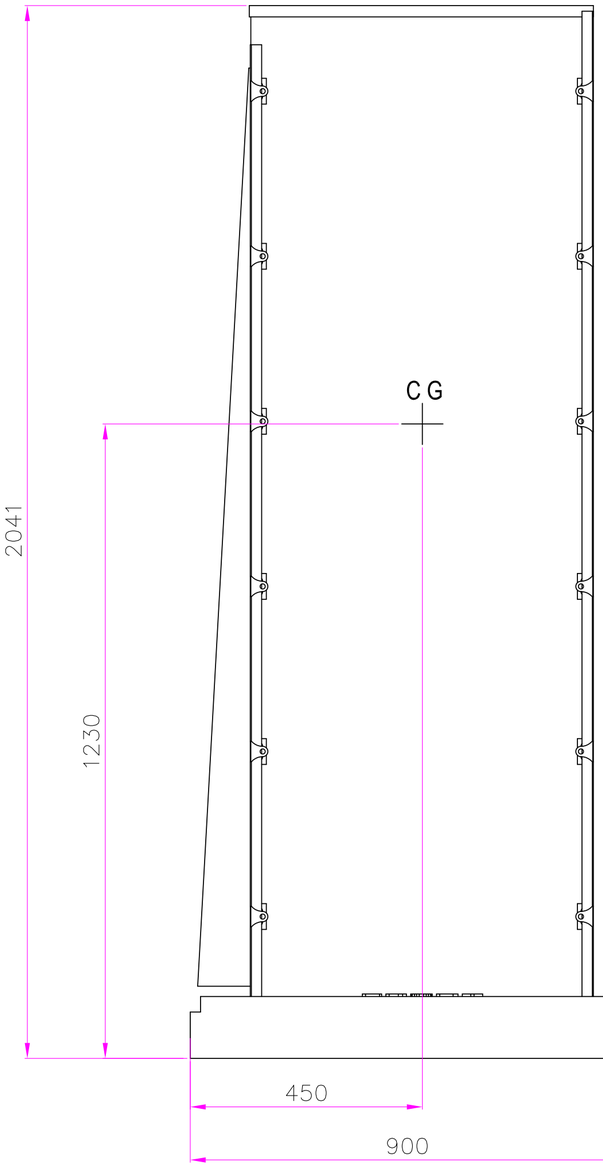
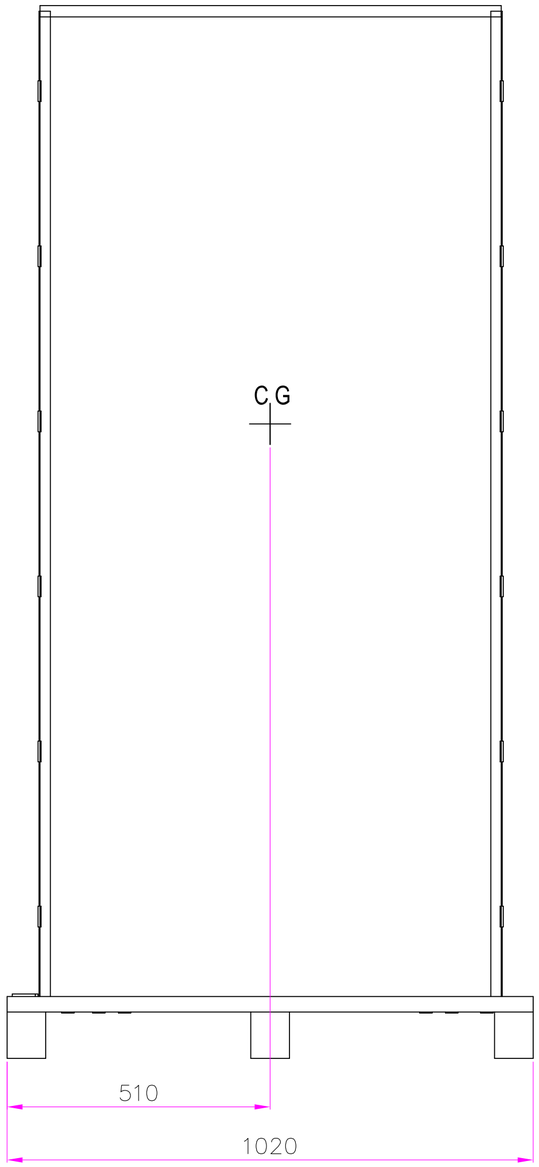
Powering Business Worldwide

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

METRIC	THIRD ANGLE PROJECTION	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: P–110000692	REVISION: 01	SIZE: A2
MODIFIED:					SCALE: N/A
CHECKED:		DOCUMENT TYPE: AUTOCAD DRAWING		STATE: RELEASED	
SAFETY:					SHEET: OF N/A
APPROVED:					



FRONT VIEW



SIDE VIEW

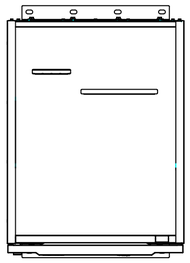
Center of Gravity dimensions – Eaton 93E–G2 100–120 kVA

Notes:

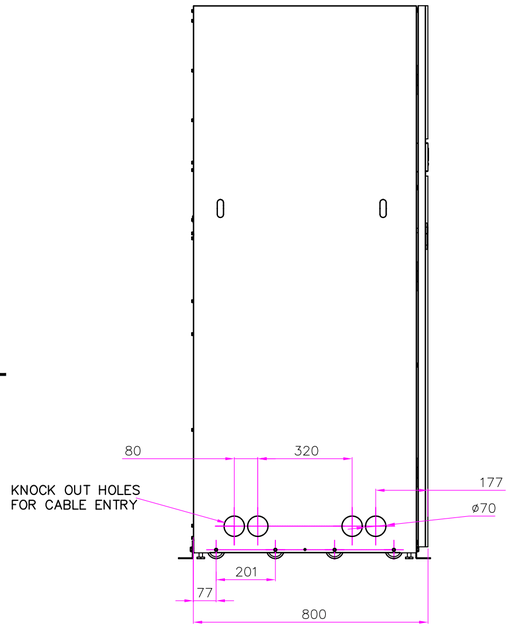
1. Center of gravity dimensions are approximated values with pallet and packaging.
2. All dimensions are in millimeters

METRIC	THIRD ANGLE PROJECTION	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 – Center of Gravity					
ORIGINATED: MERON GEMEDA	13.11.2018	ECO:	NAME: P–110000692	REVISION: 01	SIZE: A2
MODIFIED:					SCALE: 1:8
CHECKED:		DOCUMENT TYPE: AUTOCAD DRAWING		STATE: RELEASED	
SAFETY:					SHEET: 1 OF 7
APPROVED:					

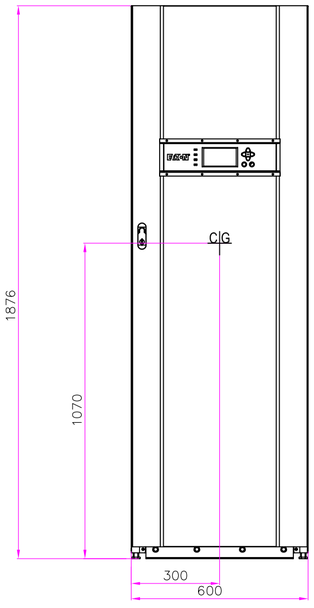
Product Specifications							
UPS Rating		Max Heat Dissipation at 100% Load	Cabinet Dimensions WXDXH	Shipping Dimensions WXDXH	Approx. Weight Installed	Approx. Weight Shipping	Floor Landing
kVA	kW	kW	mm	mm	kg	kg	kg/m²
100	90	3,8	600 x 800 x 1800	900 x 1020 x 2040	283	351	590
120	108	4,8	600 x 800 x 1800	900 x 1020 x 2040	311	379	648



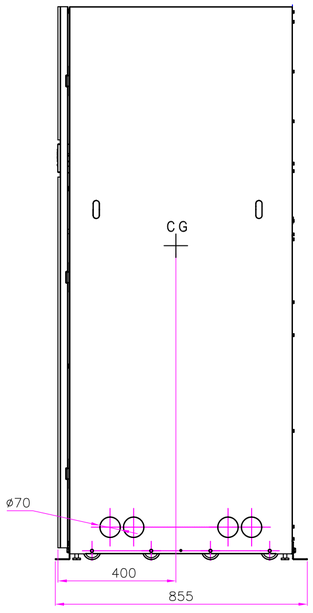
TOP VIEW



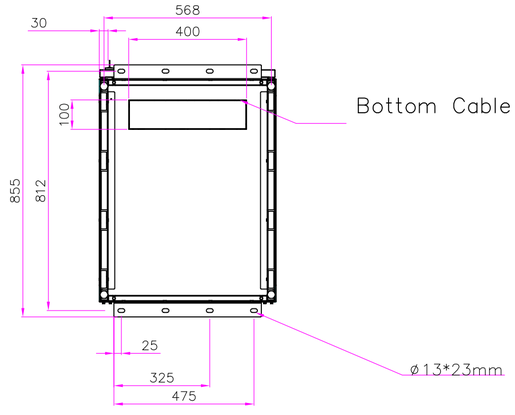
LEFT VIEW



FRONT VIEW



RIGHT VIEW



BOTTOM 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.

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

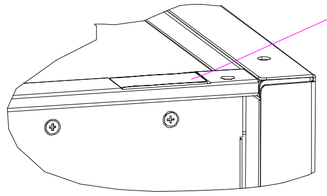
METRIC | THIRD ∠ PROJECTION | EATON CORPORATION

DIMENSIONS ARE IN MILLIMETERS AFTER PLATING, DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M–1994. SEE NOTES FOR TOLERANCES.

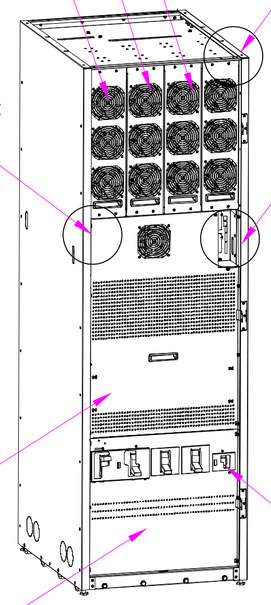
DESCRIPTION: EATON 93E–G2 100–120 kVA– Dimensional drawing

ORIGINATED: MERON GEMEDA	13.11.2018	ECO:	NAME: P–110000692	REVISION: 01	SIZE: A2
MODIFIED:					
CHECKED:		DOCUMENT TYPE: AUTOCAD DRAWING		STATE: RELEASED	SCALE: 1:14
SAFETY:					SHEET: 2 OF 7
APPROVED:					

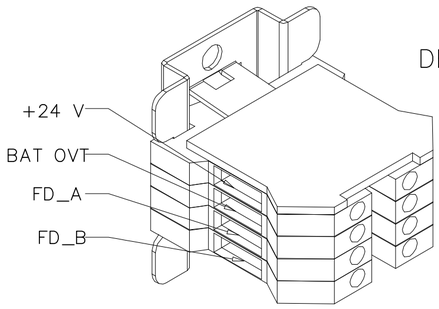
DETAIL A
Top Wiring Access



UPM 1
UPM 2
UPM 3
DETAIL A
DETAIL C
DETAIL B

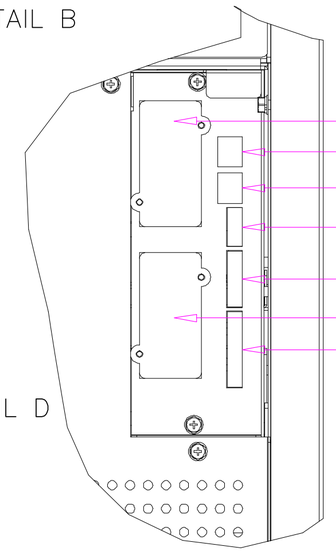


DETAIL C
OVT

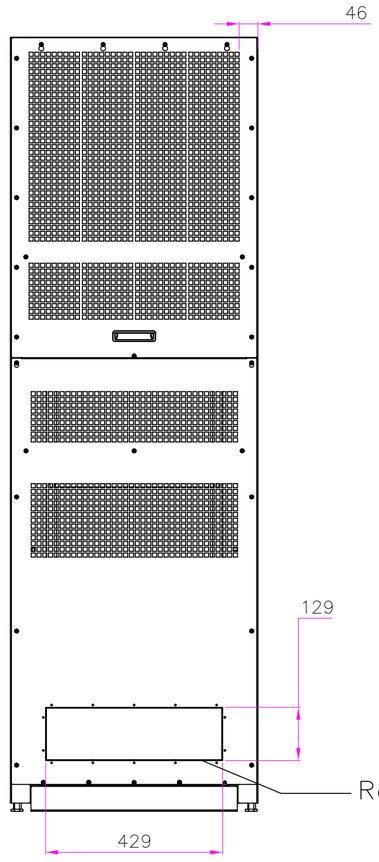


Front Middle Cover Plate

DETAIL D

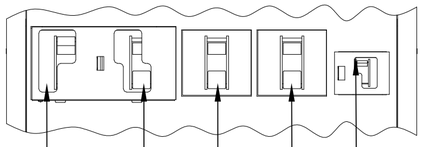


DETAIL B
Communication



REAR VIEW

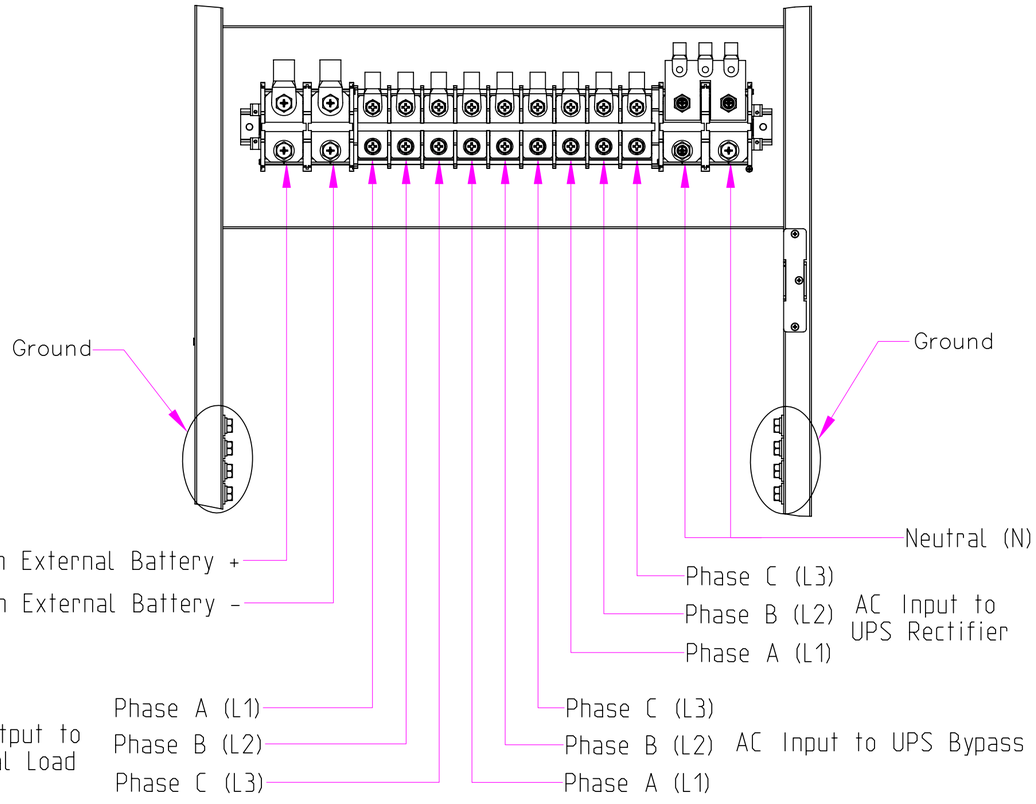
DETAIL E AND F
Customer terminals detail view



DETAIL D
Optional Switches

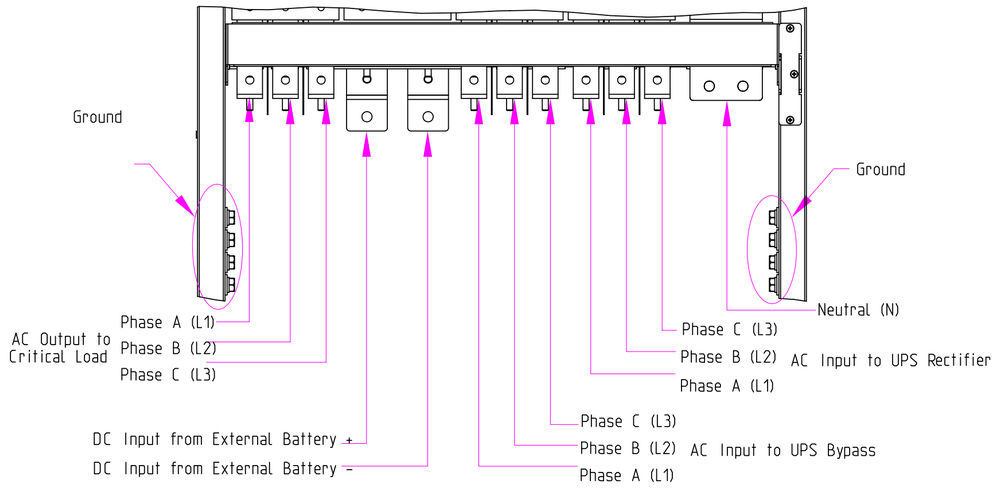
METRIC	THIRD ANGLE PROJECTION	EATON CORPORATION		EATON
DIMENSIONS ARE IN MILLIMETERS AFTER PLATING, DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M–1994. SEE NOTES FOR TOLERANCES.				
DESCRIPTION: EATON 93E–G2 100–120 kVA – Customer connections				
ORIGINATED: MERON GEMEDA	13.11.2018	ECO:	NAME: P–110000692	REVISION: 01
MODIFIED:				SIZE: A2
CHECKED:		DOCUMENT TYPE: AUTOCAD DRAWING		SCALE: 1:14
SAFETY:			STATE: RELEASED	SHEET: 3 OF 7
APPROVED:				

CUSTOMER TERMINALS DETAIL VIEW



DETAIL E

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

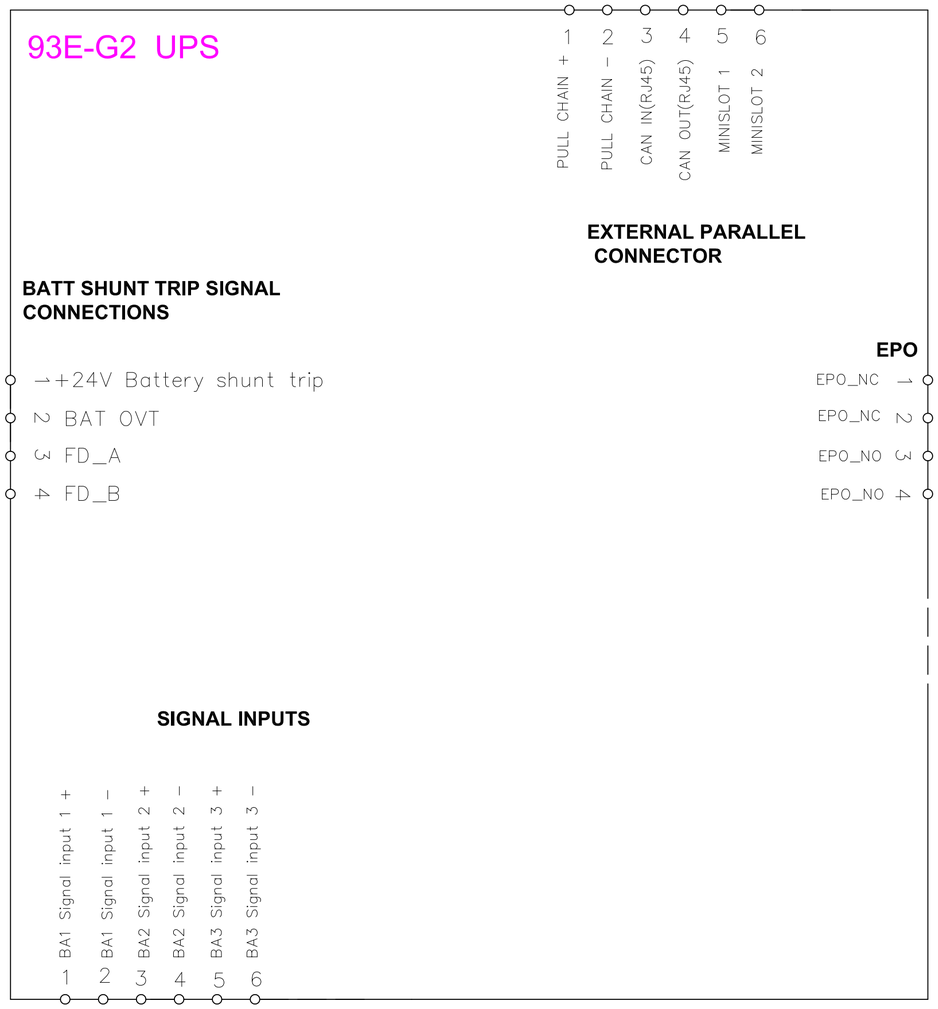


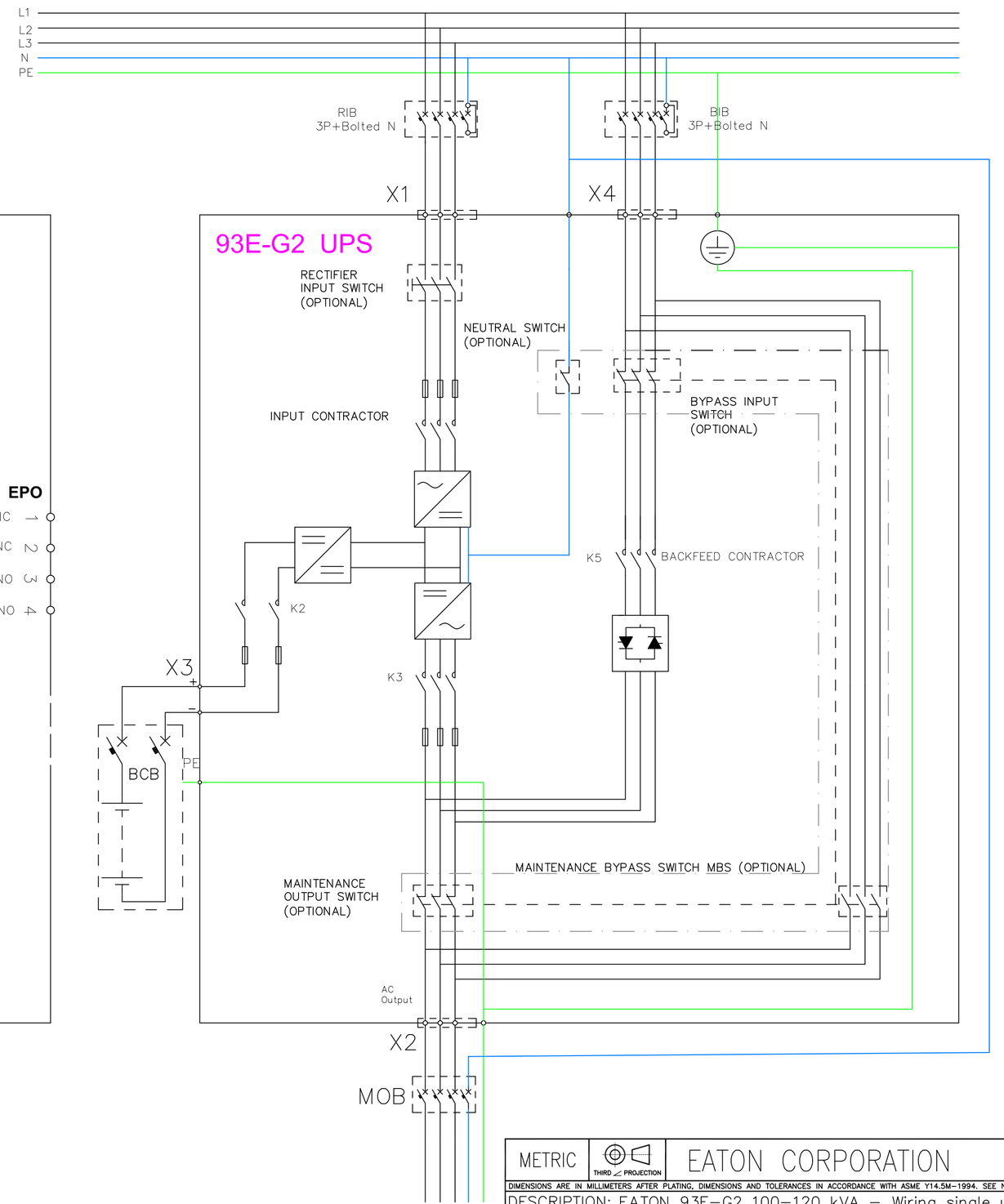
DETAIL F

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

METRIC	THIRD ∠ PROJECTION	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 – Customer terminals detail					
ORIGINATED: MERON GEMEDA	13.11.2018	ECO:	NAME: P–110000692	REVISION: 01	SIZE: A2
MODIFIED:					SCALE: 1:6
CHECKED:		DOCUMENT TYPE: AUTOCAD DRAWING		STATE: RELEASED	
SAFETY:					SHEET: 3 OF 7
APPROVED:					

Note
* Note that the layout and alignment of the terminals is not the same in the UPS

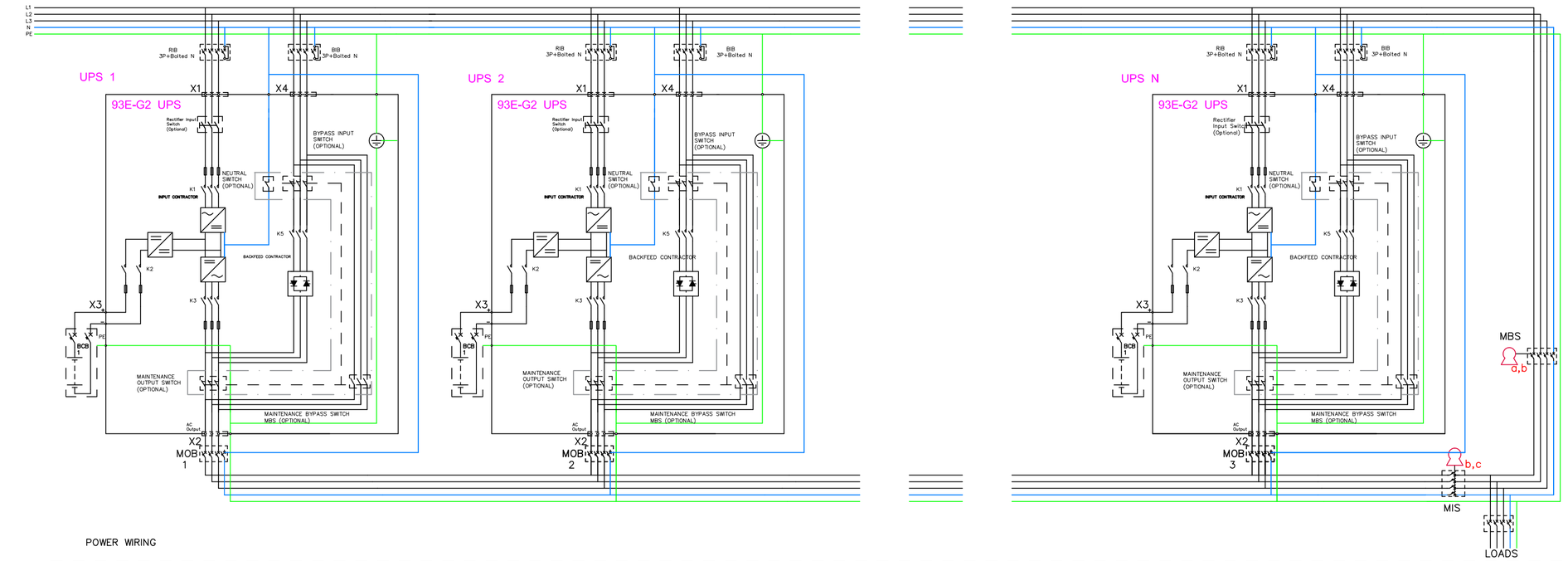




METRIC	THIRD ANGLE PROJECTION	EATON CORPORATION			
DIMENSIONS ARE IN MILLIMETERS AFTER PLATING, DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M–1994. SEE NOTES FOR TOLERANCES.					
DESCRIPTION: EATON 93E–G2 100–120 kVA – Wiring single unit					
ORIGINATED: MERON GEMEDA	13.11.2018	ECO:	NAME:	REVISION: 01	SIZE: A2
MODIFIED:			P–110000692		SCALE: N/A
CHECKED:		DOCUMENT TYPE: AUTOCAD DRAWING		STATE: RELEASED	
SAFETY:					SHEET: 5 OF 7
APPROVED:					

Note

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



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	THIRD ANGLE PROJECTION	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 – Wiring parallel units					
ORIGINATED: MERON GEMEDA	13.11.2018	ECO:	NAME: P–110000692	REVISION: 01	SIZE: A2
MODIFIED:					
CHECKED:		DOCUMENT TYPE: AUTOCAD DRAWING		STATE: RELEASED	SCALE: N/A
SAFETY:					SHEET: 6 OF 7
APPROVED:					

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.

METRIC	THIRD ANGLE PROJECTION	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 – Specifications				
ORIGINATED: MERON GEMEDA	13.11.2018	ECO:	NAME: P–110000692	REVISION: 01
MODIFIED:				SIZE: A2
CHECKED:		DOCUMENT TYPE: AUTOCAD DRAWING		SCALE: N/A
SAFETY:			STATE: RELEASED	SHEET: 7 OF 7
APPROVED:				