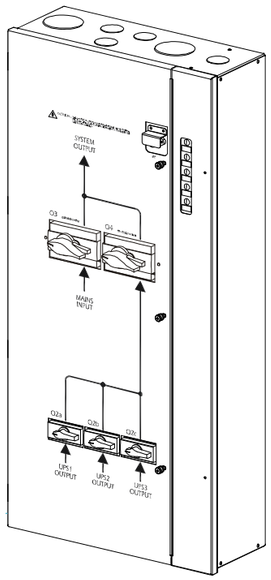
Installation

MGE™ Galaxy™ 3500 and Smart-UPS® VT Parallel System Maintenance Bypass Panel Wall Mount 10-40 kVA 400V



IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

Warning: ALL safety instructions in the Safety Sheet (990-2940) must be read, understood and followed when installing the UPS system. Failure to do so could result in equipment damage, serious injury, or death.

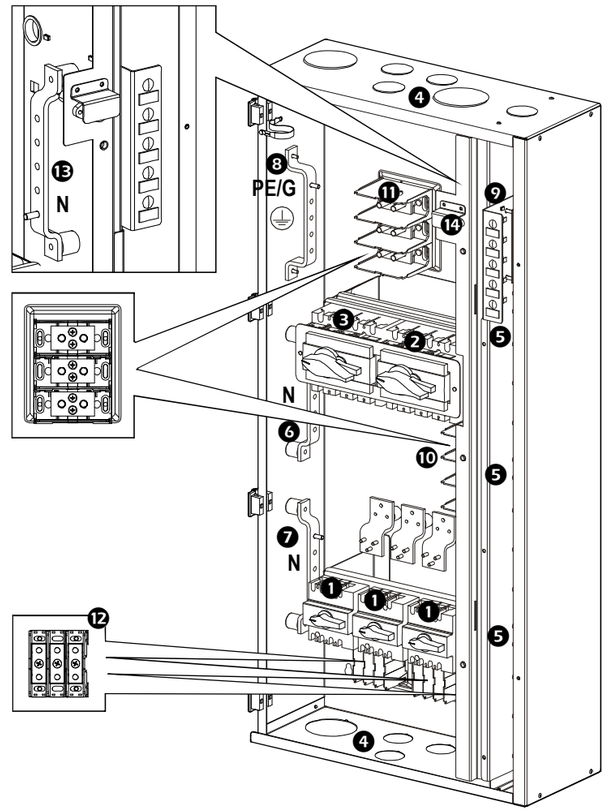
Heavy: APC recommends that two people mount the MBP to the wall to lift and hold the enclosure and to secure it to the wall.

Caution: All electrical power and power control wiring must be installed by a qualified electrician, and must comply with local and national regulations for maximum power rating.

990-3604B-001 9/2009

Product Overview

Front view (interior)



❶	Q2 UPS isolations	❽	PE/ground busbar
❷	Q4 system isolation	❾	LED indicators
❸	Q3 Maintenance bypass	❿	Mains input
❹	Knockouts for grommets/cables	⓫	Critical load
❺	MBP can I/O boards (x3)	⓬	UPS output
❻	Input neutral busbar	⓭	Output neutral busbar
❼	UPS neutral busbar	⓮	Control fuse

Note: Up to three UPS units can be installed in parallel with this bypass panel.

Site Planning

Note: APC strongly recommends mounting the MBP to a minimum 20 mm thick plywood board or similar solid backing that has approximate dimensions.

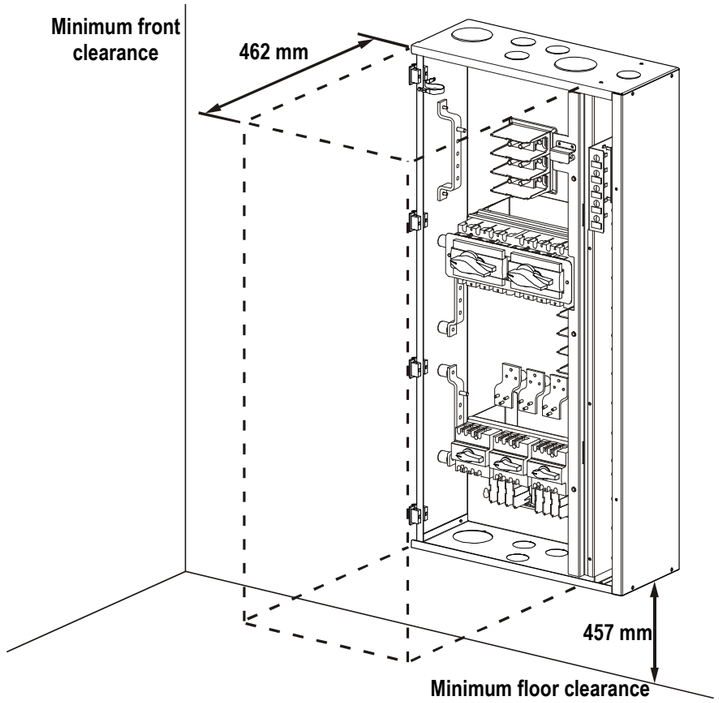
Note: Ensure that the wall area you selected to install the MBP is structurally sound and able to support the size and weight of the unit.

Note: Protect the MBP at all times from excessive moisture, construction dirt, corrosive elements, or other contaminants.

Note: When choosing a location to mount the MBP, consider the need for easy access to all of the switches and internal components.

Space requirements

Refer to the following figure to determine the space requirements for installing the MBP. Consult local codes for any additional requirements. Ideally, install the MBP in a location close to the UPS.



Prepare for cables

Note: All external cable connections with the UPS and mains must be made on-site. External cables are not supplied with the equipment.

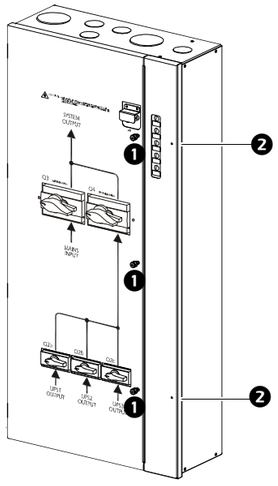
Note: All control wire connections between the UPS and the MBP must be made on-site. Control cables (30 m) for MBP I/O boards are supplied with the equipment.

Create knockouts for cable access

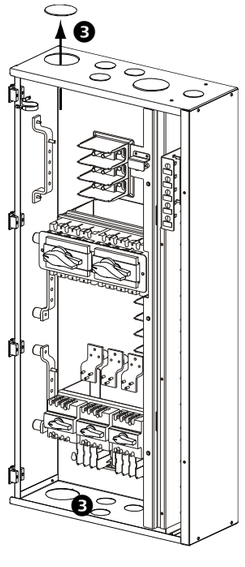
Note: You can create knockouts for cable access either before or after you have mounted the MBP to the wall. APC recommends creating all necessary knockouts prior to mounting the MBP to the wall.

❶Open the front door.

❷Remove the narrow front cover.



❸Use a knockout punch to create appropriate-sized holes for the cables/ conduits (38 or 76 mm) in either the top or bottom plates of the MBP.



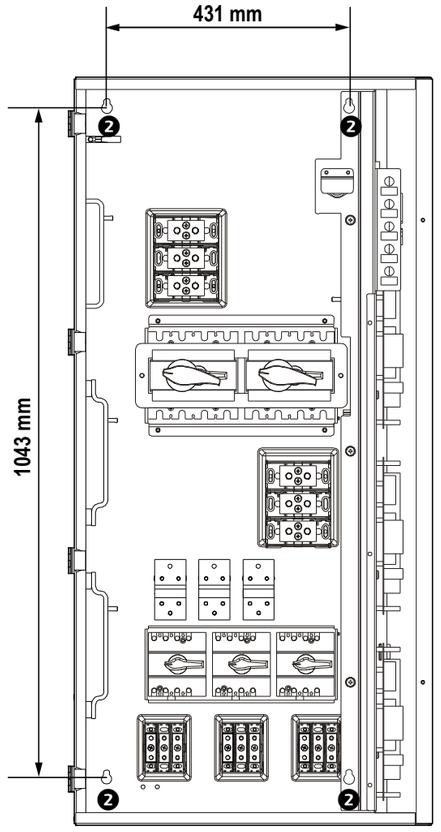
Mount the MBP to the wall

❶Mount the plywood (or other backing) to the wall using appropriate hardware for the type of wall used.

❷Measure and mark the four mounting hole locations on the wall.

❸Drill holes in each of the four marked locations.

❹Lift the MBP, position it against the backing and line it up with the four holes. Secure with the four M8 bolts and flat washers.



Connect Power Cables

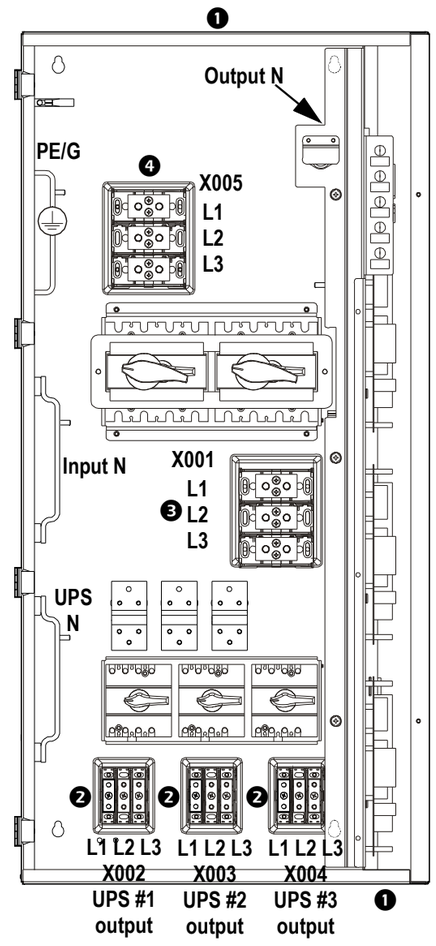
See Also: For information on grounding, see manual 990-3606.

❶Route the cables through the top or bottom of the MBP.

❷Connect UPS output cables **(L1, L2, L3, N, G)** from up to three UPS units to the UPS output terminals (X002, X003, X004) and the ground and neutral busbars.

❸Connect mains input cables **(L1, L2, L3, N, G)** to the mains input terminals (X001) and the ground and neutral busbars.

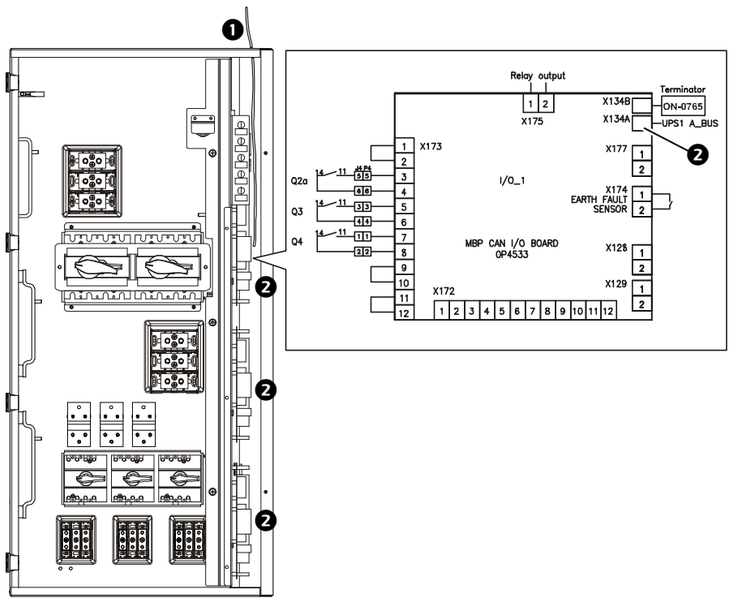
❹Connect critical load cables **(L1, L2, L3, N, G)** to the critical load terminals (X005) and the ground and neutral busbars.



Connect Communication Cables

❶Route the A-bus cables (sub RJ50-D15) from the A-bus on the UPS terminal parallel communication box through the top or bottom plates of the UPS and to the MBP CAN.

❷Connect the A-bus cables to the X134A connectors on the MBP CAN I/O boards.



Specifications

Electrical	SBPAR10K20H-WP 60kVA - up to three 10-20kVA UPS units	SBPAR30K40H-WP 120kVA - up to three 30-40kVA UPS units
Nom. input voltage	400/230 V L1,L2,L3,N,PE	400/230 V L1,L2,L3,N,PE
Nom. output voltage	400/230 V L1,L2,L3,N,PE	400/230 V L1,L2,L3,N,PE
System switches ratings	100 A	200 A
UPS switches ratings	40 A	63 A
Wiring (only use copper conductors suitable for at least 75°C)		
Maximum cable size	70 mm²	2x70 mm²
System output/ UPS output cable	35/10 mm²	95/16 mm²
System input/UPS input cable	35/10 mm²	95/16 mm²

Warning: At 100% switch mode load, the system/UPS neutral connections must be rated for 173% phase current.

Physical	SBPAR10K20H-WP 60kVA	SBPAR30K40H-WP 120kVA
Dimensions (H × W × D)	1174 x 560 × 216 mm	1174 x 560 x 216 mm
Shipping dimensions (H × W × D)	1298 x 704 x 335 mm	1298 x 704 x 335 mm
Weight	48 kg	53 kg
Shipping weight	50 kg	55 kg

Environmental	
Operating environment	Indoor use only, protect from water and conductive contaminates
Operating temperature	0° to 40°C (32° to 104°F)
Humidity	0 to 95%, non-condensing

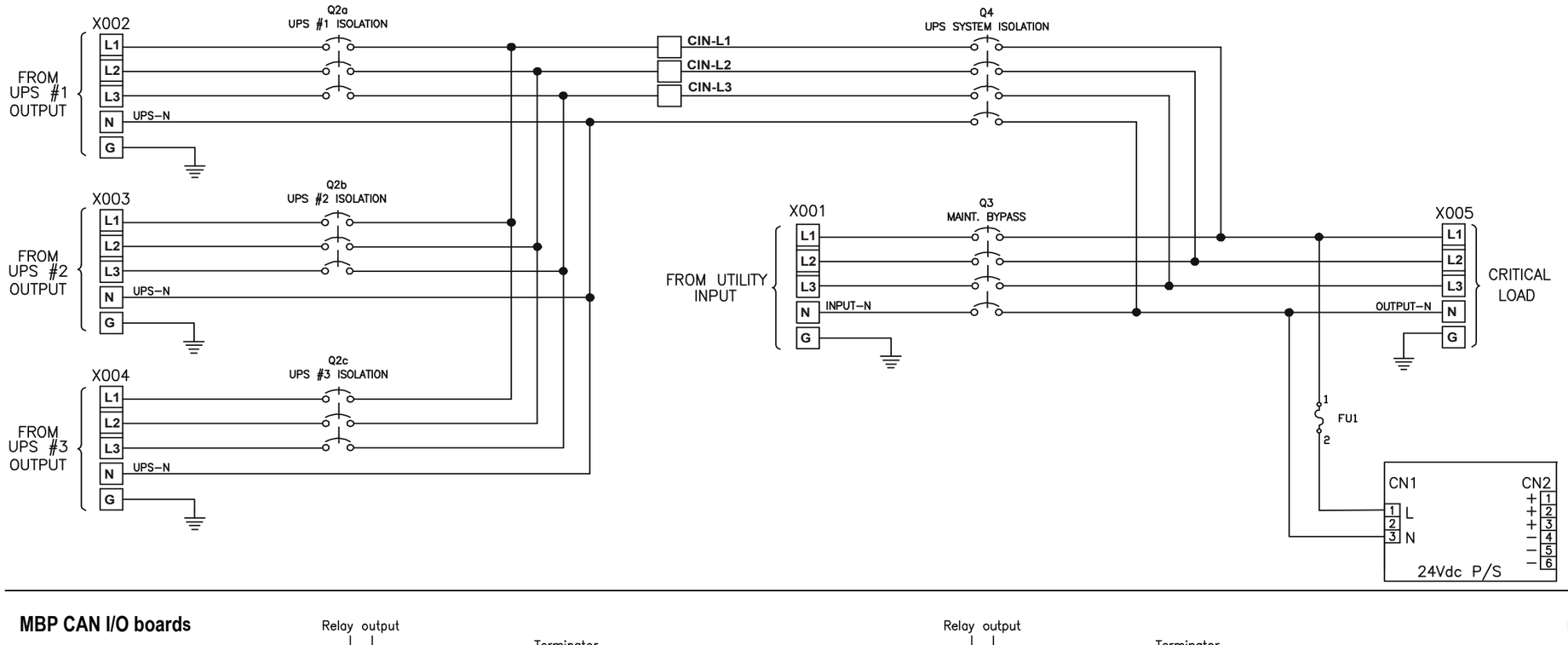
Torque value	SBPAR10K20H-WP 60kVA	SBPAR30K40H-WP 120kVA
Terminal blocks (M6 x 15 stud)	6.89 Nm	6.89 Nm
Terminal blocks (M10 x 30 stud)	N/A	25.7 Nm
Busbars M5 or M6	11.3 Nm	11.3 Nm

Contact Information

For local, country-specific centers: go to www.apc.com/support/contact.

Appendix

MBP diagram



MBP CAN I/O boards