

Loadbank 125

250A and 400A MCCB Panel Boards - Outgoing devices up to 125A

Key Features

This panel board range features busbar ratings of 250A and 400A, outgoing devices up to 125A, seven panel board size options, surge protection mounted integral to the board and options to meter incoming and outgoing supply.

The busbars are ASTA certified with a short-circuit withstand rating of 25kA for 1 second for the 250A panel board and 25kA for 3 seconds for the 400A panel board.

Form 3 is standard on the 400A panel board and this can be achieved for the 250A panel board with terminal shields fitted to the outgoing devices.

The Loadbank 125 offers an uncomplicated solution for power distribution for commercial and industrial applications with the availability of add-on enclosures such as metering enclosures and service centres which match the dimensional profile of the panel board.

Outgoing devices consist of a single frame size utilising the Loadline YA2 frame MCCB up to 125A which are a cost effective option for circuit protection.

Standard finish is epoxy powder coating in light grey RAL 7035.

Compliance

Panel Boards	EN 61439-1
MCCBs	EN 60947-2

Busbar

The Loadbank 125 panel boards have an ASTA certified busbars with a short circuit rating of 25kA for 1 second for the 250A boards and 25kA for 3 seconds for the 400A boards.

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Outgoing Ways

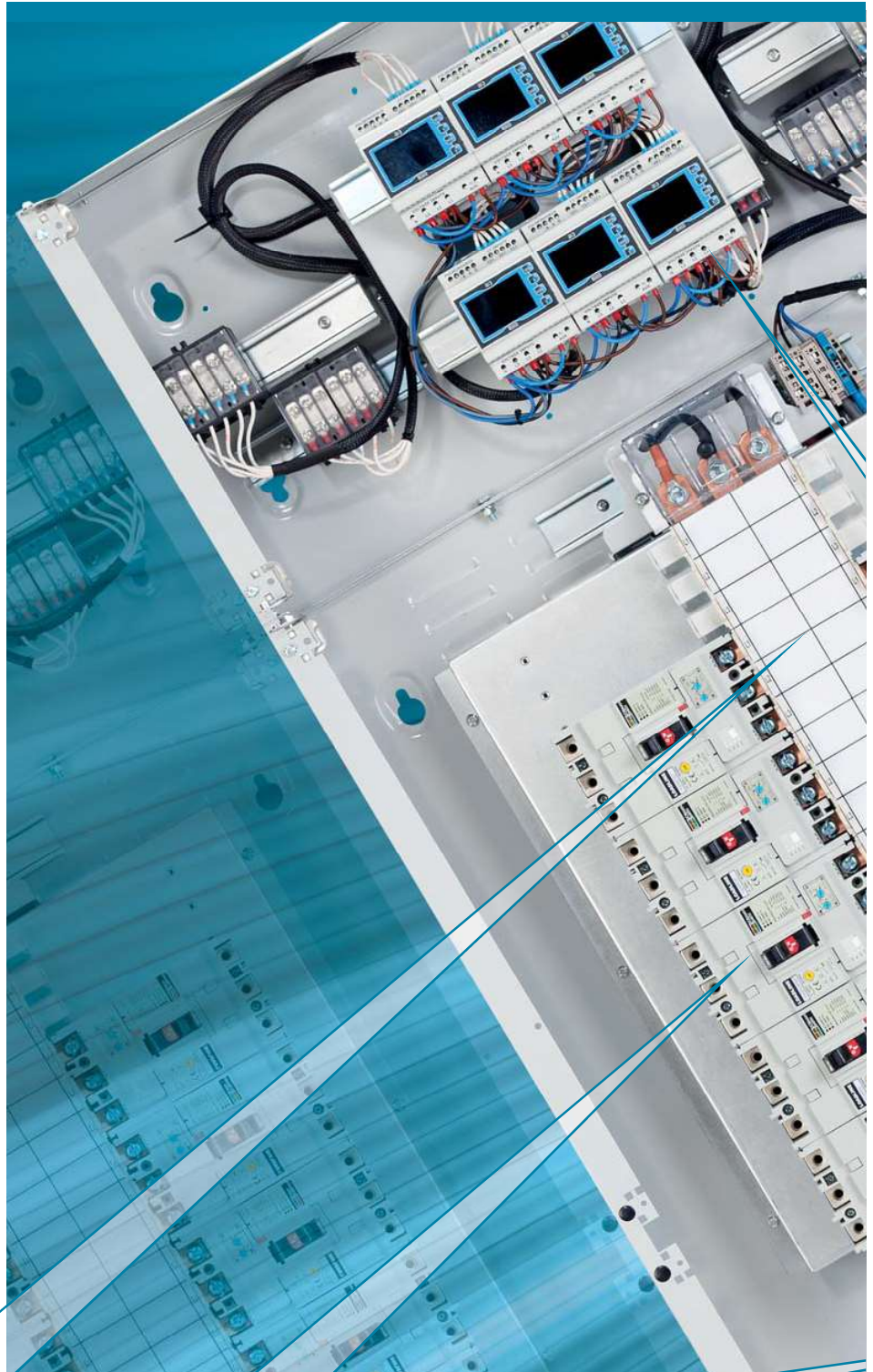
Our 250A panel boards are available with 6, 8 or 12 triple-pole outgoing ways and the 400A boards are available with 6, 8, 12 or 16 triple-pole outgoing ways for greater flexibility in design.

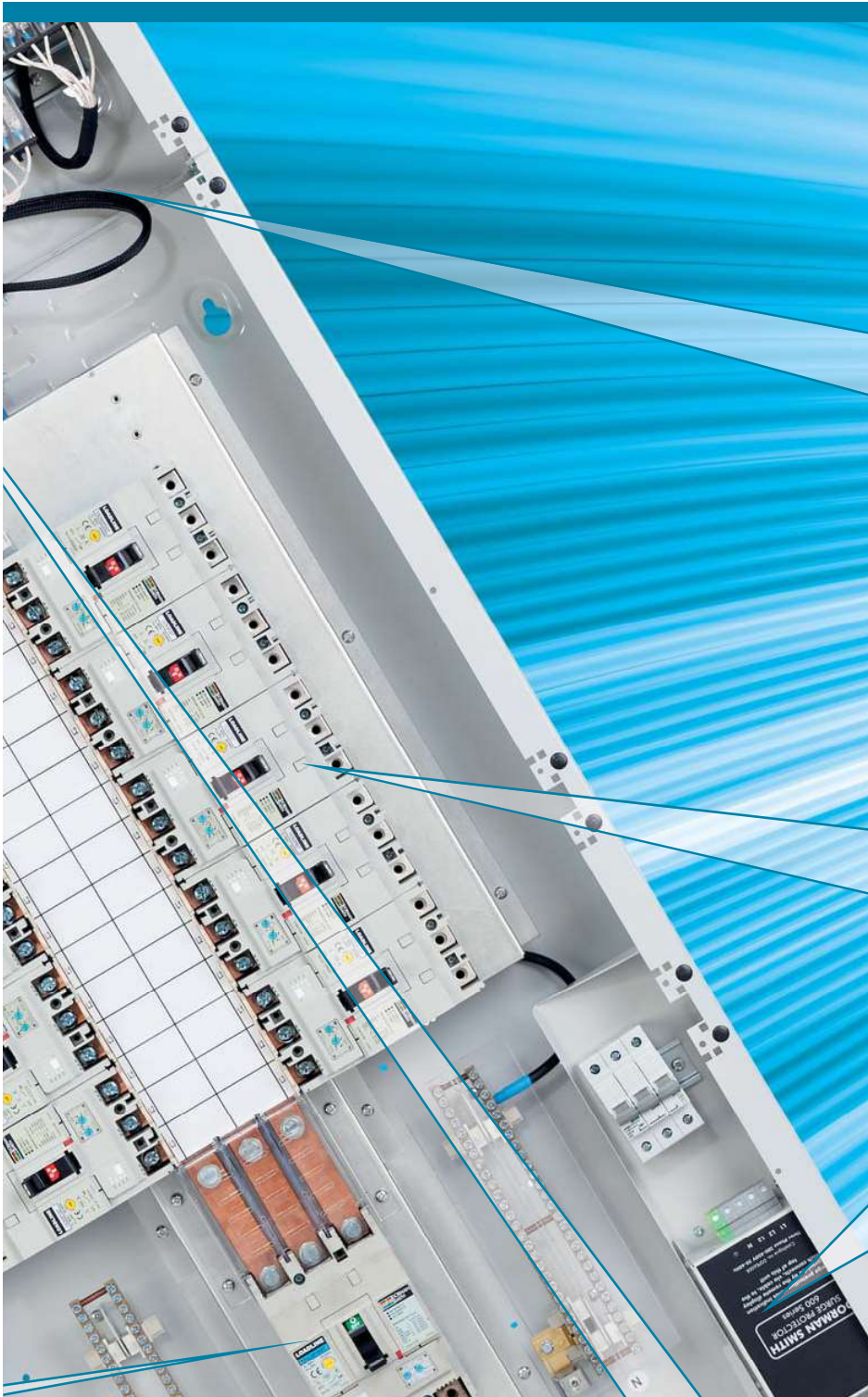
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Incoming Options

Our Loadbank 125 panel boards can have a variety of incoming options including; MCCB, switch disconnector or direct connection.

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Modular Options

This range has a common width and depth for the panel board and any add-on enclosures ensuring ease for using this range in panel building applications.

Add-on Enclosures

Panel building options for the Loadbank 125 range include; cable spreader box for additional cabling room, metering housing for incoming and outgoing DIN-rail meters, service centre and additional enclosure to house one Loadline YA3 MCCB up to 250A as an outgoing device.

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Form

The 400A panel board is a Form 3a as standard.

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Outgoing Devices

Both the 250A and the 400A share the same outgoing device type which is our Loadline YA2 frame MCCB. This is available as single-pole fixed breakers or three and four-pole adjustable breakers from 16A to 125A in 25kA. There are also a range of accessories for the Loadline YA2 MCCBs including; shunt trips, auxiliaries and UVRs.

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Surge Protection

A Type II Class II surge protection device can be internally installed in the Loadbank 125 panel boards. This device comes with a remote indicator panel which fits in a knockout in the front shield for easy surge protection monitoring. A Type I Class I device can also be used with this range via installation in a service centre.

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Modular Devices

There is a range of modular devices available for use with the Loadbank 125 system including; metering, contactors, surge protection and timers.

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Metering

By using the add-on metering enclosures this panel board system can be easily metered for incoming and outgoing circuits. The add-on metering enclosure can also house the current transformers and there are wiring looms available for this range pre-cut to the required length.

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Loadbank 125 MCCB Panel Boards 250A Form 3a 25kA for 1 second



MCCB Panel Boards 250A Form 3a 25kA for 1 second

Main features

- ASTA Certified busbars rated at 25kA for 1 second
- Form 3a as standard
- IP4X Ingress Protection rating
- Accepts YA2 frame MCCB up to 125A as outgoing devices
- Enclosure width is 700mm and depth 190mm. Height as per the table below.
- Incoming device is fitted integral to the board

Outgoing Ways	Incoming Device Type	Outgoing Device Typw	Height (mm)	Weight (kg)	Product Code
6	YB3 Frame	YA2 Frame	904	36	PB206YA
8	YB3 Frame	YA2 Frame	994	39	PB208YA
12	YB3 Frame	YA2 Frame	1174	47	PB212YA

250A Panel Board Accessories

Device Type	Product Code
YB3 3-pole incoming terminal shroud	YB3TS3P
YB3 4-pole incoming terminal shroud	YB3TS4P
YB3 3-pole and 4-pole dolly locking device	YBDL1
YA2 1-pole outgoing terminal shroud	YA2TS1P
YA2 3-pole outgoing terminal shroud	YA2TS3P
YA2 1-pole dolly locking device	Y2DL
YA2 3-pole dolly locking device	YADL1
Cylinder door lock with keys	DBXCL
Door padlock device	DBXPL
3-pole blanking plate	LBYA2BP3P
Incoming connection Kit for 4-pole device	PB4PNC250
Spare neutral / earth bar clamps for cables up to 70mm ²	PBYA2NA

250A Panel Board Add-on units

Description	Height (mm)	Weight (kg)	Product Code
Cable spreader box	270	8.3	PBYA2CSB
Service centre for 24 x 1-pole ways	270	9	PBYA2SC24
YB3 MCCB outgoing housing up to 250A	450	15	PBYA2OG
Meter housinging	450	12	PBYA2MB

250A Panel Board Incoming Device Options

YB3 Frame MCCB

- Exceeds the requirements of EN 60947-2
- MCCBs have adjustable overload and instantaneous trips, except switch disconnector
- Overload adjusts to 1 x In, 0.8 x In and 0.63 x In
- Standard cable termination is 95mm² and maximum 150mm² using M8 reduced palm width lugs
- Cable clamps available for YB3 MCCBs for maximum cable termination of 120mm²
- Four-pole incoming devices require additional connection kit of PB4PNC250

Device Type	Current Rating (A)	Icu (kA)	No of Poles	Product Code
Switch Disconnecter	250	N/A	3	YB3B3P250D
MCCB	160	25	3	YB3N3P160T
MCCB	200	25	3	YB3N3P200T
MCCB	250	25	3	YB3N3P250T
Switch Disconnecter	250	N/A	4	YB3B4P250D
MCCB	160	25	4	YB3N4P160T
MCCB	200	25	4	YB3N4P200T
MCCB	250	25	4	YB3N4P250T

MCCB Panel Boards

400A Form 3a 25kA for 3 seconds

Loadbank 125
MCCB Panel Boards
400A Form 3a 25kA
for 3 seconds

Main features

- ASTA Certified busbars rated at 25kA for 3 seconds
- Form 3a as standard
- IP4X Ingress Protection rating
- Accepts YA2 MCCB up to 125A as outgoing devices
- Enclosure width is 700mm and depth 190mm. Heights as per the table below.
- Incoming device is fitted integral to the board

Outgoing Ways	Incoming Device Type	Outgoing Device Type	Height (mm)	Weight (kg)	Product Code
6	YA5 Frame	YA2 Frame	1084	45	PB406YA
8	YA5 Frame	YA2 Frame	1174	48	PB408YA
12	YA5 Frame	YA2 Frame	1354	56	PB412YA
16	YA5 Frame	YA2 Frame	1534	65	PB416YA

400A Panel Board Accessories

Device Type	Product Code
YA5 3-pole incoming terminal shroud	YA5TS3P
YA5 4-pole incoming terminal shroud	YA5TS4P
YA2 1-pole outgoing terminal shroud	YA2TS1P
YA2 3-pole outgoing terminal shroud	YA2TS3P
YA2 1-pole dolly locking device	Y2DL
YA2 3-pole dolly locking device	YADL1
Cylinder door lock with keys	DBXCL
Door padlock device	DBXPL
3-pole blanking plate	LBYA2BP3P
Incoming connection kit for 4-pole device	PB4PNC400

400A Panel Board Add-on units

Description	Height (mm)	Weight (kg)	Product Code
Cable spreader box	270	8.3	PBYA2CSB
Service centre for 24 x 1-pole ways	270	9	PBYA2SC24
YB3 MCCB outgoing housing up to 250A	450	15	PBYA2OG
Meter Housing	450	12	PBYA2MB

400A Panel Board Incoming Device Options

YA5 Frame MCCB

- Exceeds the requirements for EN 60947-2
- MCCBs have adjustable overload and instantaneous trips, except switch disconnector
- Overload adjusts to 1 x In, 0.8 x In and 0.63 x In
- Standard cable termination is 95mm² and maximum 185mm² using M10 reduced palm width lugs
- Four-pole incoming devices require additional connection kit of PB4PNC400

Device Type	Current Rating (A)	Icu (kA)	No of Poles	Product Code
Switch Disconnecter	400	N/A	3	YA5B3P400D
MCCB	250	25	3	YA5N3P250T
MCCB	400	25	3	YA5N3P400T
Switch Disconnecter	400	N/A	4	YA5B4P400D
MCCB	250	25	4	YA5N4P250T
MCCB	400	25	4	YA5N4P400T
Direct Connection	400	N/A	N/A	PBYA2DC4



Loadbank 125 MCCB Panel Boards 250A and 400A



MCCB Panel Boards Outgoing Devices

YA2 Frame Devices

- 25kA Rated breaking capacity
- Exceeds the requirements of EN 60947-2
- 3-pole devices have adjustable overload and instantaneous trips
- Overload adjusts to $1 \times I_n$, $0.8 \times I_n$ and $0.63 \times I_n$
- 1-pole devices have fixed overload and instantaneous trips
- Standard cable termination is 50mm² using cable clamps (available as an optional extra)
- Maximum cable termination is 95mm² using M8 reduced palm width lugs
- Terminal shrouds available as optional extras

Current Rating (A)	Icu (kA)	1-pole Product Code (Fixed)	3-pole Product Code (Adjustable)
16	25	YA2NIP16T	-
20	25	YA2NIP20T	YA2N3P20T
32	25	YA2NIP32T	YA2N3P32T
40	25	YA2NIP40T	-
50	25	YA2NIP50T	YA2N3P50T
63	25	YA2NIP63T	YA2N3P63T
80	25	YA2NIP80T	-
100	25	YA2NIP100T	YA2N3P100T
125	25	YA2NIP125T	YA2N3P125T

MCCB Panel Boards Surge Protection

Class I Surge Protection

- Tested to withstand 10/350ms waveforms
- 3 Phase & neutral
- 25kA L-N
- 100kA surge protector

Device Description	Product Code	Mounting
Type I Class I 3 Phase & Neutral 25kA L-N, 100kA surge protector Tested to withstand 10/350ms waveforms Lightning impulse current (10/350ms) N-PE (Iimp) 100kA	DSPT3PN	To be mounted in a service centre PBYA2SC24

Class II Surge Protection

- DIN-rail mounting for triple pole MCB
- Comes complete with 40kA Three Phase Class 2 surge protection device
- Knockout in the front shield for surge protection remote indication plate
- Mounting Plate height is 435mm

Device Description	Product Code	Mounting
Type II Class II 3 Phase & Neutral 40kA with remote indicator Low let through voltage of 600V Maximum surge current (8/20ms), I _{max} 40kA per phase	PBSM	Comes complete with back plate for integral mounting next to the main incoming device

NOTE: It is recommended that this Surge Protection device is installed on the load side of a MCB Type C, MCCB or a fused disconnector at 63A to provide isolation and protection.

MCCB Panel Boards

Meters, Current Transformers and Wiring Looms

Loadbank 125 MCCB Panel Boards 250A and 400A

Meter Housing Enclosure

- Stackable meter housing unit for up to six outgoing DIN-rail mounted meters and corresponding current transformers
- Can be mounted below or above the main panel board for incoming or outgoing metering options
- Includes DIN-rail for mounting meters, current transformers and fuses
- Meters, current transformers and wiring looms to be purchased separately
- Matching width and depth to correspond with main panel board

Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Product Code
450	700	190	13	PBYA2MB

DIN-rail Meter

Description	Product Code
1 Phase / 3 Phase DIN-rail Multi-function Meter RS485 Modbus and Pulse output communication as standard Total harmonic distortion (THD) measurement up to the 31st harmonic True rms measurement Programmable CT ratios from 1 to 9999 Backlit LCD display	Ri3-01

3-in-1 Measuring Current Transformers

- Up to Class 0.5 accuracy
- System voltage up to 720V
- Secondary output to Meter of 5A
- Operating temperature of -20°C to $+70^{\circ}\text{C}$

Use	Description	Maximum cable aperture (mm ²)	Product Code
Incoming	250A 3-in-1 CT Core Size 45mm	150	M3N1-45-250/5
Incoming	400A 3-in-1 CT Core Size 45mm	150	M3N1-45-400/5
Outgoing	60A 3-in-1 CT Core Size 25mm	50	M3N1-25-60/5
Outgoing	100A 3-in-1 CT Core Size 25mm	50	M3N1-25-100/5
Outgoing	125A 3-in-1 CT Core Size 25mm	50	M3N1-25-125/5

Wiring Looms

- Quantity of 1 x PBWP fused voltage tap off loom required per board
- Fuse to Voltage loom PBWI required for incoming meter
- Fuse to Voltage loom PBWM6 required for up to six outgoing meters
- CT to Meter Loom PBWCT required for each outgoing meter

Description	Product Code
Fused Voltage Tap Off Loom	PBWP
Fuse to Voltage loom for Incoming meter	PBWI
Fuse to Voltage loom for up to six outgoing meters	PBWM6
CT to Meter Loom	PBWCT

Please see our **Metering Selection Chart** on the following page which details all of the parts required in order to correctly meter the Loadbank 125 Panel Board Range



Metering Selection Chart

Loadbank 125
MCCB Panel Boards
250A and 400A

Step 1: Select Panel Board

Step 2: Select Meter Housing

Step 3: Fused Voltage Tap off loom

Step 4: Select Meter

Step 5: Incoming or Outgoing?

Step 5: Fuse to Voltage Loom

Step 6: Select Current Transformers

Step 7: Select CT to Meter Loom

