



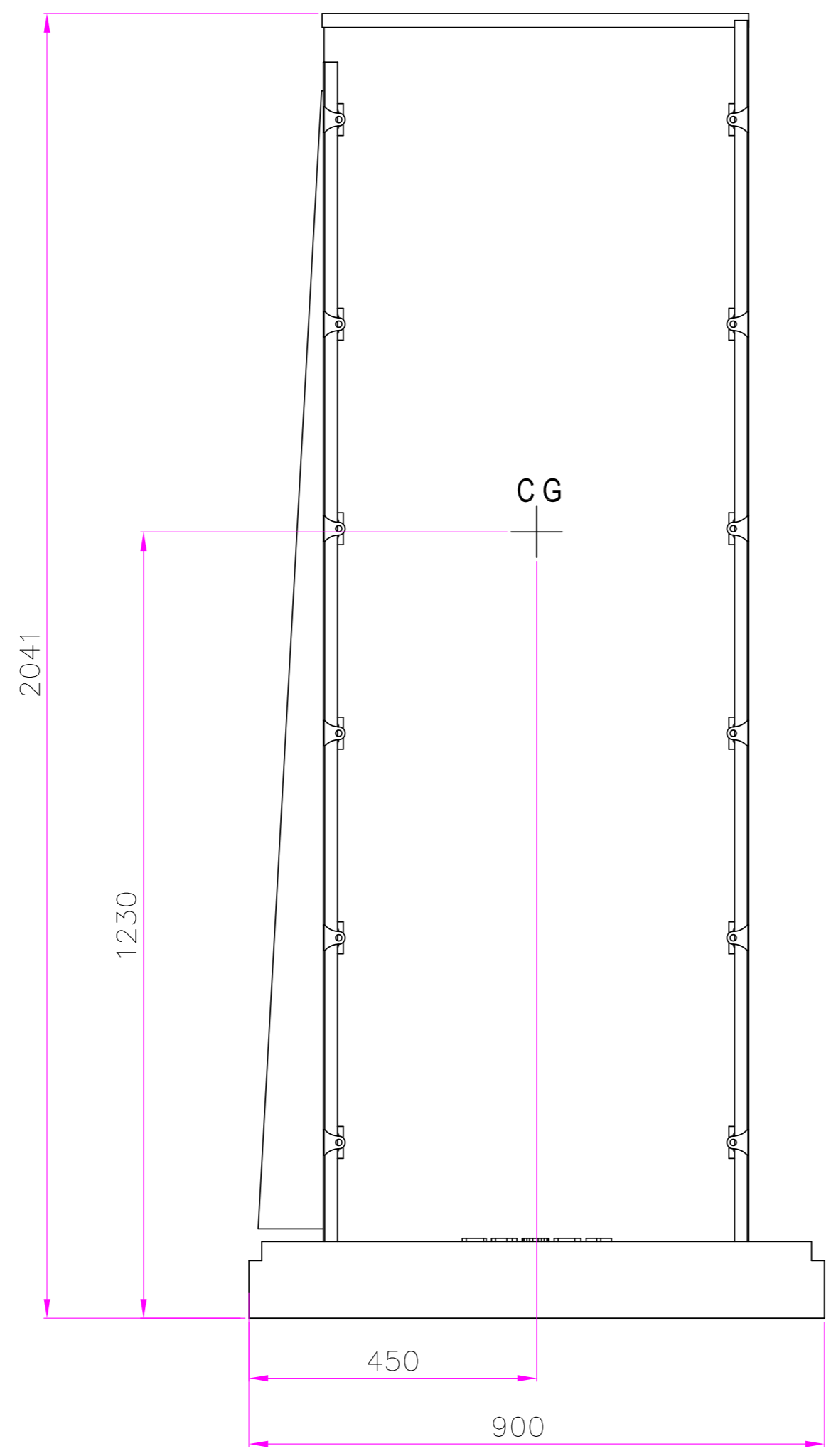
Powering Business Worldwide

SITE PLANNING DATA Eaton 93E-G2 100-120 kVA

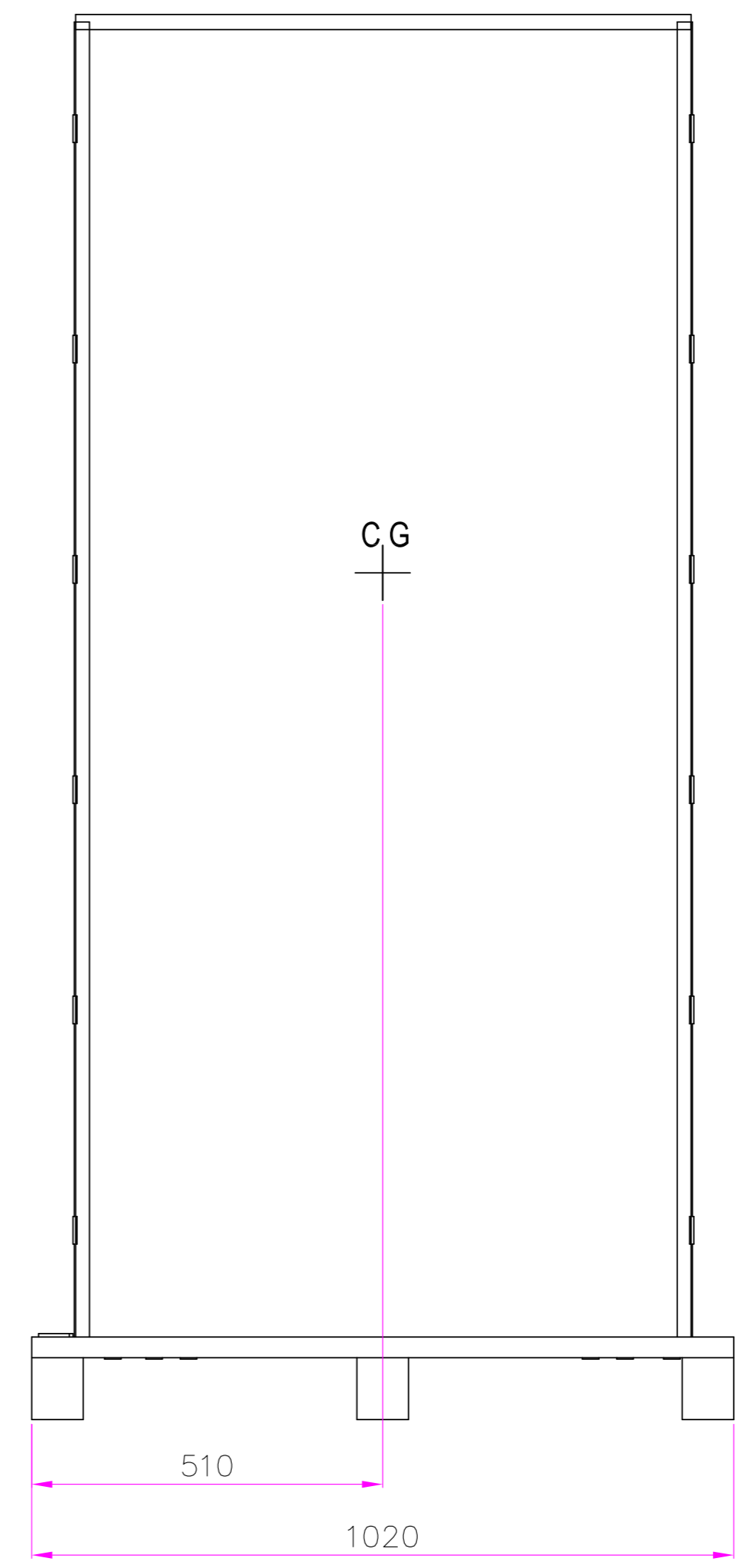
Page 1	Center of Gravity dimensions with packaging
Page 2	Dimensional Drawings
Page 3	Customer Connections
Page 4	Customer Connections Detail View
Page 5	Electrical Wiring of Single Unit
Page 6	Electrical & Signal Wiring of Parallel Units
Page 7	Product Specifications



METRIC		EATON CORPORATION			
DIMENSIONS ARE IN MILLIMETERS AFTER PLATING, DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M-1994. SEE NOTES FOR TOLERANCES.					
DESCRIPTION: EATON 93E-G2 100-120 kVA					
ORIGINATED: MERON GEMEDA	13.11.2018	ECO:	NAME:	REVISION: 01	SIZE: A2
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FRONT VIEW

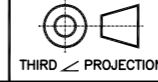



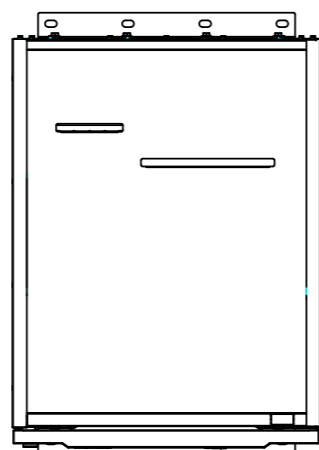
SIDE VIEW

Center of Gravity dimensions – Eaton 93E-G2 100-120 kVA

Notes:

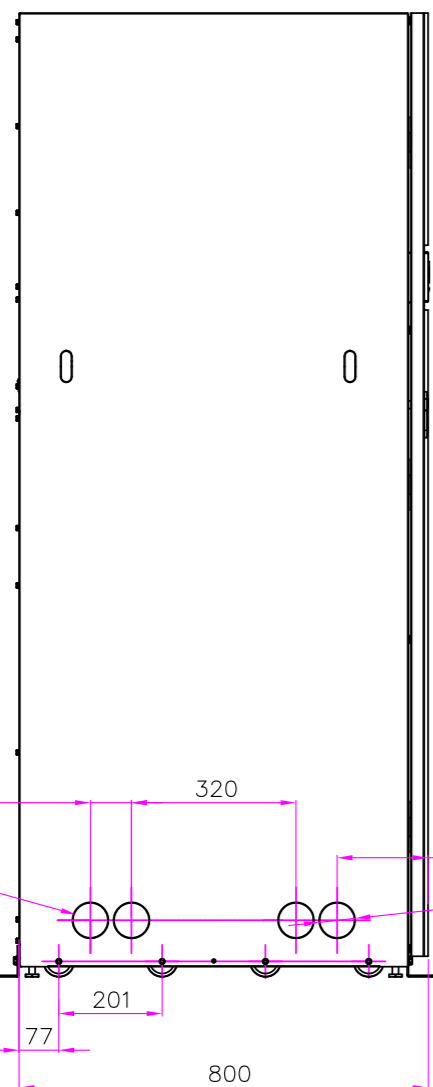
- Center of gravity dimensions are approximated values with pallet and packaging.
- All dimensions are in millimeters

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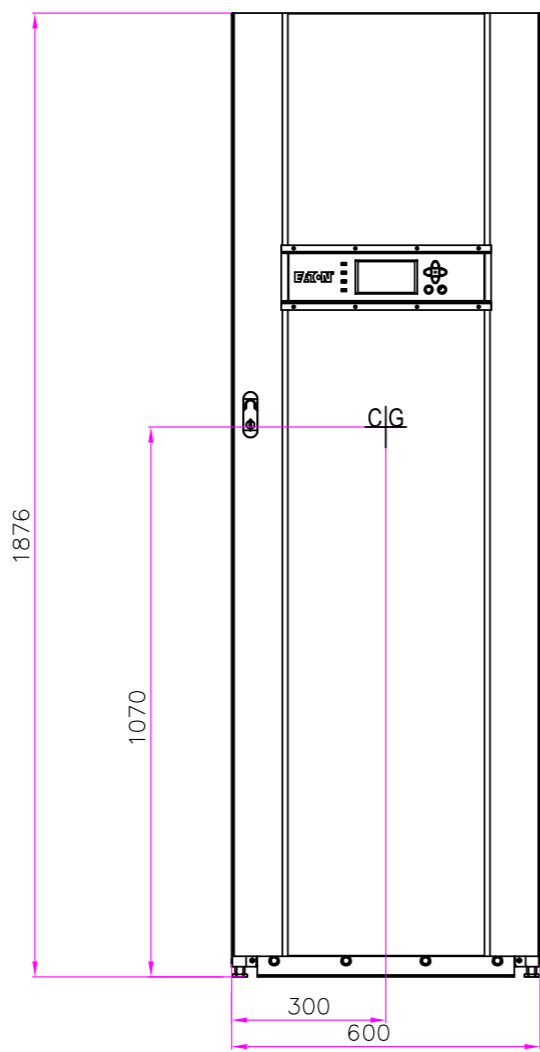


TOP VIEW

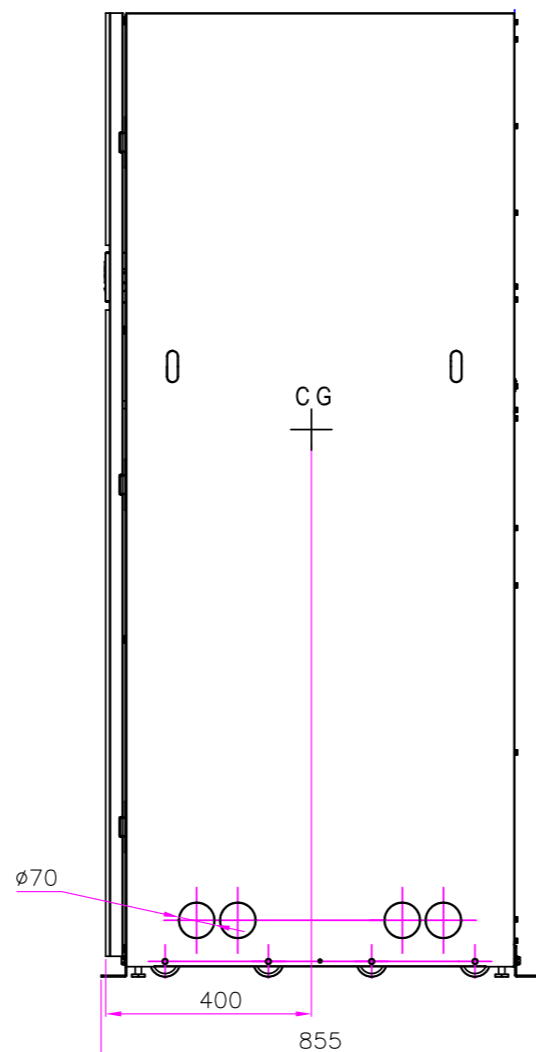
Product Specifications							
UPS Rating		Max Heat Dissipation at 100% Load	Cabinet Dimensions WXD _X H	Shipping Dimensions WXD _X H	Approx. Weight Installed	Approx. Weight Shipping	Floor Landing
kVA	kW	kW	mm	mm	kg	kg	kg/m ²
100	90	3,8	600 x 800 x 1800	900 x 1020 x 2040	283	351	590
120	108	4,8	600 x 800 x 1800	900 x 1020 x 2040	311	379	648



LEFT VIEW



FRONT VIEW



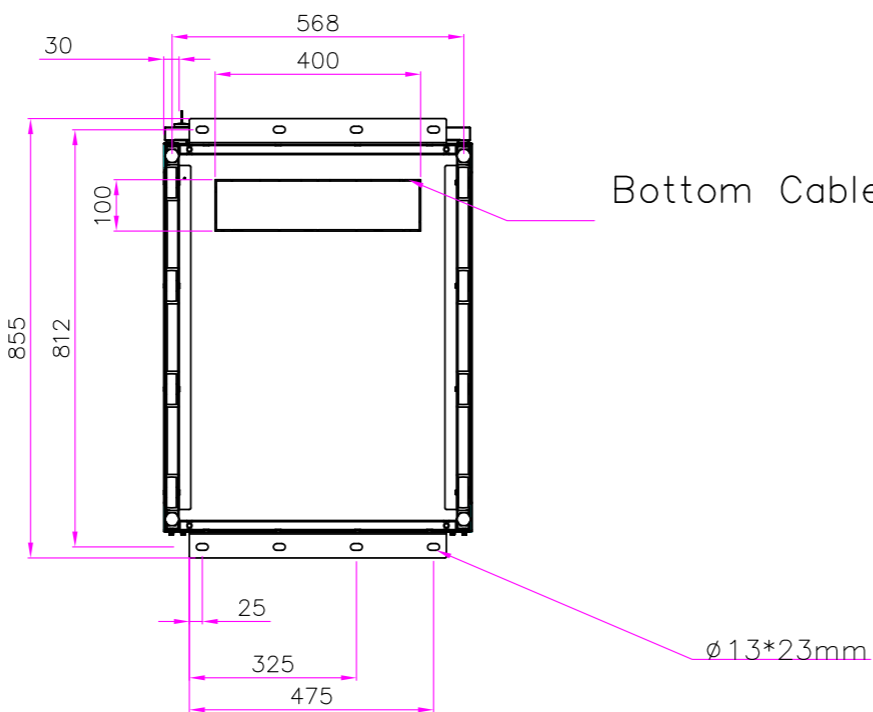
RIGHT VIEW

Notes:

1. The system must be installed in a temperature and humidity controlled indoor area free of conductive contaminants.
2. Continuous ambient temperature range, 0–40°C. Maximum relative humidity: 95% non-condensing
3. Minimum overhead clearance for ventilation above the UPS cabinet is 300mm.
4. Minimum 900mm clearance in front of the UPS cabinet is required for cooling air intake and servicing space.
5. Minimum 600mm of clearance required in the back of the UPS cabinet for normal system.
6. CG(Center of Gravity) dimensions are approximated values.
7. All dimensions are in millimeters.

KNOCK OUT HOLES FOR CABLE ENTRY

Bottom Cable Access

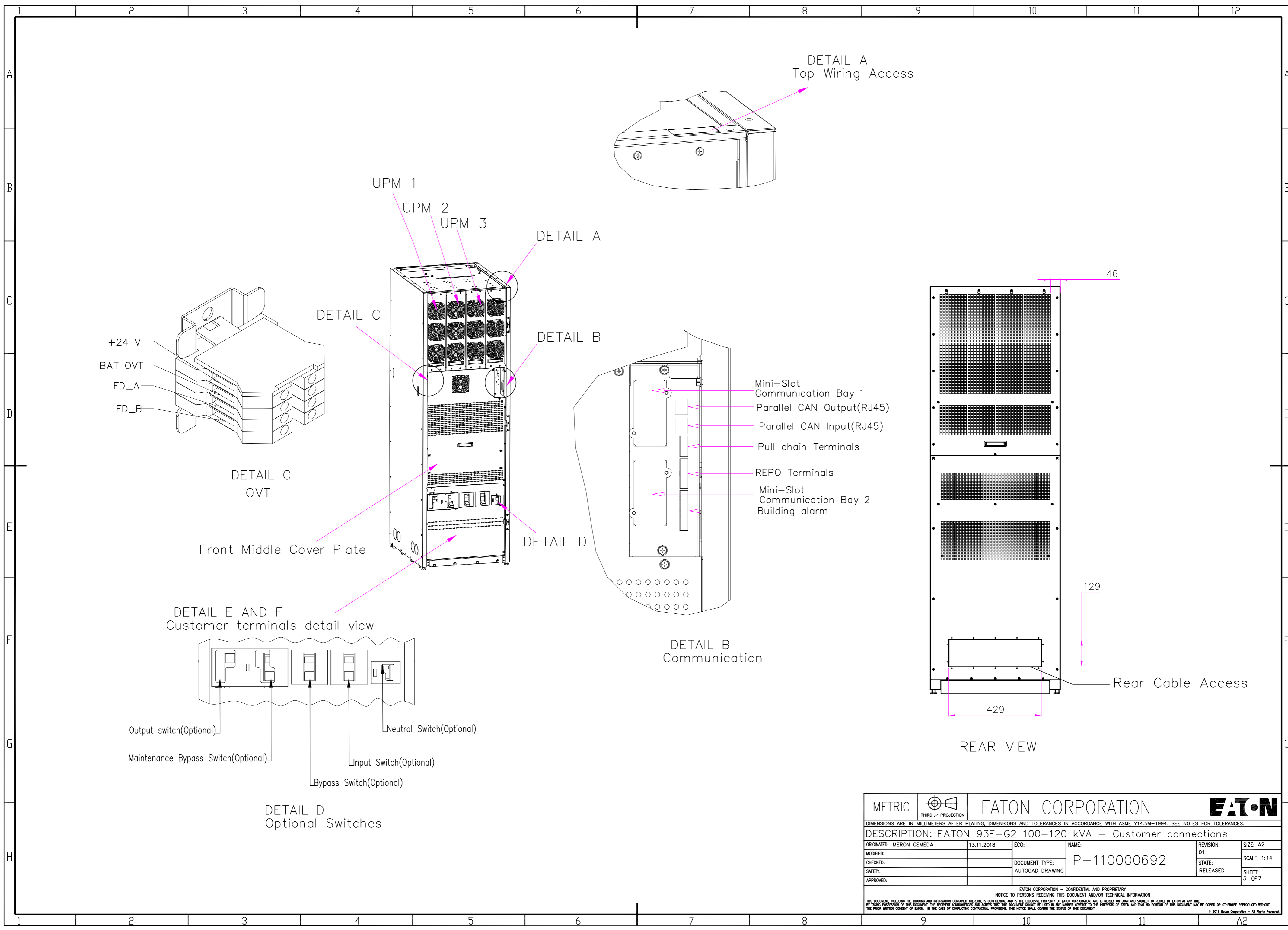


BOTTOM VIEW

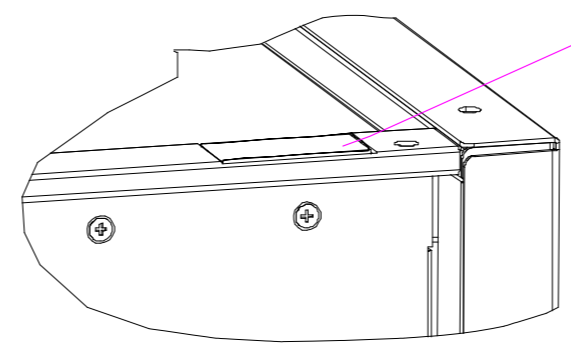
Cabinet Installation Clearances

From the top of cabinet	300 mm
From the front of cabinet	900 mm
From the back of cabinet	> 600 mm recommended
From the right side of cabinet	>50 mm recommended
From the left side of the cabinet	>50 mm recommended

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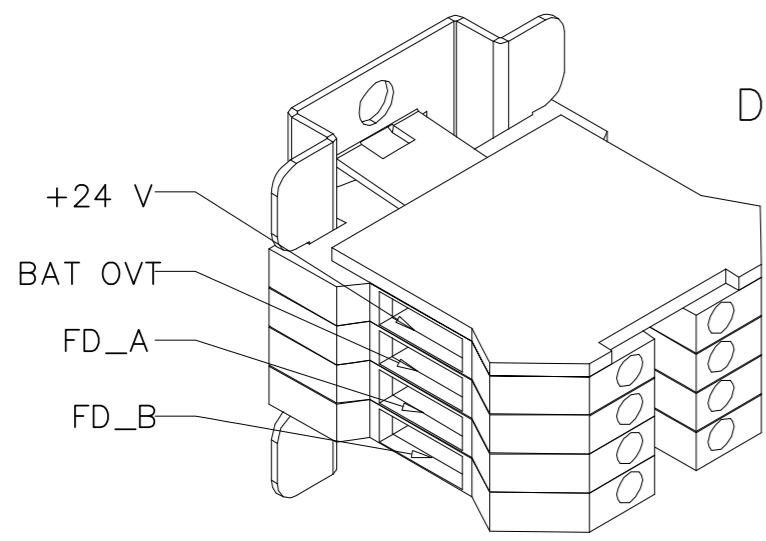
DETAIL A
Top Wiring Access



UPM 1
UPM 2
UPM 3

DETAIL A

DETAIL C

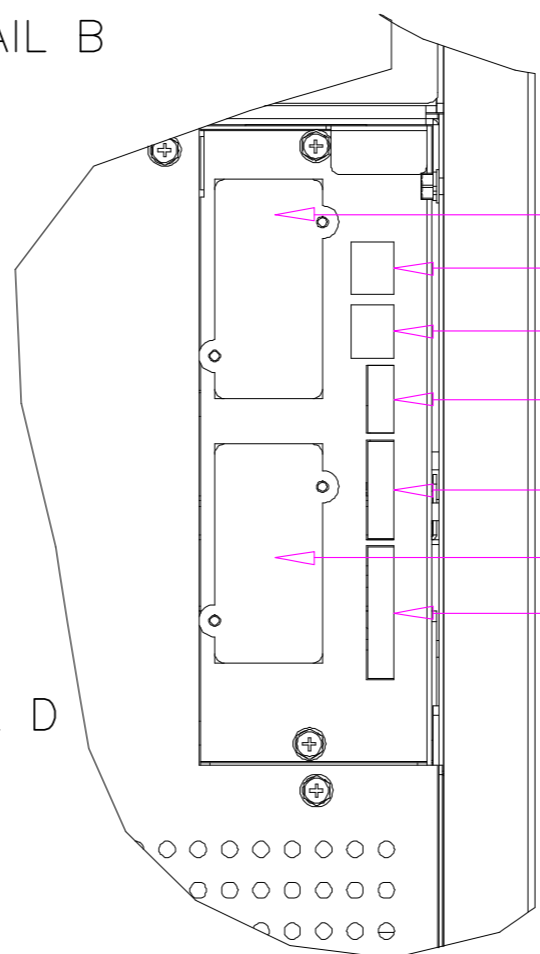


+24 V
BAT OVT
FD_A
FD_B

DETAIL C
OVT

Front Middle Cover Plate

DETAIL B

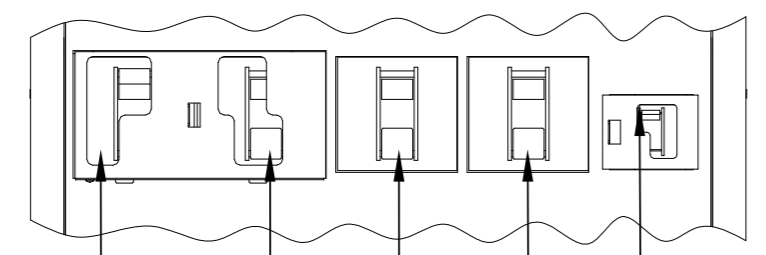


Mini-Slot
Communication Bay 1
Parallel CAN Output(RJ45)
Parallel CAN Input(RJ45)
Pull chain Terminals
REPO Terminals
Mini-Slot
Communication Bay 2
Building alarm

DETAIL B
Communication

DETAIL D

DETAIL E AND F
Customer terminals detail view



Output switch(Optional)
Maintenance Bypass Switch(Optional)
Neutral Switch(Optional)
Input Switch(Optional)
Bypass Switch(Optional)

DETAIL D
Optional Switches

46

129

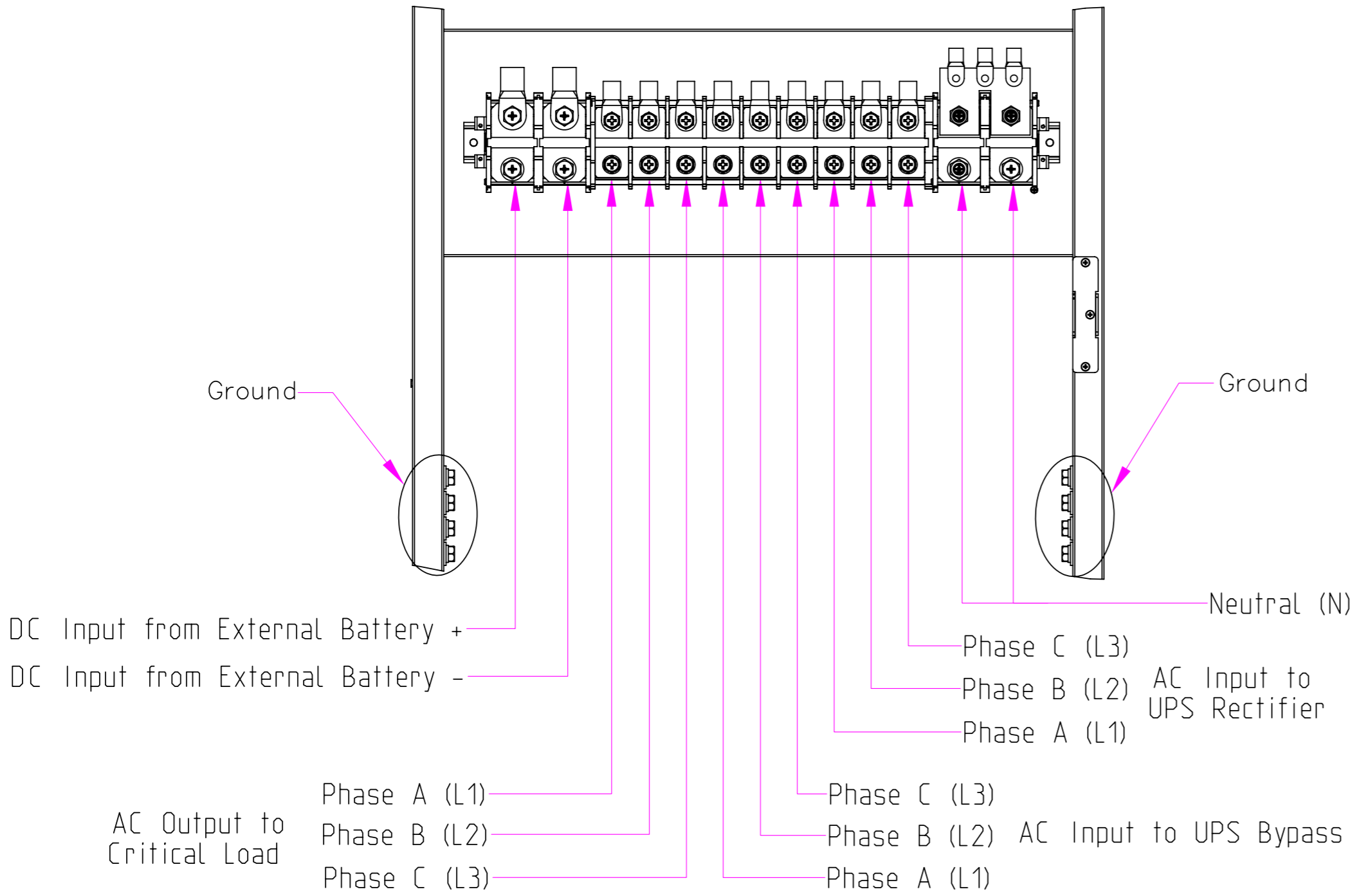
429

Rear Cable Access

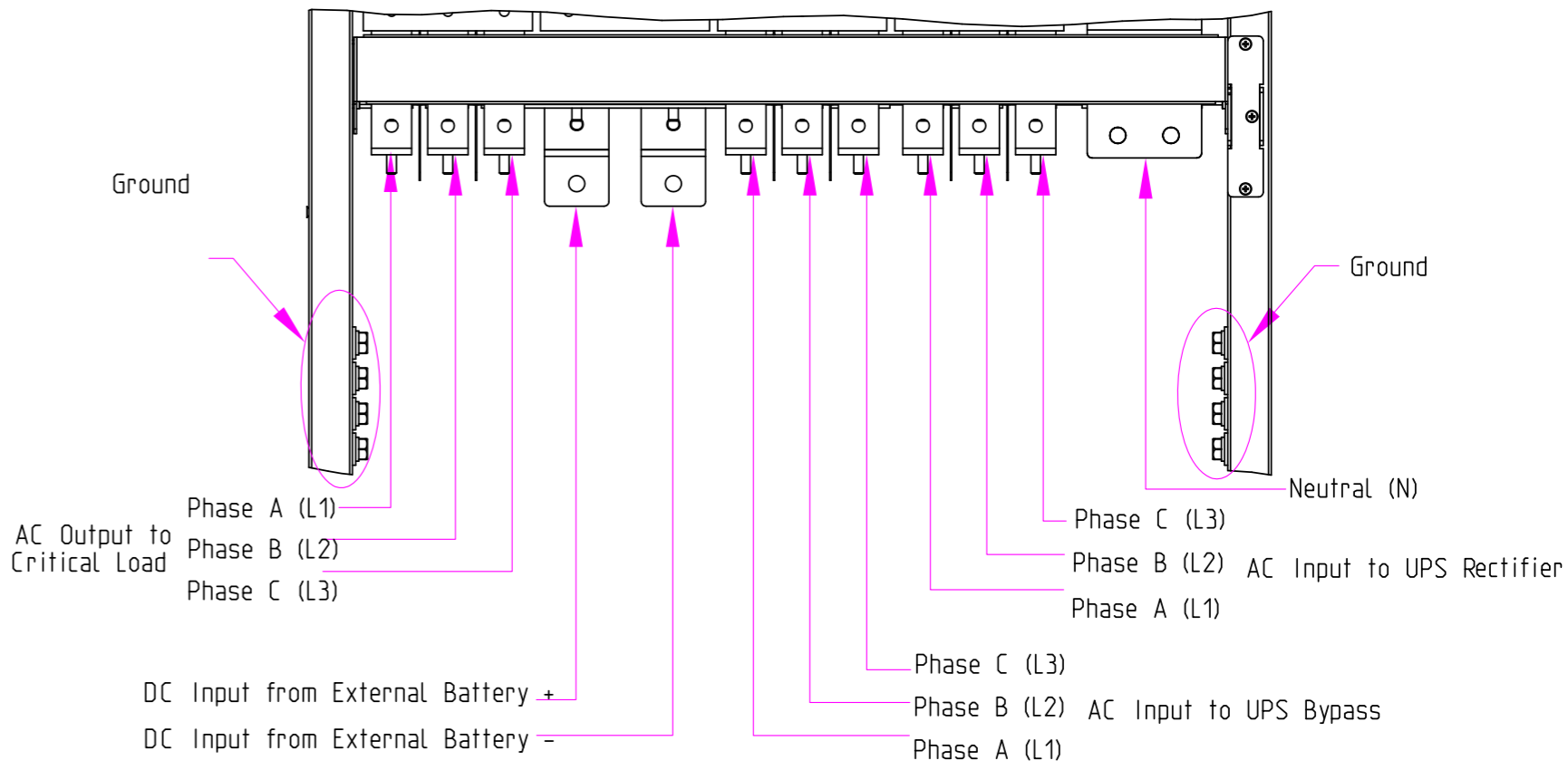
REAR VIEW

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CUSTOMER TERMINALS DETAIL VIEW



DETAIL E
Power terminal locations 100–120 kVA with MBS
(front view without the terminal cover plate)



DETAIL F

Power terminal locations 100–120 kVA with out MBS
(front view without the terminal cover plate)

METRIC		THIRD ANGLE PROJECTION		EATON CORPORATION		EATON	
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Note
* Note that the layout and alignment of the terminals is not the same in the UPS

93E-G2 UPS

- 1 PULL CHAIN +
- 2 PULL CHAIN -
- 3 CAN IN (RJ45)
- 4 CAN OUT (RJ45)
- 5 MINISLOT 1
- 6 MINISLOT 2

EXTERNAL PARALLEL CONNECTOR

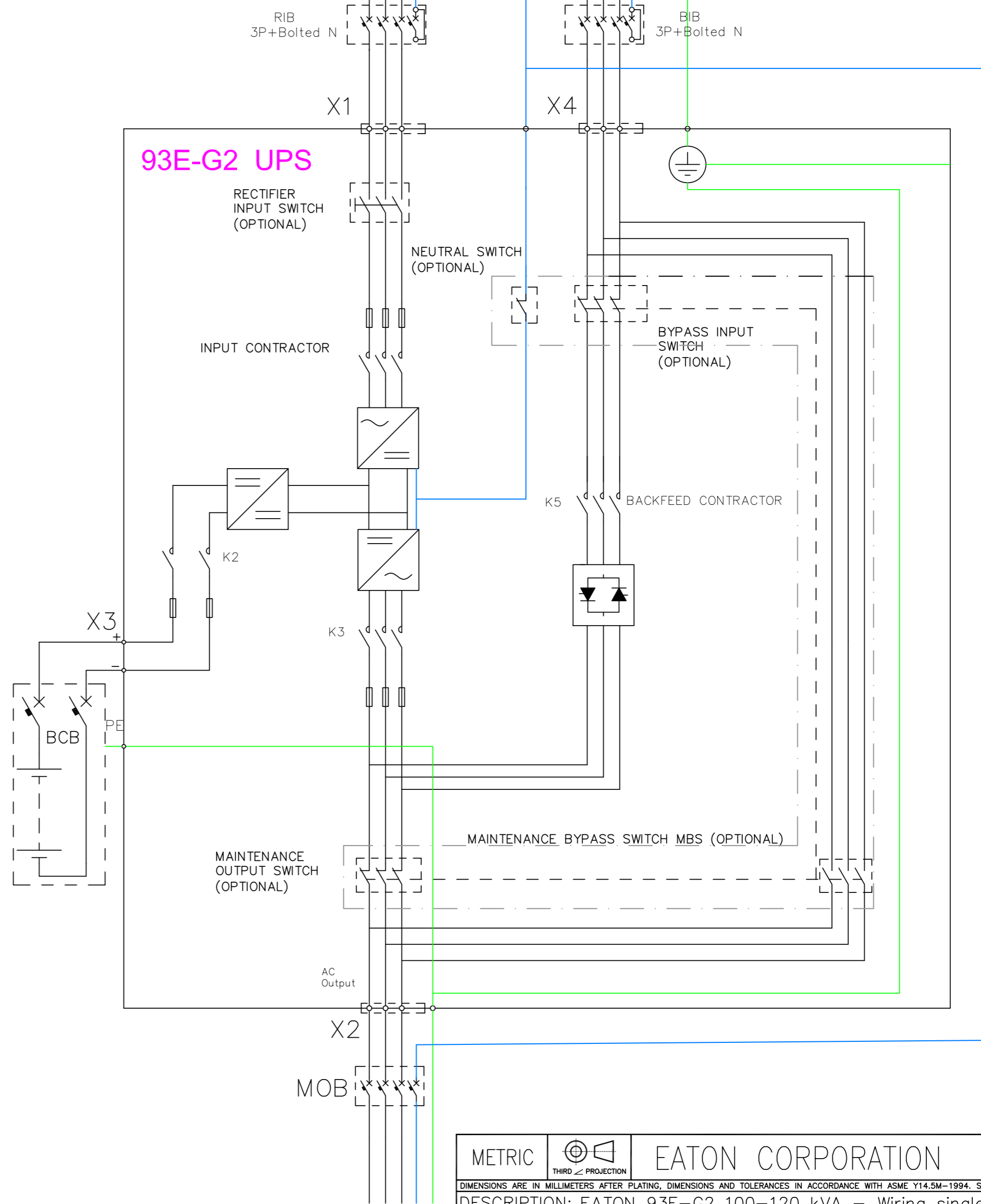
BATT SHUNT TRIP SIGNAL CONNECTIONS

- +24V Battery shunt trip
- ~ BAT OVT
- ∞ FD_A
- ↗ FD_B

SIGNAL INPUTS

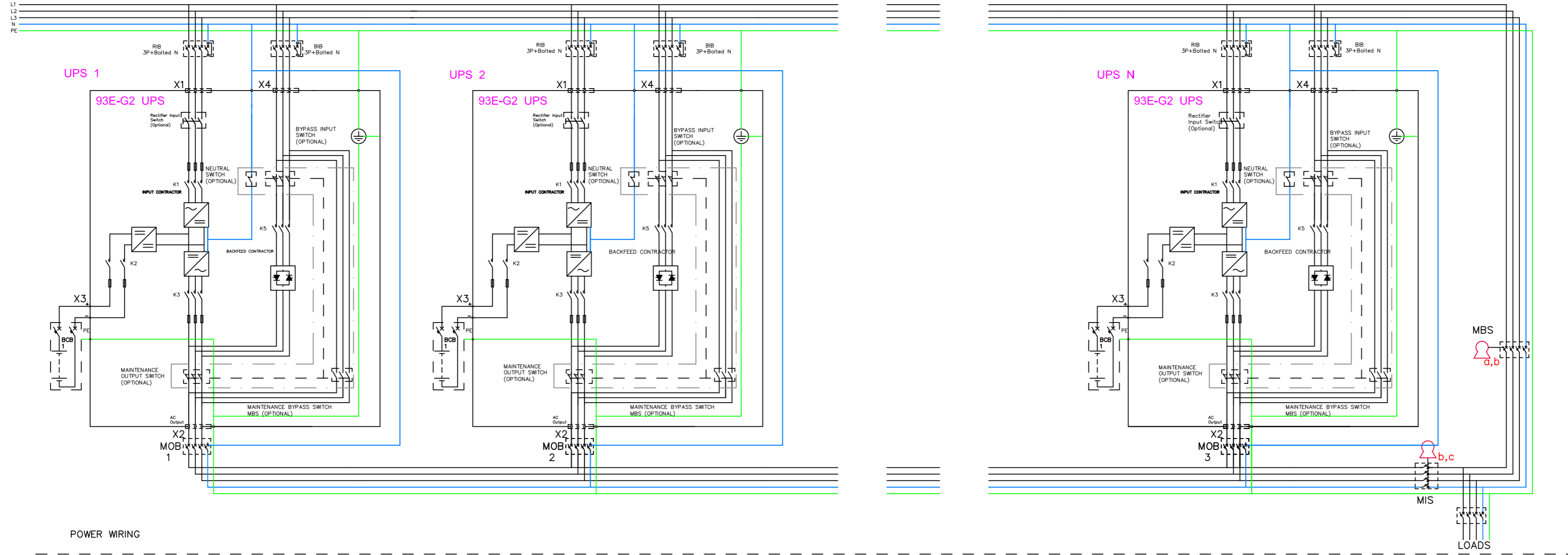
- 1 BA1 Signal input 1 +
- 2 BA1 Signal input 1 -
- 3 BA2 Signal input 2 +
- 4 BA2 Signal input 2 -
- 5 BA3 Signal input 3 +
- 6 BA3 Signal input 3 -

- #### EPO
- EPO_NC
 - ~ EPO_NC
 - ∞ EPO_NO
 - ↗ EPO_NO



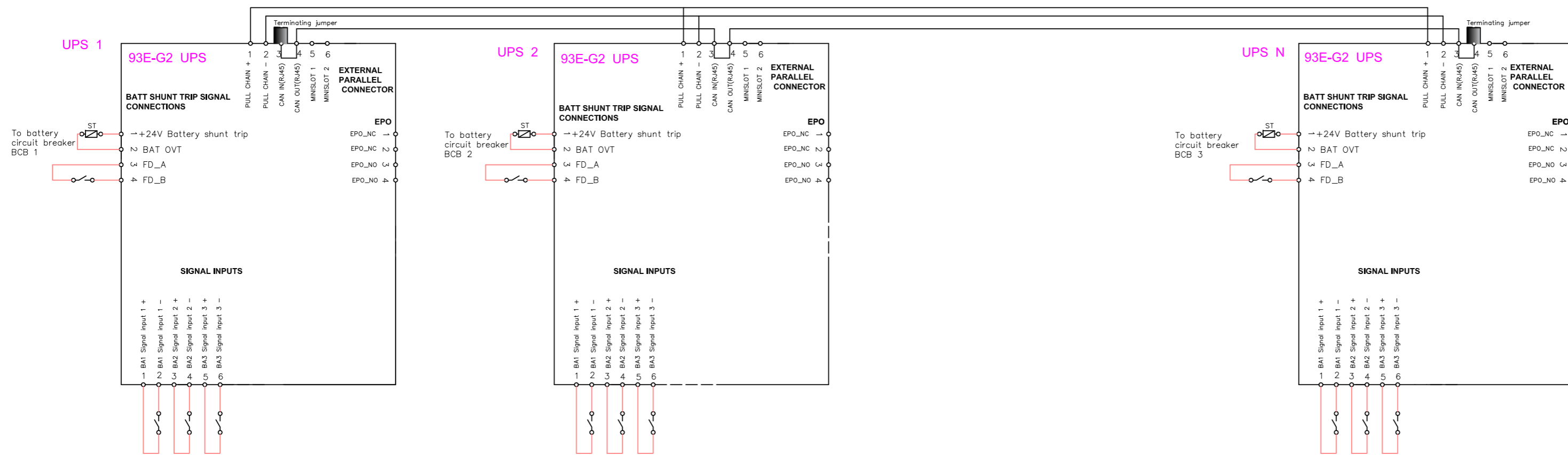
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Note
* Note that the length of all the power cables for a parallel system must be the same to have an even load share.



POWER WIRING

SIGNAL WIRING



- Mechanical bypass interlocking sequence
1. Place UPS system to bypass. On bypass status (K3) will energize Key A solenoid to release it
 2. Removing key A will switch on "force bypass" to the UPS system
 3. Place key A to MBS breaker and close breaker. Key B will be released.
 4. Aux contact of MBS will keep "force bypass" on UPS system
 5. Place key B to MIS breaker and open MIS to isolate UPS system from load. Key C will be released
 6. Place key C to it's dedicated keyhole to release "force bypass" command to allow UPS system testing

METRIC		EATON CORPORATION		EATON	
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Eaton 93E-Generation 2 100-200 kVA UPS Site Planning Data

Product Specifications													
UPS Rating		AC Input	3P+Bolted N Rectifier Input Breaker (RIB)		3P+Bolted N Bypass Input Breaker (BIB)	AC Output	4P Inverter AC output Breaker MOB		Battery Breaker (BCB) (Ratings at 36 blocks string length)			For Parallel Units Common Maintenance Bypass Switch (MBS)	
			Nominal Current at 380V	Maximum Current	Nominal Current at 380V		Output Current	Inverter Short Circuit Current	Rating	Battery Configuration (UPS Battery)		Trip Device (Shunt Trip)	Rating
kVA	kW	V	A	A	A	V	A	A / 400ms	VDC	Rated current [A]	Maximum current [A]	VDC	A
100	90	400	158	176	152	400	152	410	500	206	257	24	152 x N
120	108	400	189	207	182	400	182	410	500	247	309	24	182 x N

Notes:

1. Rectifier AC input current calculations: Nominal, 100% load with full charging;
2. Maximum AC input calculations: Rectifier current limit.
3. Inverter AC output current calculation: Nominal, 100% rated load.
4. The system must be installed on a level floor suitable for computer or electronic equipment.
5. The system must be installed on surface which is not combustible.
6. All wiring and installations must be in accordance with applicable National and Local Electric Regulations.
7. AC input to UPS: (3) phases, (1) neutral, (1) ground.
AC output to load: (3) phases, (1) neutral, (1) ground.
DC input from battery to UPS: (1) positive, (1) negative, (1) ground.
8. All breakers should be adjusted according to the specified Ampere values to protect the UPS and installation.
9. For UPS installation that utilizes single feed input, the input breaker should be configured according to the rated rectifier input current.
10. Specifications are subject to change.

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