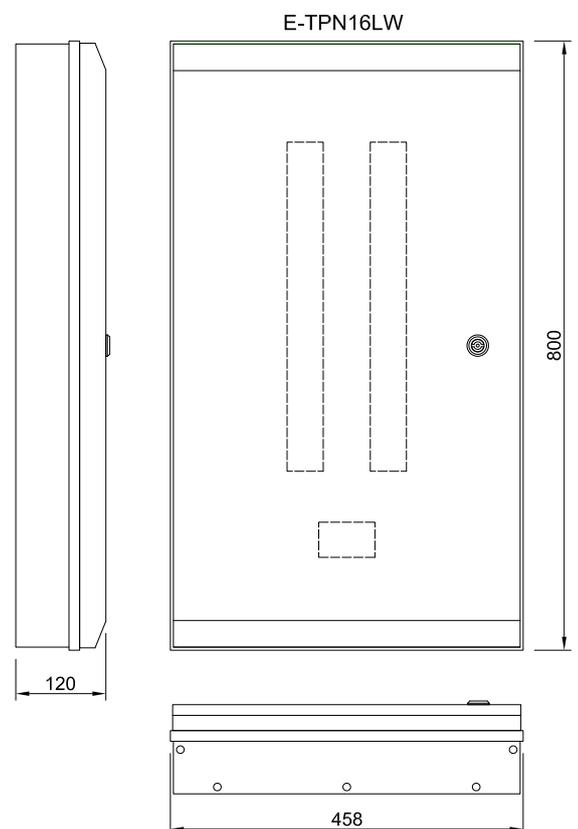
## MODULE 8



## MODULE 12



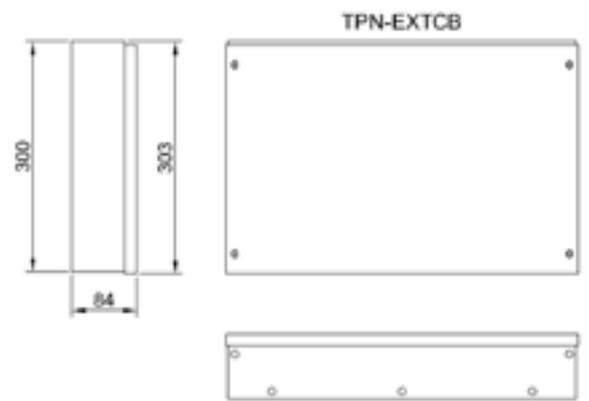
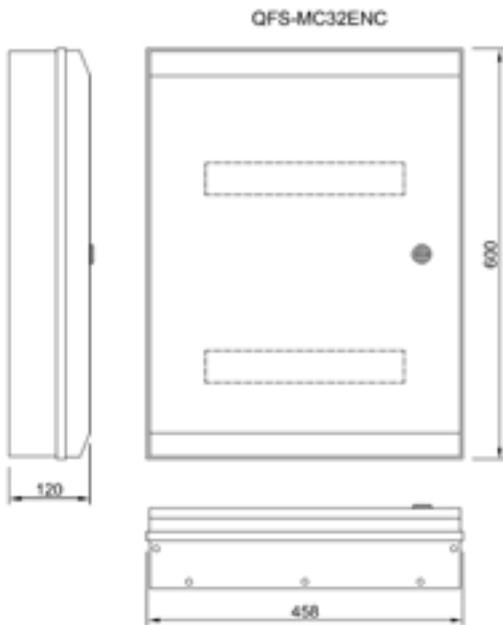
## MODULE 16



# DIMENSIONAL DRAWINGS

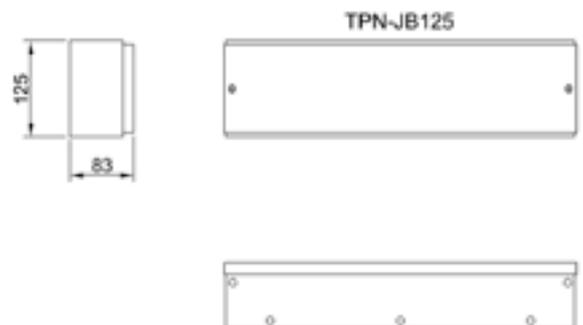
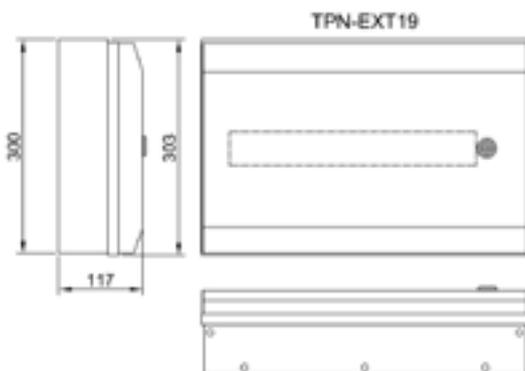
## MODULE 32

## EXTENSION



## MODULE 19

## JOINING





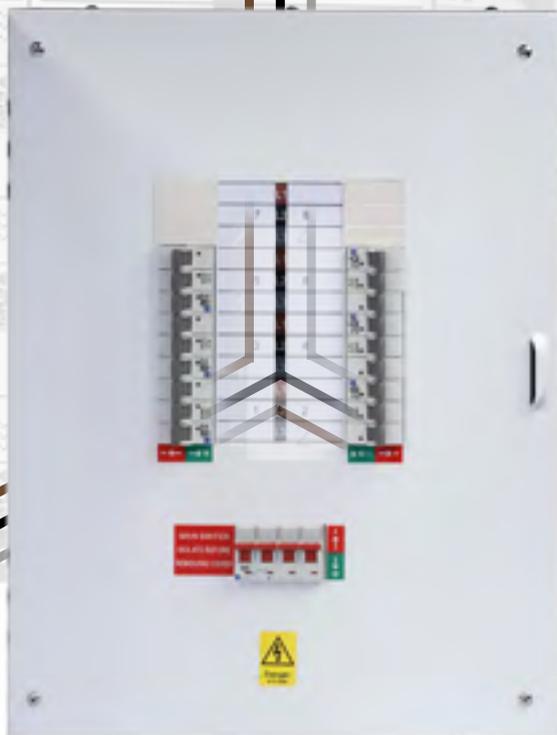
# THE COMPLETE SOLUTION FOR YOUR INDUSTRIAL INSTALLATION

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LIGHTING

SOCKET  
OUTLETS

JUNCTION  
BOXES



SWITCH  
FUSES

ROTARY  
ISOLATORS

MAIN SWITCH  
ISOLATE BEFORE  
REMOVING COVER



AUTOMATION

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