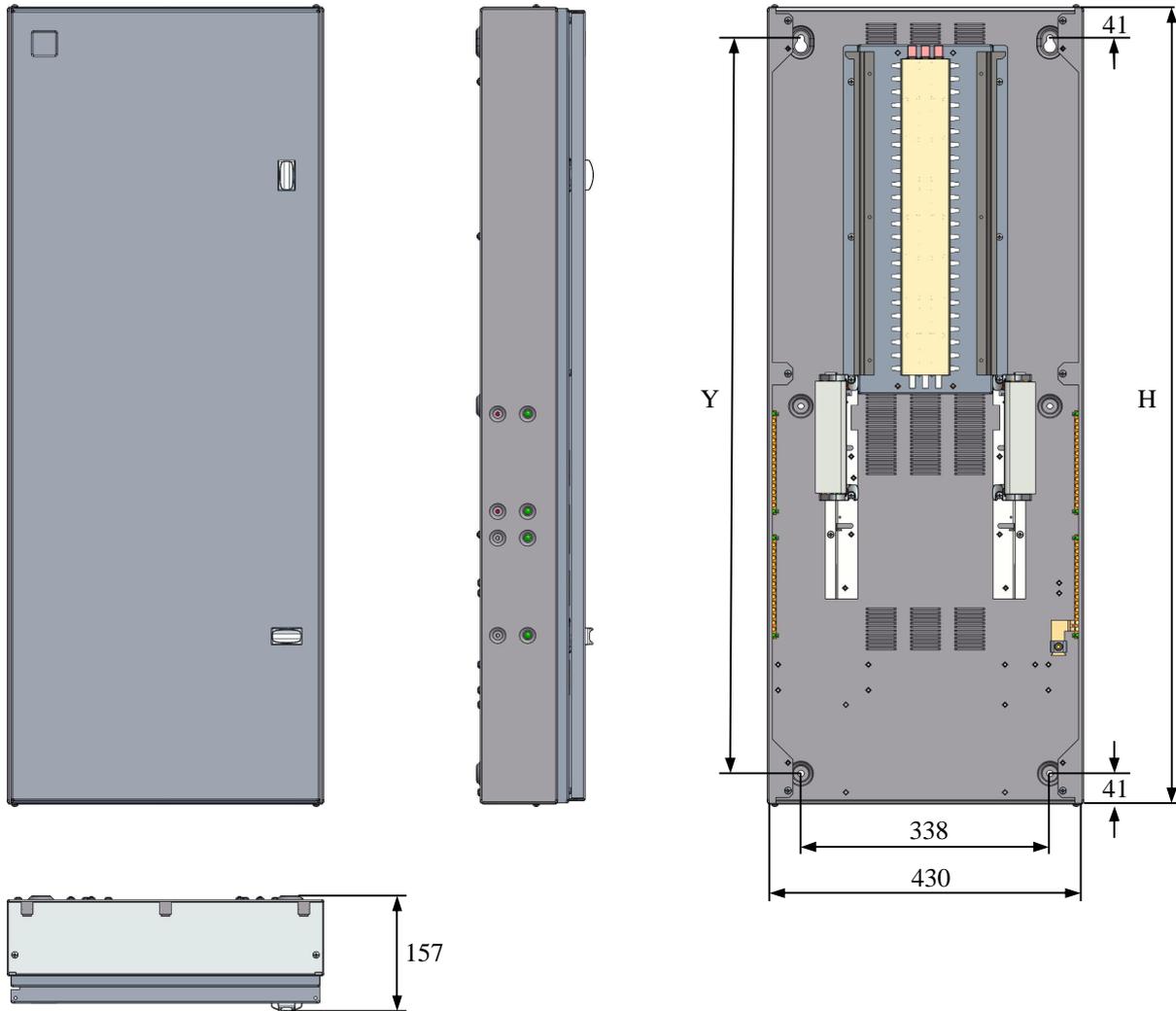


250A TYPE 'B' TPN DISTRIBUTION BOARDS



Unit	No of Ways	H Dimension (mm)	Y Dimension (mm)
8GP1204-4DA54	4 Way	766	684
8GP1206-4DA54	6 Way	820	738
8GP1208-4DA54	8 Way	874	792
8GP1212-4DA54	12 Way	982	900
8GP1216-4DA54	16 Way	1090	1008
8GP1220-4DA54	20 Way	1116	1116
8GP1224-4DA54	24 Way	1306	1224

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Waste electrical products should not be disposed of with household waste.
Please recycle where waste disposal facilities exist.
Check with your retailer, wholesaler or local authority for recycling advice.



DISTRIBUTION BOARDS: -

8GP1204-4DA54, 8GP1206-4DA54, 8GP1208-4DA54, 8GP1212-4DA54,
8GP1216-4DA54, 8GP1220-4DA54, & 8GP1224-4DA54

Designed for Siemens 5SL & 5SY range of MCBs & 5SU9 RCBOs

250A Integral meter kits:

≤120 mm² incoming cables - 8GP1933-0DA11 (Standard) & 8GP1933-0DA13 (MID)

≤185 mm² incoming cables – 8GP1933-0DA12 (Standard) & 8GP1933-0DA14 (MID)

Safety Note

“This unit should be installed by a qualified competent person in accordance with all relevant legislation and regulations including building regulations and wiring regulations BS7671. If in doubt contact a qualified competent person”

Turn off all power supplying this equipment before commencing work on or inside the distribution board.

Test with appropriately rated test equipment to ensure power is off.

Replace all devices, blanks, neutral shroud, doors and covers before turning the power on.

To avoid swarf and other foreign objects entering the enclosure always remove gland plates to cut cable / trunking entries.

Important – the terminal screws of all incoming devices should be fully opened before fitting.

DO NOT USE POWER TOOL SCREWDRIVERS ON ELECTRICAL CONNECTIONS

Technical Consideration

Siemens ALPHA BS II type B distribution boards offer a choice of incoming termination arrangements, internal live busbar and termination shrouding. A range of distribution boards and internal components tested to exacting standards of quality and reliability.

All products are type tested to appropriate British and European Standards

Points to Remember

All Distribution Boards and associated ancillary Equipment should be fitted in a DRY, VIBRATION FREE environment.

Degree of Protection IP2XC

The total current supplied must never exceed the rating of the incoming main switch or any other limitation as shown on the distribution board labels. However, the sum of individual MCB ratings may exceed this value if there is significant diversity on the installation.

All terminals are designed for use with copper conductors only.

Insulating bushes should be fitted where necessary to offer greater mechanical protection to cables.

To ensure that all cables to a given circuit are readily identifiable, it is advisable to adhere to the indicated terminal numbering sequence.

NEUTRAL

The main neutral termination (120 mm² max) is located to the left of the main supply terminals and incorporates a removable link for isolation/test purposes. The neutral terminal bars are located on each side of the pan. There are spare unmarked terminals on both sides with spare blank labels to accommodate changes or nonstandard markings.

EARTH

Earth Terminal Bars are located to each inside face of the Distribution Board. The main termination point (120 mm² max) is located to the lower right-hand side. There are spare unmarked terminals on both sides with spare blank labels to accommodate changes or nonstandard markings.

The facility to add a complete additional set of earth terminal bars exists, courtesy of duplicate fixing holes on the enclosure sides. Additional terminal bars are available as an extra.

4 Way Board **8GP1920-0DA41** to 24 Way Board **8GP1920-0DA47**

A kit to convert the conventional ‘dirty’ earth to a ‘clean’ earth is also available. This kit,

ref: **8GP1962-0DA10** comprises an incoming cable termination and insulators for one terminal bar.

OVERSIZED OUTGOING NEUTRAL AND EARTH CABLES

A kit is available to accommodate up to 70 mm² cables. However, this kit occupies two terminals on the appropriate terminal bar.

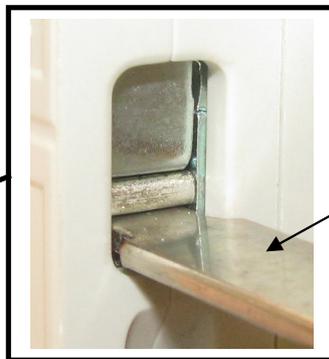
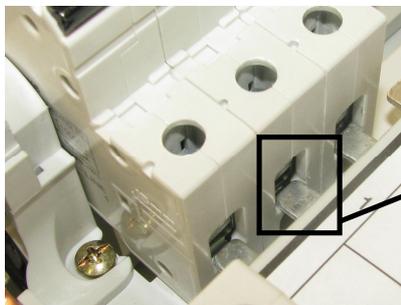
Set of three 70 mm² terminal assemblies **8GP1976-0DA16**

Outgoing way numbering

The outgoing ways must be identified. If the busbar assembly is not pre-numbered, then the installer must number the outgoing ways. Odd numbered ways on the left of the board way 1 being either at the top or bottom of the busbar assembly. Even numbered ways on the right of the board ascending in the same direction as the odd numbers. Way 1 must be opposite way 2, both either at the top or the bottom of the busbar assembly.

Installation of MCBs

- Ensure supply is switched off.
- Only Siemens 5SL and 5SY MCBs can be used in Siemens ALPHA BS II Distribution Boards
For prospective fault level applications of 10 kA or less use 5SL4 & 5SY4 MCBs.
For prospective fault level applications of 15 kA or less use 5SY7 MCBs.
- **Ensure that the MCB phase barriers are intact and are not damaged or removed**
i.e. Terminal screws are fully shielded between phases.
- Fully slacken all MCB terminal screws.
- **Caution: The combined maximum load on two facing MCBs / RCBOs on a common cross link (e.g. Way 1 + Way 2) must not exceed 100 A.**
- Adjacent thermal-magnetic MCBs should not be continuously loaded 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 60 % diversity factor is applied to the MCB nominal rated current where it is intended to load the MCBs continuously (in excess of 1 hour)
- Push MCB onto appropriate busbar outgoing way – In 3 phase boards make sure that the “OFF” position is nearest to the busbar assembly in the centre of the board
- Fully tighten busbar connections to the recommended torque marked on the MCB



MCB installation only: -
Busbar connection
into lower cage, ensure
cage is fully lowered
before attaching to busbar.

Installation of RCBOs

- Ensure supply is switched off.
Only Siemens 5SU9 RCBOs can be used in the Siemens ALPHA BS II Distribution Boards
For prospective fault level applications of 10 kA or less use 5SU9 x 04 RCBOs.
- Fully slacken all RCBO busbar terminal screws.
- Push RCBO onto appropriate busbar outgoing way making sure that the DIN clip faces towards the busbar assembly.
- Fully tighten busbar connections to the recommended torque marked on the RCBO
- Connect RCBO neutral lead to appropriate numbered terminal on the neutral terminal bar.
- Ensure both live and neutral outgoing cables are terminated on the RCBO outgoing terminals.
- Connect white functional earth lead to appropriate terminal on earth terminal bar.
- Please note the 5SU9 series of RCBO has an unswitched neutral (i.e. a solid neutral).

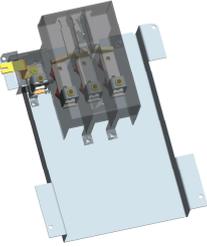
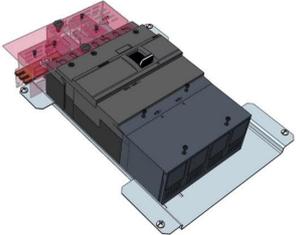
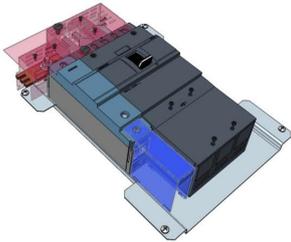
Main Incomer Options

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	List No	Rating
	250A TP Direct Connection incomer kit <ul style="list-style-type: none"> • 8GP1867-0DA10 	250A
	250A DB 4P MCCB Incomer Kit <ul style="list-style-type: none"> • 8GP1601-4DA50 	250A
	250A DB 4P SWD Incomer Kit <ul style="list-style-type: none"> • 8GP1600-4DA50 	250A
	250A DB TP+N MCCB Incomer Kit <ul style="list-style-type: none"> • 8GP1601-4DA40 	250A
	250A DB TP+N SWD Incomer Kit <ul style="list-style-type: none"> • 8GP1600-4DA40 	250A

Device	Max. Cable Capacity	Recommended Tightening Torque
8GP1856-0DA10	120 mm ²	10 Nm (88 lbf-in)
8GP1617-0DA41, 8GP1618-0DA51 8GP1643-4DA40, 8GP1643-4DA50	185 mm ²	
8GP1601-4DA50, 8GP1600-4DA50 8GP1601-4DA40, 8GP1600-4DA40	50-185 mm ²	See individual instruction leaflets
MCB	25 mm ²	2.3 Nm (20 lbf-in)
RCBO	16 mm ²	2.0 Nm (18 lbf-in)
Earth & Neutral Terminals	25 mm ²	2.3 Nm (20 lbf-in)
Earth & Neutral main termination point	120 mm ²	10 Nm (88 lbf-in)
Removable Neutral link for isolation / test purpose	N/A	2.3 Nm (20 lbf-in)

Note

Before fitting the front cover, check the tightness of **all** connections, including factory made connections.

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Fitting the Front Cover

Remove the appropriate rectangular knockout from the front cover.

For incomer kits: 8GP1617-0DA41, 8GP1618-0DA51, 8GP1643-4DA40 & 8GP1643-4DA50 remove small knockout (35 x 67 mm)

For incomer kits: For incomer kits: 8GP1601-4DA50, 8GP1600-4DA50, 8GP1601-4DA40, 8GP1600-4DA40 remove rectangular knockout (143 mm wide)

Fit blanks to all unused ways.

Blanks	
Cat No.	Description
8GP1970-0DA11	Blanking Strip – 6 x (1 mod)
8GP1971-1DA11	Blanking Strip – 12 x (1 mod)
8GP1972-0DA12	Blanking Strip – 4 x (3 mod)
8GP1973-0DA15	Blanking Strip – 2 x (12 mod)
8GP1974-0DA11	1M MCB Profile blank

