



Dorman Smith Loadbank 125 MCCB Panel Boards

MCCB Panel Boards

Loadbank 125 Range (250A and 400A Ratings)



Overview

Key Features

- ASTA certified busbars with a short circuit rating of 25kA for 1 second (250A) and 25kA for 3 seconds (400A)
- Shunts, UVRs and auxiliaries are common for YA2, YA3 and YA5 MCCBs
- Single frame size outgoing MCCBs from 16A to 125A
- Generous cable-spreading space for incoming and outgoing cables
- Common width (700mm) and depth (190mm) for all enclosures
- A single part number identifies the complete main enclosure

Available Options

- 250A panel boards with 6, 8 or 12 triple-pole outgoing ways can choose incoming devices from the YA3 MCCB range or a direct connection
- 400A panel boards with 6, 8, 12 or 16 triple-pole outgoing ways can choose incoming devices from the YA5 MCCB range or a direct connection
- Panel build options include:
 - Cable spreader box
 - Service centre with 24 single-pole ways
 - Integra metering housing
 - YA3 frame outgoing housing

Additional Features

- Neutral and earth terminal for each single-pole way
- Clean earth facility
- 250A panels use YA3 MCCBs for incoming devices
- 400A panels use YA5 MCCBs for incoming devices
- All versions use YA2 MCCBs for outgoing devices
- All triple-pole MCCBs have adjustable overload and instantaneous trips

Compliance

Panel boards	EN 60439-1
MCCBs	EN 60947-2

Featuring busbar ratings of 250A and 400A with seven MCCB panel board designs Loadbank 125 system offers an uncomplicated solution for power distribution in commercial and industrial applications. Outgoing devices consist of a single frame size utilising the Loadline YA2 frame as a cost effective option for circuit protection.

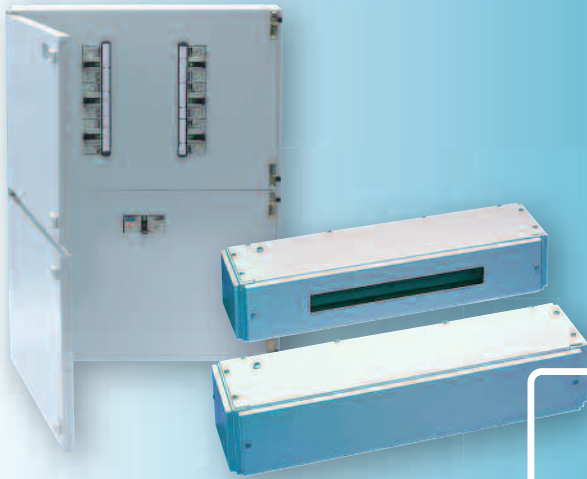
New developments include ASTA certified busbars with a short-circuit withstand rating of 25kA-3sec (400A busbars only) and Form 3 separation is now as standard.

Available options now include a versatile range of accessories for both incoming and outgoing metering for compliance with Part L2 Building Regulations. A multitude of add-on enclosures, including service centres and a unique outgoing housing for 160A to 250A YA3 frame MCCB matching the dimensional profile of the standard enclosure.

The standard finish is epoxy powder coating in light grey RAL 7035.



MCCB Panel Boards (250A and 400A Rating)

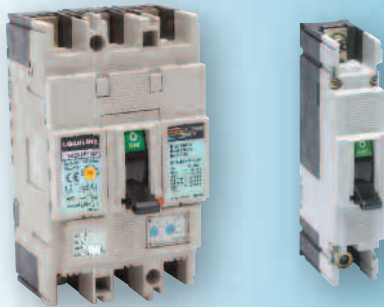


MCCB Panel Boards

- Service centres
- Metering enclosures

Incoming Devices

- Switch disconnecter
- Moulded case circuit breakers



Circuit Protection Devices

- Moulded case circuit breakers (125A max)

Modular Devices

- Surge protection
- Meters, current transformers and wiring looms
- Contactors
- Timer
- Earth leakage device



Loadbank 125

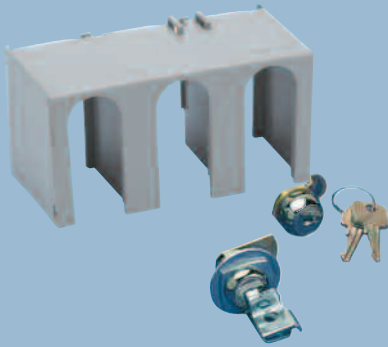
250A Panel Board Enclosures Form 3 25kA-1sec



250A Panel Board Enclosures

- ASTA certified busbars rated 25kA-1sec
- Form 3 with outgoing terminals shields fitted
- IP4X protection rating
- Optional incoming terminal shield available
- Accepts single frame size YA2 MCCB (Max 125A) outgoing devices

No. of TP outgoing ways	Incoming device type	Height (mm)	Width (mm)	Depth (mm)	Cat. no.
6	YA3 frame	904	700	190	PB206YA
8	YA3 frame	994	700	190	PB208YA
12	YA3 frame	1174	700	190	PB212YA



250A Panel Board Accessories

Description	Cat. no.
3-pole incoming terminal shroud	YA3TS3P
4-pole incoming terminal shroud	YA3TS4P
Door cylinder lock	DBXCL
Door padlock device	DBXPL
3-pole blanking piece	LBYA2BP3P
4-pole incoming connection kit	PB4PNC250



250A Panel Board Incoming Devices

- Standard cable termination 95mm²
- Maximum cable termination is 150mm² using reduced palm width M8 cable lugs
- MCCBs have thermal and magnetic overloads except switch disconnecter
- Four-pole incoming devices require adapter kit
- YA3 cable clamp termination 120mm² (sold separately)

Incoming device type	Current rating (A)	No. of poles	Cat. no.
Switch disconnecter	250	3	YA3B3P250D
MCCB	160	3	YA3N3P160T
MCCB	200	3	YA3N3P200T
MCCB	250	3	YA3N3P250T
Switch disconnecter	250	4	YA3B4P250D
MCCB	160	4	YA3N4P160T
MCCB	200	4	YA3N4P200T
MCCB	250	4	YA3N4P250T

250A and 400A Panel Board Accessories Add-on Units

- Cable spreader box
- 24 way service centre
- Housing to accommodate outgoing YA3 MCCB

Description	Height (mm)	Cat. no.
Cable spreader box	270	PBYA2CSB
Service centre with 24-1 pole ways	270	PBYA2SC24
160A-250A YA3 outgoing housing	450	PBYA2OG

Loadbank 125

400A Panel Board Enclosures Form 3 25kA-3secs

400A Panel Board Enclosures

- ASTA certified busbars rated 25kA-3secs
- Form 3 as standard
- IP4X protection rating
- Optional incoming terminal shield available
- Accepts single frame size YA2 MCCB (Max 125A) outgoing devices

No. of TP outgoing ways	Incoming device type	Height (mm)	Width (mm)	Depth (mm)	Cat. no.
6	YA5 frame	1084	700	190	PB406YA
8	YA5 frame	1174	700	190	PB408YA
12	YA5 frame	1354	700	190	PB412YA
16	YA5 frame	1534	700	190	PB416YA

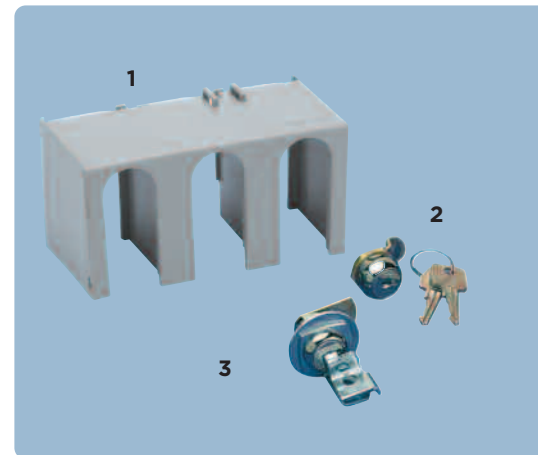
400A Panel Board Accessories

Description	Picture number	Cat. no.
3-pole incoming terminal shroud	1	YA5TS3P
4-pole incoming terminal shroud	-	YA5TS4P
Door cylinder lock	2	DBXCL
Door padlock device	3	DBXPL
3-pole blanking piece	-	LBYA2BP3P
4-pole incoming connection kit	-	PB4PNC400

400A Panel Board Incoming Devices

- Standard cable termination 95mm²
- Maximum cable termination is 185mm² using reduced palm width M8 cable lugs
- MCCBs have thermal and magnetic overloads except switch disconnectors
- Four-pole incoming devices require adapter kit

Incoming device type	Current rating (A)	No. of poles	Cat. no.
Switch disconnector	400	3	YA5B3P400D
MCCB	250	3	YA5N3P250T
MCCB	400	3	YA5N3P400T
Switch disconnector	400	4	YA5B4P400D
MCCB	250	4	YA5N4P250T
MCCB	400	4	YA5N4P400T
Direct connection	400	3/4	PBYA2DC4



Loadbank 125

250A/400A Surge Protection and Metering Accessories



Surge Protection Mounting Kits

- Easily installed inside panelboard closely located to incoming device
- DIN-rail mounting for triple-pole MCB
- C/W 30kA three-phase surge protector
- Remote status indication
- Site fault indication

Description	Height (mm)	Cat. no.
Surge protection Loadbank 125 mounting kit c/w surge protector and remote indicator	435	PBSM



Metering Housing

- New stackable meter housing for incoming and outgoing metering
- Designed to fit up to six DIN-rail mounted meters (4 mod max)
- Can be mounted top or bottom
- Includes DIN-rail for facility to mount current transformers and fuses

Description	Height (mm)	Weight	Cat. no.
Meter housing	450	-	PBYA2MB

Four Module DIN-rail Meter

Description	Cat. no.
Digital multi-function meter with 1 pulse and 1 RS485 Modbus output	RI3-01
Analogue kWh meter with 1 pulse	DRK-3PCT-415

Incoming Current Transformers

Description	Max cable size mm ²	Cat. no.
250A 3-in-1 CT case size 3	150	M3N1-45-250/5
400A 3-in-1 CT case size 3	150	M3N1-45-400/5

Outgoing Current Transformers

Description	Max cable size mm ²	Cat. no.
60A 3-in-1 current transformer Case size 25mm	50	M3N1-25-60/5
100A 3-in-1 current transformer Case size 25mm	50	M3N1-25-100/5
125A 3-in-1 current transformer Case size 25mm	50	M3N1-25-125/5

Metering Harnesses

- A collection of meter harnesses for metering incoming and outgoing circuits
- Please refer to page 44 for easy selection chart

Description	Cat. no.
Incoming meter loom	PBWI
Voltage tap off loom for outgoing metering	PBWP
CT harness for 1 meter	PBWCT
Power loom for 6 outgoing meters	PBWM6

Loadbank 125

250A/400A Outgoing Devices and Accessories

Outgoing Devices

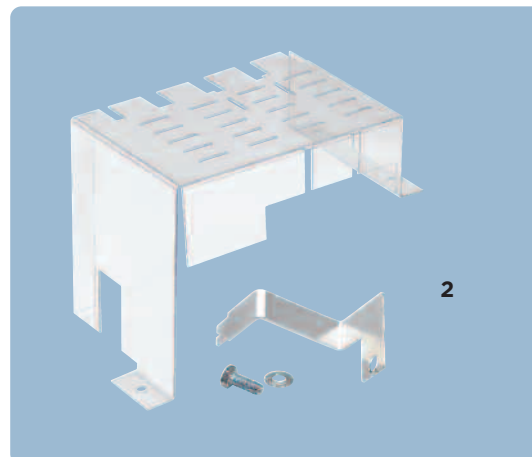
- Standard cable termination 35mm²
- Maximum cable termination is 70mm² using reduced palm width M8 cable lugs
- 3-pole MCCBs have thermal and magnetic overloads
- 1-pole MCCBs have fixed thermal and magnetic overloads

Device type	Current rating (A)	1-pole cat. no. (fixed overloads)	3-pole cat. no. (adjustable)
YA2 frame	16	YA2NIP16T	N/A
YA2 frame	20	YA2NIP20T	YA2N3P20T
YA2 frame	32	YA2NIP32T	YA2N3P32T
YA2 frame	40	YA2NIP40T	-
YA2 frame	50	YA2NIP50T	YA2N3P50T
YA2 frame	63	YA2NIP63T	YA2N3P63T
YA2 frame	80	YA2NIP80T	-
YA2 frame	100	YA2NIP100T	YA2N3P100T
YA2 frame	125	YA2NIP125T	YA2N3P125T



Accessories

Description	Cat. no.
Panel board 3P blanking piece	LBYA2BP3P
YA3 4-pole MCCB incoming kit	PB4PNC250
YA5 4-pole MCCB incoming kit (pic 2)	PB4PNC400
YA2 cable clamps (1.5-50mm ²)	YA2CC3P
YA3 cable clamps (35-120mm ²)	YA3CC3P
YA5 cable clamps (95-240mm ²)	YA5CC3P
YA2 1-pole terminal shroud	YA2TS1P
YA2 3-pole terminal shroud	YA2TS3P
YA3 1-pole terminal shroud	YA3TS1P
YA3 3-pole terminal shroud (pic 1)	YA3TS3P
YA5 3-pole terminal shroud	YA5TS3P
YA3 4-pole terminal shroud	YA3TS4P
YA5 4-pole terminal shroud	YA5TS4P
Door cylinder lock	DBXCL
Door padlock device lock	DBXPL
YA2 1-pole dolly lock	Y2DL
YA2 3-pole dolly lock	YADL1
Shunt trips	
YA frame shunt trip 100-120V AC	YAST115AC
YA frame shunt trip 200-240V AC	YAST240AC
YA frame shunt trip 380-450V AC	YAST450AC
YA frame shunt trip 24V DC	YAST24DC
Under-voltage release	
YA frame under-voltage release 100-120V AC	YAUVR120AC
YA frame under-voltage release 200-240V AC	YAUVR240AC
YA frame under-voltage release 380-450V AC	YAUVR450AC
YA frame under-voltage release 24V DC	YAUVR24DC



YADL1 fitted without padlock

Loadbank 125 Selection Chart - Panel Boards

250A Panel Boards				
Busbar rating	ASTA busbar short circuit rating	Incoming device	Outgoing ways	Cat. no.
250A	25kA for 1 second	YA3 MCCB/switch disconnecter	6	PB206YA
250A	25kA for 1 second	YA3 MCCB/switch disconnecter	8	PB208YA
250A	25kA for 1 second	YA3 MCCB/switch disconnecter	12	PB212YA

Incoming Devices for 250A Panel Boards					
Device type	Current rating (A)	Frame size	No. of poles	MCCB I _{cu}	Cat. no.
Switch Disconnecter	250	YA3	4	N/A	YA3B3P250D
MCCB	125	YA3	4	25kA	YA3N3P125T
MCCB	160	YA3	4	25kA	YA3N3P160T
MCCB	200	YA3	4	25kA	YA3N3P200T
MCCB	250	YA3	4	25kA	YA3N3P250T
Switch Disconnecter	250	YA3	4	N/A	YA3B4P250D
MCCB	125	YA3	4	25kA	YA3N4P125T
MCCB	160	YA3	4	25kA	YA3N4P160T
MCCB	200	YA3	4	25kA	YA3N4P200T
MCCB	250	YA3	4	25kA	YA3N4P250T
400A	-	-	-	-	PBYA2DC4

400A Panel Boards				
Busbar rating	ASTA busbar short circuit rating	Incoming device	Outgoing ways	Cat. no.
400A	25kA for 3 seconds	YA5 MCCB/switch disconnecter	6	PB406YA
400A	25kA for 3 seconds	YA5 MCCB/switch disconnecter	8	PB408YA
400A	25kA for 3 seconds	YA5 MCCB/switch disconnecter	12	PB412YA
400A	25kA for 3 seconds	YA5 MCCB/switch disconnecter	16	PB416YA

Incoming Devices for 400A Panel Boards					
Device type	Current rating (A)	Frame size	No. of poles	MCCB I _{cu}	Cat. no.
Switch Disconnecter	400	YA5	3	N/A	YA5B3P400D
MCCB	250	YA5	3	25kA	YA3N3P250T
MCCB	400	YA5	3	25kA	YA3N3P400T
Switch Disconnecter	400	YA5	4	N/A	YA5B4P400D
MCCB	250	YA5	4	25kA	YA3N4P250T
MCCB	400	YA5	4	25kA	YA3N4P400T

Auxiliary Units for both 250A & 400A Panel Boards	
Description	Cat. no.
Cable spreader box	PBYA2CSB
Service centre with 24 1-pole ways	PBYA2SC24
YA3 MCCB outgoing housing	PBYA2OG

Surge Protection Mounting Kits for 250A and 400A Panelboards		
Description	Height (mm)	Cat. no.
Surge protection Loadbank 125 mounting kit c/w surge protector & remote indicator	435	PBSM

Loadbank 125 Selection Chart - Panel Boards

Outgoing Devices for 250A & 400A Panel Boards					
Device type	Current rating (A)	Frame size	MCCB I _{cu}	1-pole cat. no.	3-pole cat. no.
MCCB	16	YA2	25kA	YA2N1P16T	N/A
MCCB	20	YA2	25kA	YA2N1P20T	YA2N3P20T
MCCB	32	YA2	25kA	YA2N1P32T	YA2N3P32T
MCCB	40	YA2	25kA	YA2N1P40T	N/A
MCCB	50	YA2	25kA	YA2N1P50T	YA2N3P50T
MCCB	63	YA2	25kA	YA2N1P63T	YA2N3P63T
MCCB	80	YA2	25kA	YA2N1P80T	N/A
MCCB	100	YA2	25kA	YA2N1P100T	YA2N3P100T
MCCB	125	YA2	25kA	YA2N1P125T	YA2N3P125T

Selection Chart - Accessories

Description	Cat. no.
Panel board 3-pole blanking piece	LBYA2BP3P
YA3 4-pole MCCB kit	PB4PNC250
YA5 4-pole MCCB kit	PB4PNC400
YA2 cable clamps (1.5-50mm ²)	YA2CC3P
YA3 cable clamps (35-120mm ²)	YA3CC3P
YA5 cable clamps (95-240mm ²)	YA5CC3P
YA2 1-pole terminal shroud	YA2TS1P
YA2 3-pole terminal shroud	YA2TS3P
YA3 1-pole terminal shroud	YA3TS1P
YA3 3-pole terminal shroud	YA3TS3P
YA5 3-pole terminal shroud	YA5TS3P
70mm ² outgoing cable clamps for neutral earth	PBYA2NA
YA3 4-pole terminal shroud	YA3TS4P
YA5 4-pole terminal shroud	YA5TS4P
Door cylinder lock	DBXCL
Door padlock device lock	DBXPL
YA2 1-pole dolly locking device	Y2DL
YA2 3-pole dolly locking device	YADL1
Shunt trips	
YA frame shunt trip 100-120V AC	YAST115AC
YA frame shunt trip 200-240V AC	YAST240AC
YA frame shunt trip 380-450V AC	YAST450AC
YA frame shunt trip 24V DC	YAST24DC
Under-voltage release	
YA frame under-voltage release 100-120V AC	YAUVR120AC
YA frame under-voltage release 200-240V AC	YAUVR240AC
YA frame under-voltage release 380-450V AC	YAUVR450AC
YA frame under-voltage release 24V DC	YAUVR24DC

Metering Accessories

Description	Cat. no.
Metering enclosure for upto 6 meters	PBYA2MB
Incoming meter loom	PBWI
Voltage tap off loom	PBWP
CT harness for 1 meter	PBWCT
Power loom for 6 outgoing meters	PBWM6
250A 3-in-1 CT case size 3	M3N1-45-250/5
400A 3-in-1 CT case size 3	M3N1-45-400/5
60A 3-in-1 current transformer case size 25mm	M3N1-25-60/5
100A 3-in-1 current transformer case size 25mm	M3N1-25-100/5
125A 3-in-1 current transformer case size 25mm	M3N1-25-125/5
Digital multi-function meter with 1 pulse and 1 RS485 Modbus output	RI3-01
Analogue kWh meter with 1 pulse output	DRK-3PCT-415

Loadbank 125 Meter Selection Process

Loadbank 125 MCCB Panel Board System

The Loadbank 125 metering facilities consist of DIN-rail mounted meters used within a housing which can fit up to 6 meters of four modules. The meter housing can be stacked top or bottom with facility to mount current transformers and fuses. We recommend that for applications with more than 6 outgoing meters the Loadbank 250 system with metering accessories should be used. For applications which require single phase metering please contact the sales office.

Panel-board enclosures

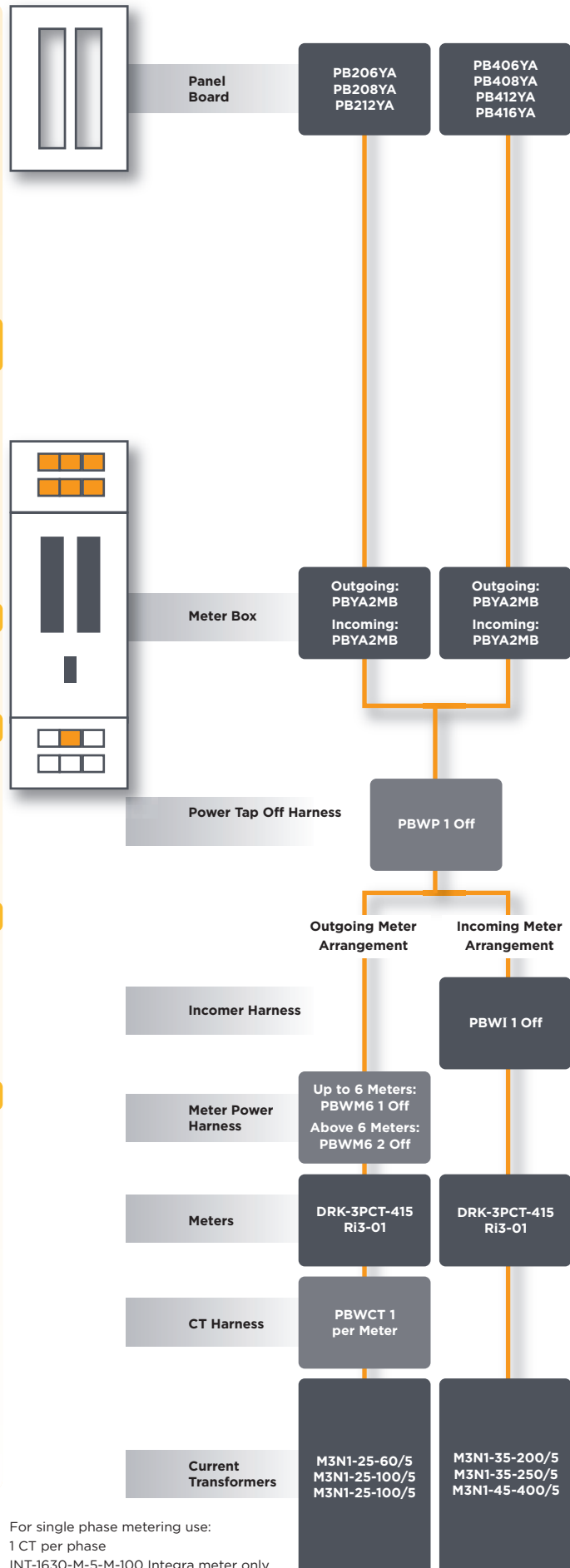
Description	Cat. no.
250A, 6 TP way	PB206YA
250A, 8 TP way	PB208YA
250A, 12 way	PB212YA
400A, 6 way	PB406YA
400A, 8 way	PB408YA
400A, 12 way	PB412YA
400A, 16 way	PB416YA

Description	Cat. no.
Meter housing for up to 6 meters	PBYA2MB

Description	Cat. no.
Incoming meter loom	PBWI
Voltage tap off loom for outgoing metering	PBWP
CT harness for 6 outgoing meters	PBWCT
Power loom for 6 outgoing meters	PBWM6

Description	Cat. no.
Digital Multi-function meter with 1 pulse output and 1 Modbus output	RI3-01
Analogue kilowatt hour meter with one pulse output	DRK-3PCT-415

Description	Cat. no.
3-in-1 60A current transformers	M3N1-25-60/5
3-in-1 100A current transformers	M3N1-25-100/5
3-in-1 125A current transformers	M3N1-25-125/5
3-in-1 200A current transformers	M3N1-35-200/5
3-in-1 250A current transformers	M3N1-35-250/5
3-in-1 400A current transformers	M3N1-45-400/5



For single phase metering use:
1 CT per phase
INT-1630-M-5-M-100 Integra meter only

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