

Operating Instructions,

800 A Panelboard System BS EN 61439-2





<u>DANGER: LIVE PARTS ENCLOSED</u>. Ensure the unit is installed by a qualified competent person in accordance with all relevant legislation and regulations including building regulations and wiring regulations BS 7671. If in doubt, contact a qualified competent person.



IMPORTANT INFORMATION

Follow the instructions below before working on or inside the equipment.



- Turn off all power supplies
- Always use a calibrated volt-sensing device to confirm the power is off.
- Replace all devices, doors and covers before turning on the power to this equipment.
- To avoid ingress of swarf and similar material, always remove gland plates to allow cutting/slotting for cable entries.
- Do not use power screwdrivers on electrical connections.

Failure to follow these instructions could result in serious injury or death.

For information on the recommended maximum cable sizes to terminate onto the incoming and outgoing devices please refer to table 1.

Note: - It is good engineering practice to apply generous derating factors or make provision for free air between devices. In these situations, and in common with other manufacturers, we recommend a 55 % diversity factor is applied to the MCCB nominal rated current where it is intended to load the MCCB continuously (in excess of 1 hour).

Incoming Device

The incoming device & interconnection kits are supplied separately from the panelboard. Details of what combinations are possible can be seen in the table 2.

We recommend the fitting of the phase barriers supplied as standard with the incomer switching unit. Fully tighten the electrical connections to the recommended torque detailed in Table 1.

Internal accessories can be mounted in the incoming 3VA devices. Please refer to the installation instructions supplied with the accessories for guidance.

Outgoing Devices

3VA type MCCBs only, to be fitted as outgoing devices.

Ensure the supply is switched off.

These instructions are to be read in conjunction with the installation instructions supplied with the MCCBs.

Care must be taken when positioning the MCCB. The terminals 2, 4, & 6 are used for the busbar connections, i.e. with the 'OFF' position towards the busbar.

Fully tighten the electrical connections to the recommended torque detailed in table 1.

If using the screws supplied with the MCCB please note that these screws are for lateral location purposes only, as shown in Fig 1, and should not be overly tightened. The recommended torque for the mounting screws can be found in the manufacturer's leaflets provided with the device. Mechanical strength of the assembly remains even when the screws are not fully tightened.

Earth Connection

Ensure that the M12 nut / bolt assembly which connects the earth cable lug to the **Copper Earthing Point** in the Panel Board is torqued to 40 Nm.





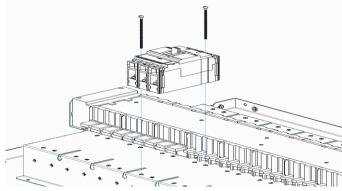


Fig 1.

DO NOT USE POWER TOOL SCREWDRIVERS ON ELECTRICAL CONNECTIONS

Outgoing Way Numbering

The outgoing ways must be identified. If the busbar is not prenumbered, 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.

Fitting Cableways

See potential panelboard combinations in table 2 for cableway catalogue numbers. Remove the side plates from the main unit and/or extension unit.

Couple the cableways to the main unit/extension unit(s) using the fasteners provided with the cableway(s).

Testing & Commissioning

Before the panelboard and the installation, of which it forms a part, are commissioned they must be tested, in accordance with the requirements of the latest edition of the Requirements for Electrical Installations (BS 7671) published jointly by the British Standards Institution (BSI) and the Institution of Engineering and Technology.

Note: Before fitting the front cover, check the tightness of all connections, including the factory-made connections. Also ensure that all shrouds are correctly located and secured in place.

Unused ways must be fitted with busbar blanks and door blanks.



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.



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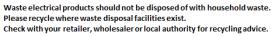
Technical Data	800 A		
Standards Compliance	IEC 61439-2; Ed 2 2011-08		
Short Circuit Withstand Strength	65 kA for 1 s		
Rated Voltage	230/400 V 3 ph 50 Hz		
Mounting	Wall		
Entry	Bottom		
Access	All Sides		
Form of Separation	orm of Separation F4bT6 (GM)		
Degree of Protection	IP3X (door closed)		
Paint Finish	Light Grey RAL7035		
Outgoing Devices	3VA type MCCB's ONLY		
For more Information contact Technical support	Tel: 0845 850 7600 Email: service.gbi.industry@siemens.com		

Table 1 - Cabl	e Capacity / Torque Setting	js					
	Incoming			Outgoing			
	Switch-disc. or MCCB	Direct Connect	Neutral	Earth	160 A MCCB	Neutral	Earth
					Maximum Stranded CU Cable		
800 A Panelboard	M10 320 SE	M12	-	M12	70 mm² csa	35 mm² csa	35 mm² csa
Recommended	400 mm² csa *25 Nm	40 Nm		40 Nm	*5-8 Nm	6 Nm	6 Nm
torque settings				-	• • • • • • • • • • • • • • • • • • • •		
Available terminals	dividual Product leaflets for all other recommended torque settings. For more detail on 3VA27 MCCB & SW Disconnector click here Earth Bars						
	4 '	way		8 way		12 way	
800 A Panelboard		20	-	40	_	60	

Panelboard system	4 Way	8 Way	12 Way
800 A	8GP1921-0DA75	8GP1921-0DA76	8GP1921-0DA77
Meter cableways	Meter knockouts	800 A	List No.
Corner	0	All Sizes	8GP1921-0DA15
Size 3	7	4w	8GP1921-0DA18
Size 4	9	8w	8GP1921-0DA20
Size 5	10	12w	8GP1921-0DA40
Earth leakage cableways	Meter knockouts	800 A	List No.
Size 3	5	4w	8GP1921-0DA43
Size 4	6	8w	8GP1921-0DA44
Size 5	7	12w	8GP1921-0DA45
Extension kits			
Control module - 24 mod			8GP1921-0DA21
SPN Distribution board 19 mod			8GP1921-0DA22
TPN Distribution board 19 mod			8GP1921-0DA23
Cable spreader box			8GP1921-0DA24
Add on 2W 250 A 4P Outgoing M	CCB housing 4W		8GP1921-0DA26
Connection kits			
800 A Direct connection kit			8GP1921-0DA81
800 A 4P Incoming kit			8GP1921-0DA80
250 A Add on link kit 4W			8GP1921-1DA01
250 A Add on link kit 8W			8GP1921-1DA02
250 A Add on link kit 12W			8GP1921-1DA03
Integral meter kit 800 A STD			8GP1921-0DA86
Integral meter kit 800 A MID			8GP1921-0DA87
Incoming MCCB device			4P
800 A			3VA2780-2AC13-0AA0
Incoming switch disconnector of	device		
800 A			3VA2780-1AA13-0AA0

SIEMENS

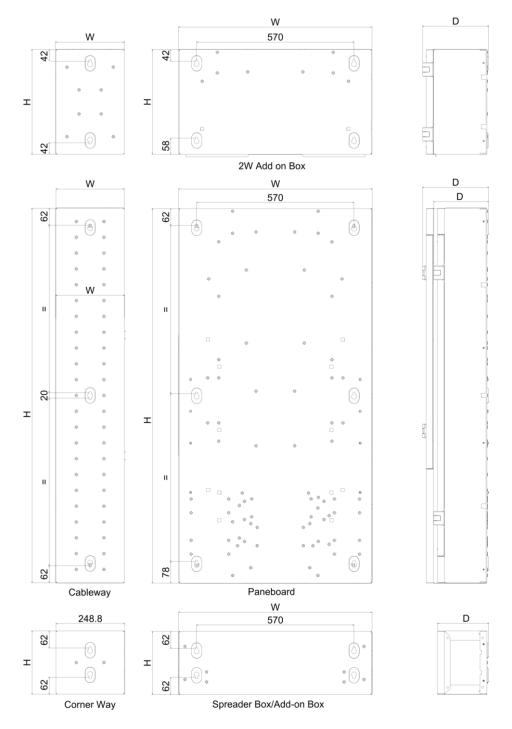






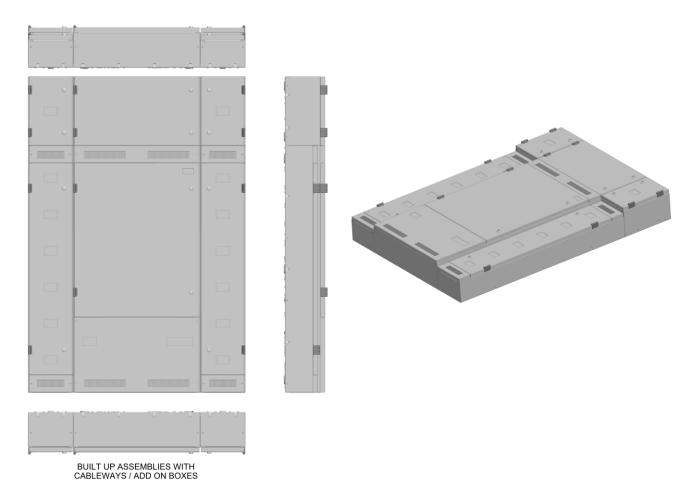
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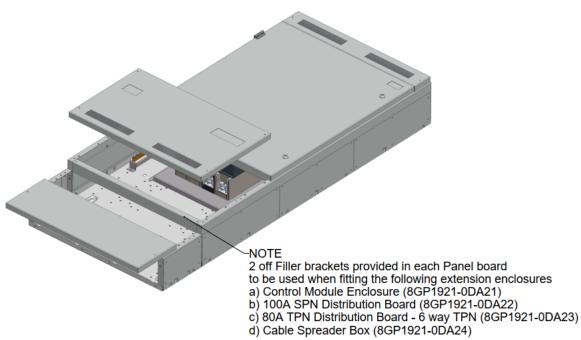
Table 3 - Dimensions for the main unit and cableways						
Main Units	Description	Dimensions (mm)			Distance from gland plate to incoming terminals (mm)	
		Н	W	D	<u> </u>	
8GP1921-0DA75	800 A: 4 way	1361	700	240	400	
8GP1921-0DA76	8 way	1591	700	240	400	
8GP1921-0DA77	12 way	1820	700	240	400	
Cable Ways						
8GP1921-0DA15	Corner unit	230	249	185	-	
8GP1921-0DA18	Size 3	1361	249	185	-	
8GP1921-0DA20	Size 4	1591	249	185	-	
8GP1921-0DA40	Size 5	1821	249	185	-	
Extension Units						
8GP1921-0DA26	Top box Add-on	380	700 & 249	240	-	
8GP1921-0DA21	CM Add-on	230	700	185	-	
8GP1921-0DA22	SPN Add-on	230	700	185	-	
8GP1921-0DA23	TPN Add-on	230	700	185	-	
8GP1921-0DA24	SP box	230	700	184	-	











Filler brackets fitted to inside of panel board side frames with Number 10 fixing screws through the top of the side frames and extension box jointing screws



