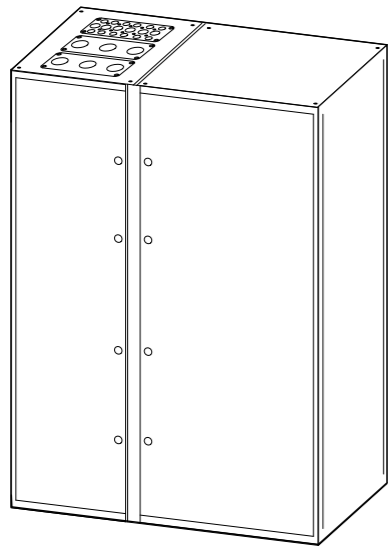




MGE™ Galaxy™ 3500 3:1 15-40 kVA 400 V

Wall-Mounted Parallel Maintenance Bypass Panel Installation



IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS



WARNING: All safety instructions in the Safety Sheet shipped with the product must be read, understood and followed prior to installing the system. Failure to do so could result in equipment damage, serious injury, or death.



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



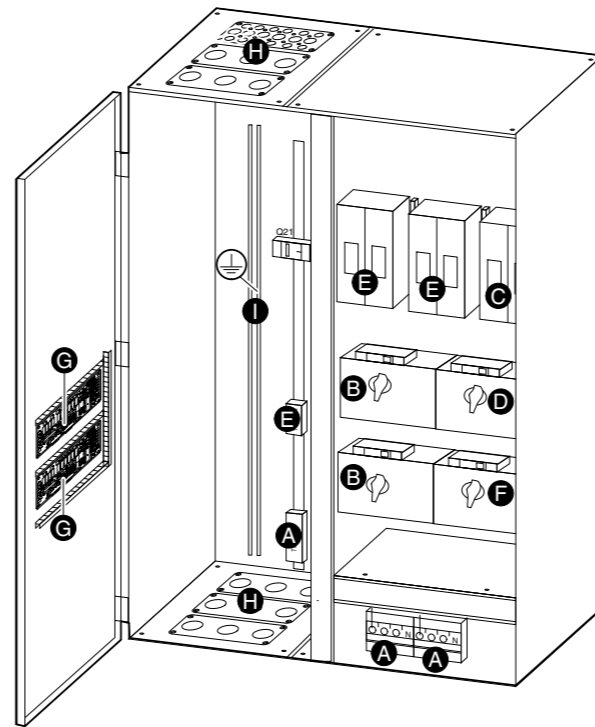
Caution: Use a forklift or other lifting device to lift the MBP to the installation height.

Product Overview



Note: This Maintenance Bypass Panel supports two UPS units connected in parallel for redundancy (1+1) only.

Front View (Interior)



- A. Mains input (Q1a, Q1b)
- B. UPS output (Q2a, Q2b)
- C. System output F7
- D. Maintenance bypass (Q3)
- E. Bypass input (Q5a, Q5b)
- F. System isolation breaker (Q4)
- G. Communication boards
- H. Cable entry
- I. PE/Ground

Site Planning



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



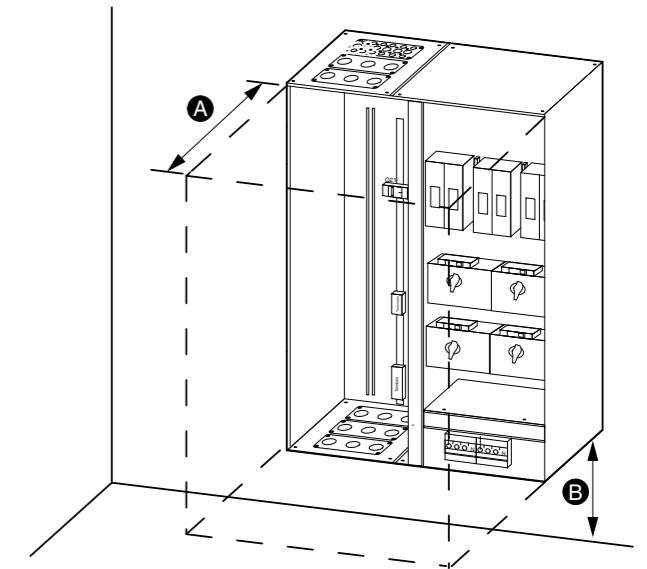
Note: Ensure that the selected wall is structurally sound and able to support the size and weight of the unit.



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

Space Requirements

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



- A. Minimum front clearance 700 mm.
- B. Minimum floor clearance 600 mm.

Prepare for Cables



Note: All power cables must be connected on-site. External power cables are not supplied with the equipment.



Note: Two communication cables (30 m) are supplied with the equipment.

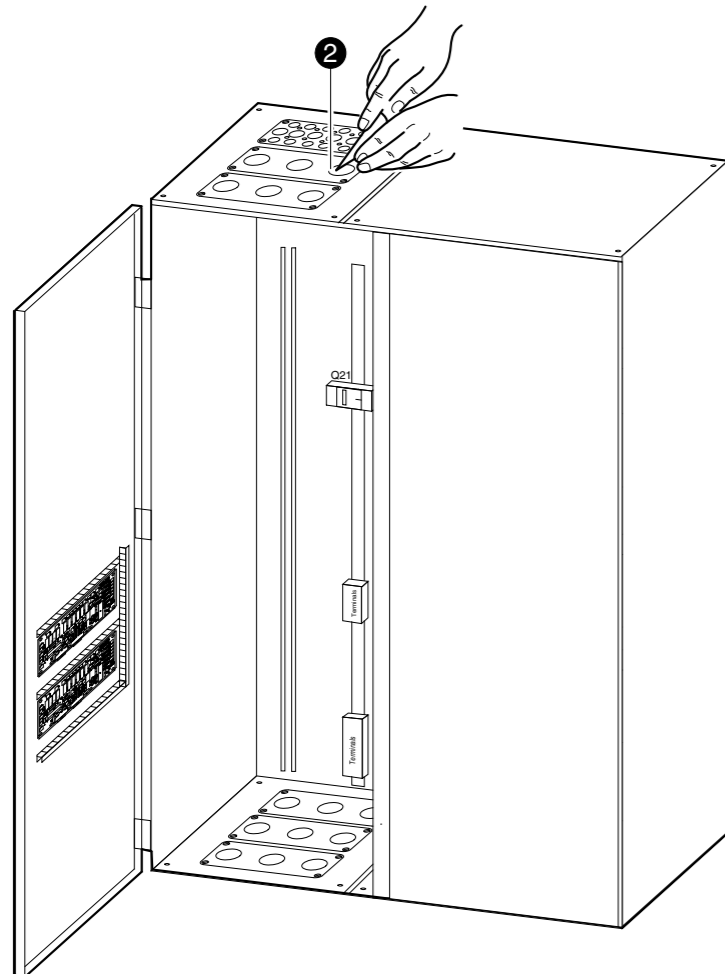


Note: You can cut holes for cable access either before or after you have mounted the MBP to the wall. APC by Schneider Electric recommends that you create all necessary holes before mounting the MBP.



Note: The gland plate with small holes can be replaced with the plate in the bottom if necessary. To maintain ingress level a gland plate must be installed in each opening.

1. Open the left front door.
2. Use a knife to cut an x in either the top or bottom gland plate of the MBP.

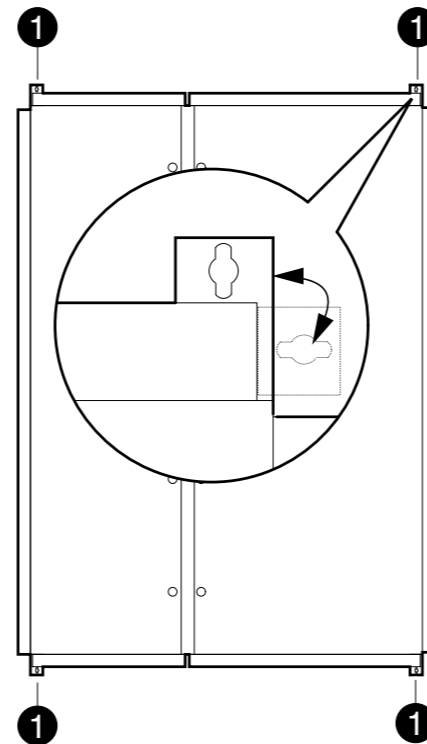


Mount the MBP to the Wall

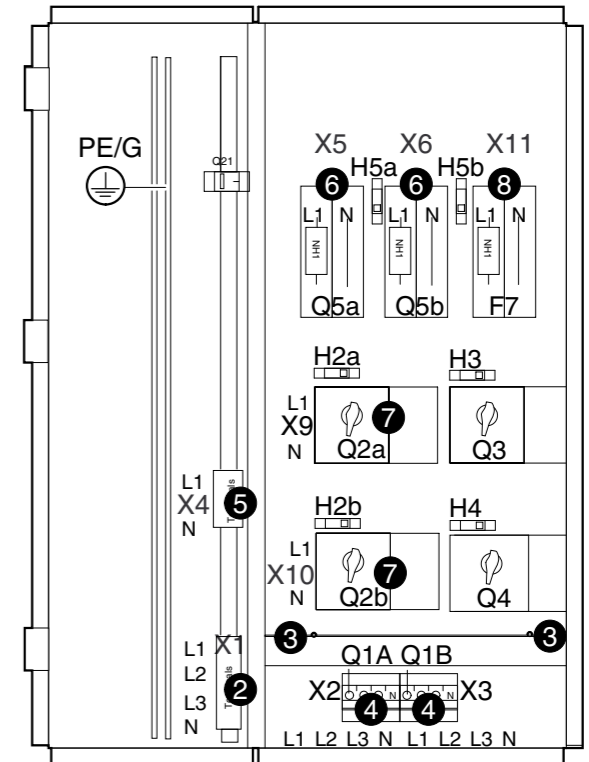


Caution: Anchoring bolts are not supplied. Use anchors/bolts that are suitable to support the weight of the panel.

1. Measure and mark the four mounting hole locations on the wall.
2. Drill holes in each of the four marked locations and mount anchor bolts.
3. Lift the MBP, position it against the backing and line it up with the four holes/anchor bolts. Secure the MBP with the four bolts and flat washers.

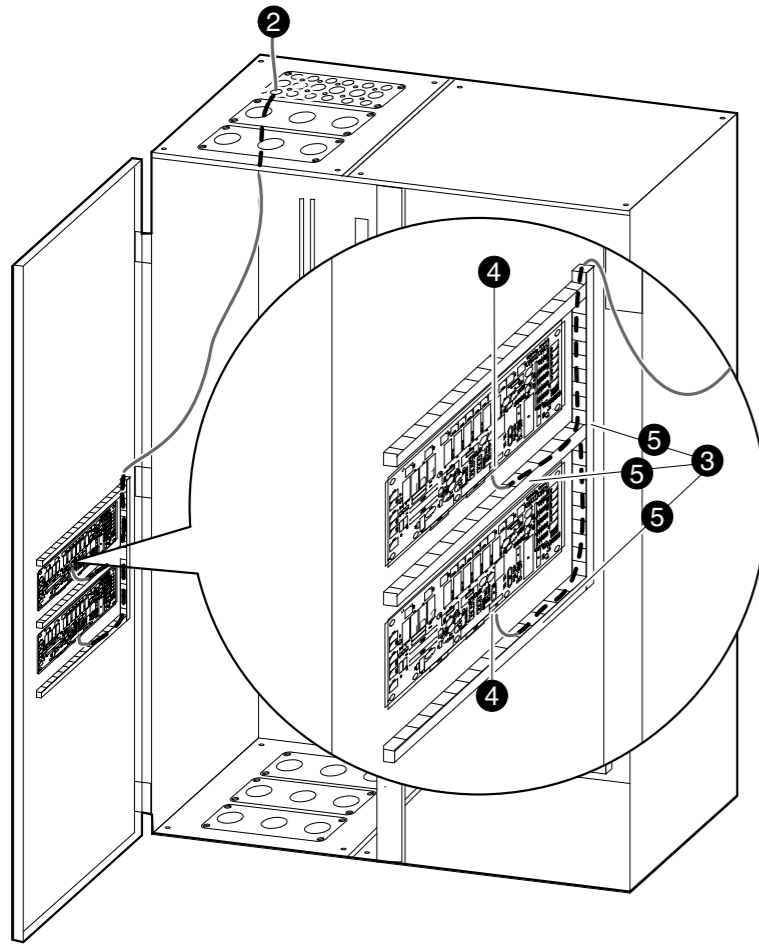


Connect the Power Cables



1. Route the cables through the top or bottom of the MBP.
2. Connect the mains input cables (L1, L2, L3, N) to the terminal block "X1" and the PE cable to the PE/G bar.
3. Remove the cover plate above Q1a and Q1b by loosening the two screws.
4. Connect the input cables (L1, L2, L3, N) from the two UPS units to the top of Q1a (X2) and Q1b (X3) and the PE cables to the PE/G bar. Reinstall the cover plate above Q1a and Q1b.
5. Connect the bypass input cables (L1, N) to the terminal block X4.
6. Connect the bypass input cables (L1, N) from the two UPS units to Q5a (X5) and Q5b (X6).
7. Connect the output cables (L1, N) from the two UPS units to Q2a (X9) and Q2b (X10).
8. Connect the system output cables to the load (L, N) to F7 (X11).

Connect the Communication Cables



1. Connect the ABus cables (supplied with the MBP) to the ABus terminals in the parallel communication box in each UPS. See Installation Manual for information on how to route the cables to the parallel communication box.
2. Route the ABus cables from the ABus terminals in each parallel communication box through the top or bottom of the UPS and to the MBP Can I/O board.
3. Remove the cover plates from the cable channel and route the cables in the channel.
4. Connect the two ABus cables to the X134A connectors on the MBP Can I/O board.
5. Reinstall the cover plates on the cable channel.

Specifications



Note: The maximum cables are for one conductor/wire per terminal. The terminals cannot accept parallel conductors.

Electrical	15–20 kVA	30–40 kVA
Nominal input voltage	3×400/230 V (L1, L2, L3, N, PE)	
Nominal bypass input voltage	230 V (L1, N, PE)	
Nominal output voltage	230 V (L1, N, PE)	
Frequency (Hz)	50	
Earthing	TN-S	
Maximum rated input current (A)	35	63
Maximum rated output current (A)	100	200
Rated short-circuit current	30 kA, 0.1 sec	
Switch ratings: Q1a, Q1b (A)	63	
Switch ratings: Q2a, Q2b, Q3, Q4, Q5a, Q5b, F7 (A)	100	250
Wiring (use only copper conductors with a minimum rating for 70° C)		
Recommended cable cross section for mains input (L1, L2, L3, N, PE) ¹	10 mm ²	25 mm ²
Maximum cable cross section allowed by the terminals for mains input (L1, L2, L3, N, PE)	16 mm ²	25 mm ²
Recommended cable cross section for bypass input respectively system output (L1, N, PE) ¹	35 mm ²	95 mm ²
Maximum cable cross section allowed by the terminals for bypass input respectively system output (L1, N, PE)	70 mm ²	150 mm ²

¹ Recommended cable sizes are for installation method B1, B2, C in EN60364–5–52 table 52–E3

Physical	15–20 kVA	30–40 kVA
Dimensions H × W × D (mm)	1200 × 1010 × 415	1390 × 1010 × 415

Shipping dimensions H × W × D (mm)	1600 × 1200 × 800	
Weight (kg)	113	123
Shipping weight (kg)	128	138

Environmental	15–20 kVA	30–40 kVA
Operating environment	Indoor use only, protect from water and conductive contaminants	
Operating temperature	0° to 40°C	
Humidity	0 to 95%, non-condensing	
Pollution degree (according to EN60 439-1 6.1.2.3)	1	
Protection class	IP 31	

Torque	15–20 kVA	30–40 kVA
Terminal block “X1”	Min. 6.0 Nm - max. 12.0 Nm	
Terminal block “X4”	Min. 25.0 Nm - max. 30.0 Nm	
Q1a top (X2), Q1b top (X3)	3.0 Nm	
Q5a top (X5), Q5b top (X6)	Two bolts, each 4.0 Nm	Two bolts, each 6.0 Nm
Q2a left (X9), Q2b left (X10)	12 Nm	26 Nm
F7 (X11)	Two bolts, each 4.0 Nm	Two bolts, each 6.0 Nm

Contact Information

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

Appendix

MBP One-line Diagram

