

# NO-BREAK

# INSCHAKELLEN

# EXTERNE BYPASS

(onderhoudschakelaar No-Break)

## **Schakelen naar onderhoud:**

De externe bypass schakelaar Q2 (*verdeler E001*) mag slechts bediend worden nadat **EERST** de interne bypass van de No-Break is ingeschakeld.

Raadpleeg hiertoe de handleiding in de No-Break kast.

Als de externe bypass IN staat direct schakelaar Q3 (*verdeler E002*) UIT zetten, daarna kan de No-Break desgewenst spanningsloos gemaakt worden door respectievelijk de schakelaars F20 en F21 op de laagspanningsverdeler (*verdeler E001*) uit te schakelen EN de batterijschakelaar in de strengenkast in de accuruimte.

## **Terug naar normaal bedrijf:**

Voor het weer in gebruik nemen van de No-Break eerst de batterijschakelaar inschakelen en daarna F20 en F21 (*verdeler E001*).

**Controleer of de interne by-pass van de No-Break IN staat** en vervolgens kan Q3 (*verdeler E002*) ingeschakeld worden.

Check de display op de No-Break voor eventuele foutmeldingen en controleer of de No-Break in de correcte bedrijfsmodus staat.

Daarna kan de externe bypass Q2 (*verdeler E001*) uitgeschakeld worden en is normaal bedrijf weer bereikt.

**Indien de instructies niet nauwkeurig worden opgevolgd kan grote schade ontstaan.**

**Er mag enkel geschakeld worden door een daartoe bevoegd persoon. Indien er geschakeld moet worden gedurende opengestelde Verdiepte liggen dan eerst overleg voeren met de WegVerkeersLeider Provincie Utrecht.**



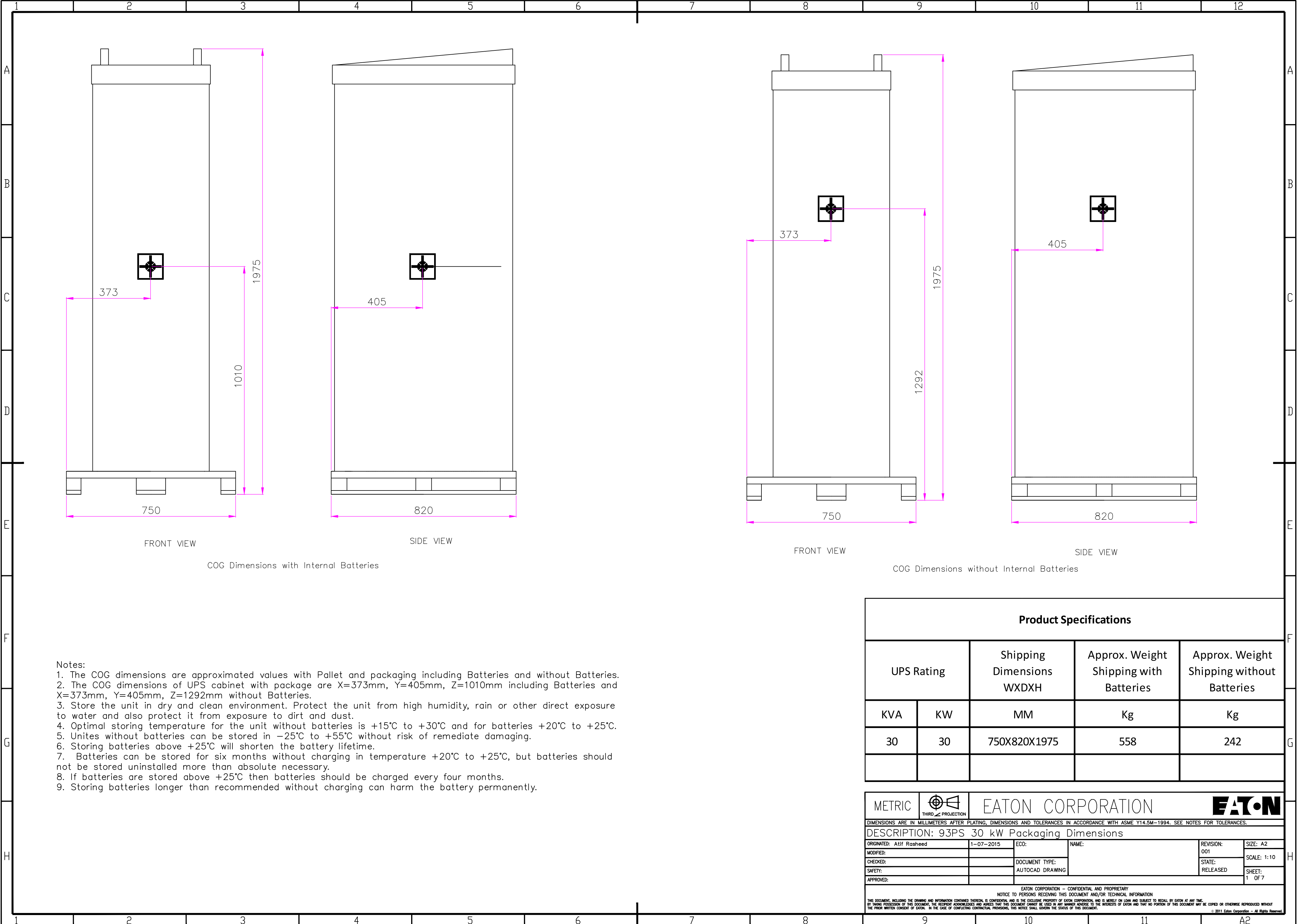
SITE PLANNING DATA 93PS 30 kW

Page 1	Packaging Dimensions
Page 2	Dimensional Drawings
Page 3	COG and Clearance Dimensions
Page 4	Customer Connections
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: 93PS 30 kW							
ORIGINATED: ATIF RASHEED		1-07-2015		ECO:		NAME:	
MODIFIED:						REVISION: 001	
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FRONT VIEW

SIDE VIEW

COG Dimensions with Internal Batteries



FRONT VIEW

SIDE VIEW

COG Dimensions without Internal Batteries

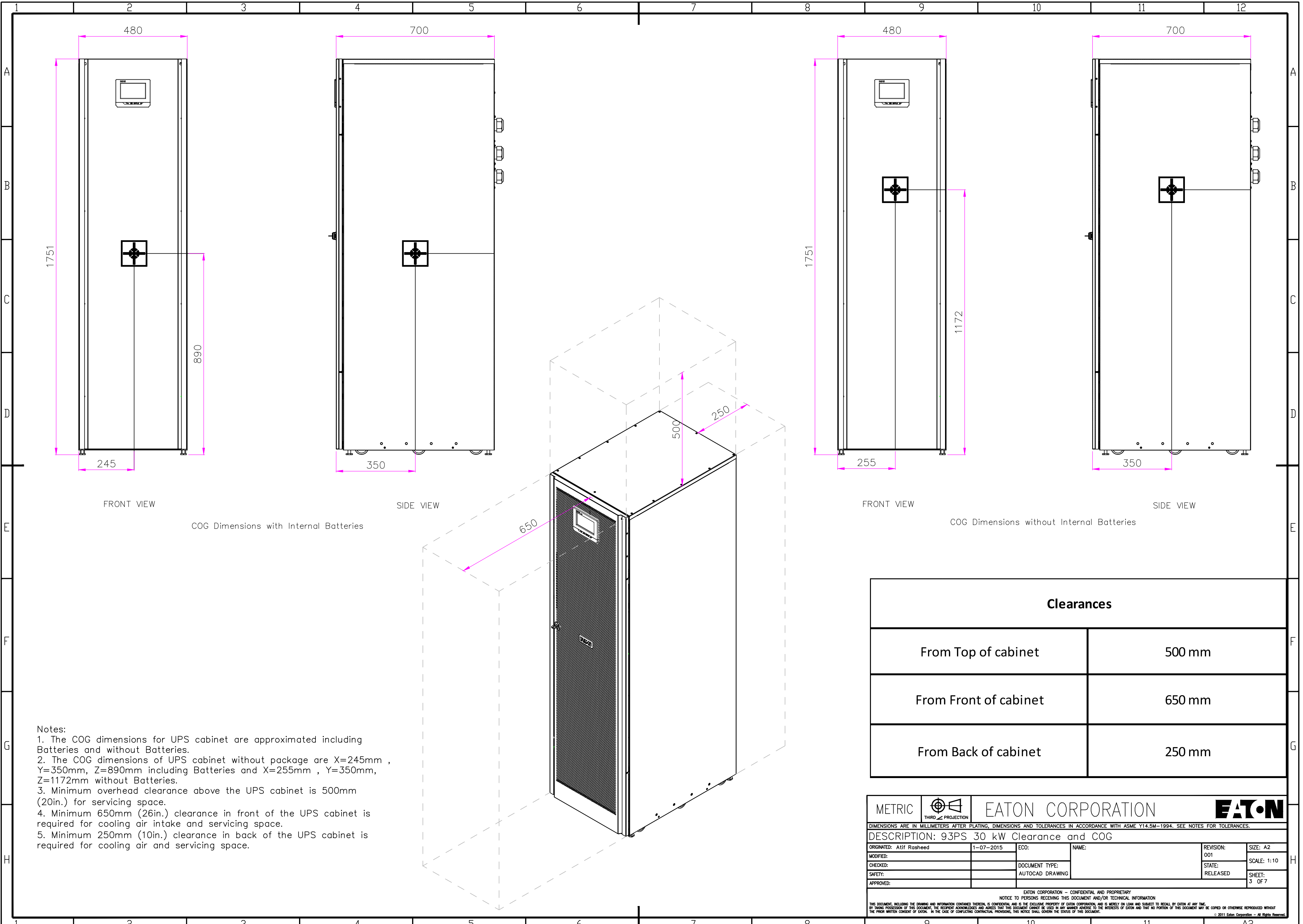
- Notes:
1. The COG dimensions are approximated values with Pallet and packaging including Batteries and without Batteries.
  2. The COG dimensions of UPS cabinet with package are X=373mm, Y=405mm, Z=1010mm including Batteries and X=373mm, Y=405mm, Z=1292mm without Batteries.
  3. Store the unit in dry and clean environment. Protect the unit from high humidity, rain or other direct exposure to water and also protect it from exposure to dirt and dust.
  4. Optimal storing temperature for the unit without batteries is +15°C to +30°C and for batteries +20°C to +25°C.
  5. Unites without batteries can be stored in -25°C to +55°C without risk of remediate damaging.
  6. Storing batteries above +25°C will shorten the battery lifetime.
  7. Batteries can be stored for six months without charging in temperature +20°C to +25°C, but batteries should not be stored uninstalled more than absolute necessary.
  8. If batteries are stored above +25°C then batteries should be charged every four months.
  9. Storing batteries longer than recommended without charging can harm the battery permanently.

Product Specifications				
UPS Rating		Shipping Dimensions WXDXH	Approx. Weight Shipping with Batteries	Approx. Weight Shipping without Batteries
KVA	KW	MM	Kg	Kg
30	30	750X820X1975	558	242

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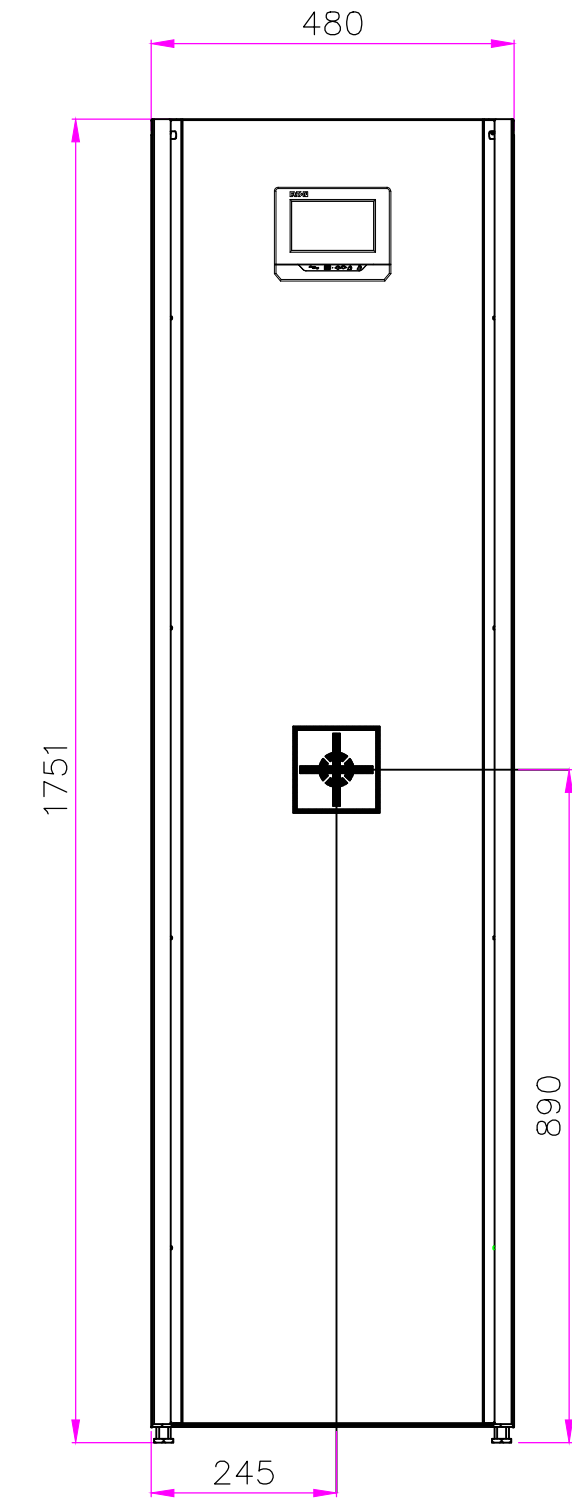






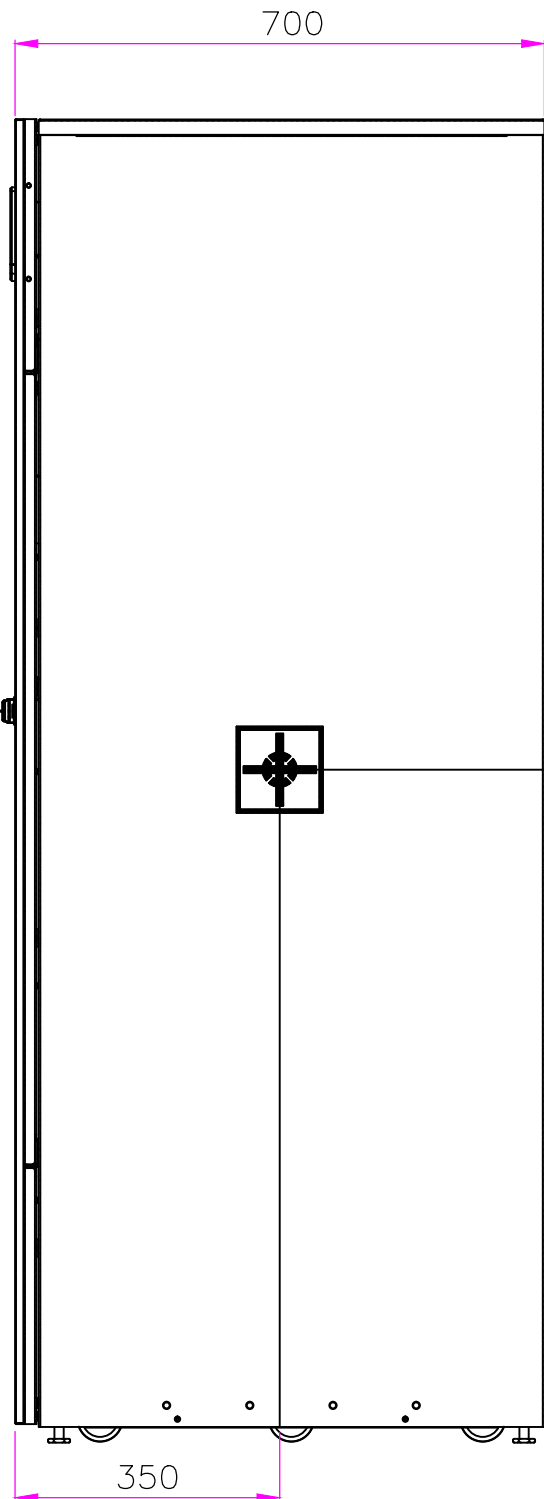
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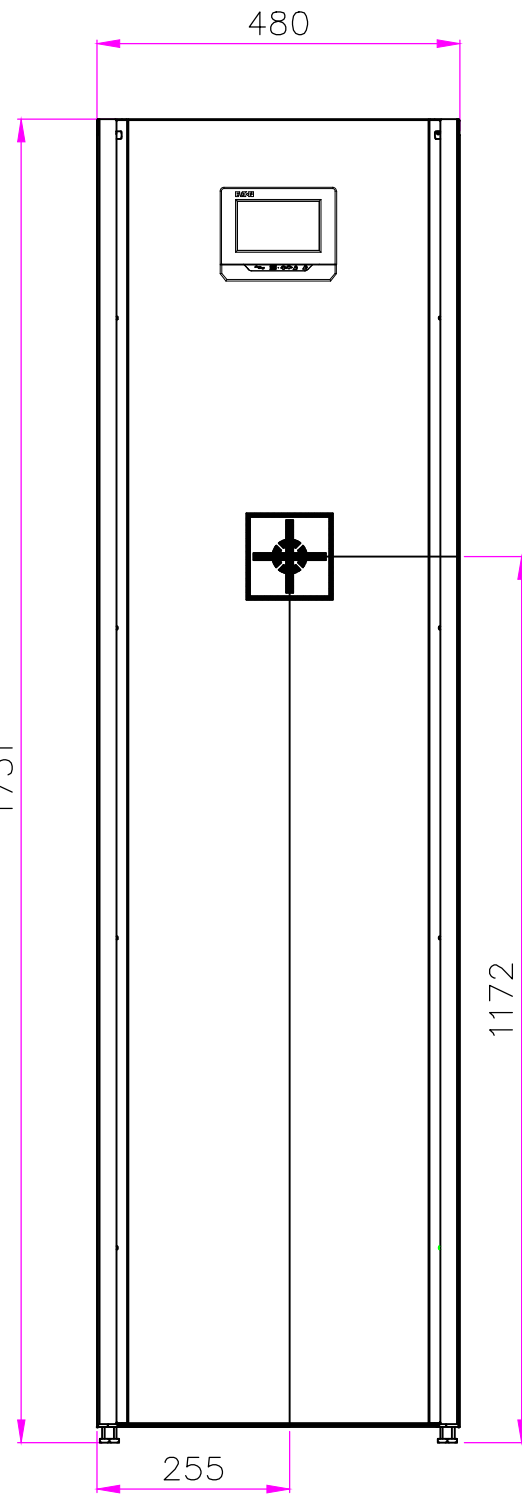


FRONT VIEW

COG Dimensions with Internal Batteries

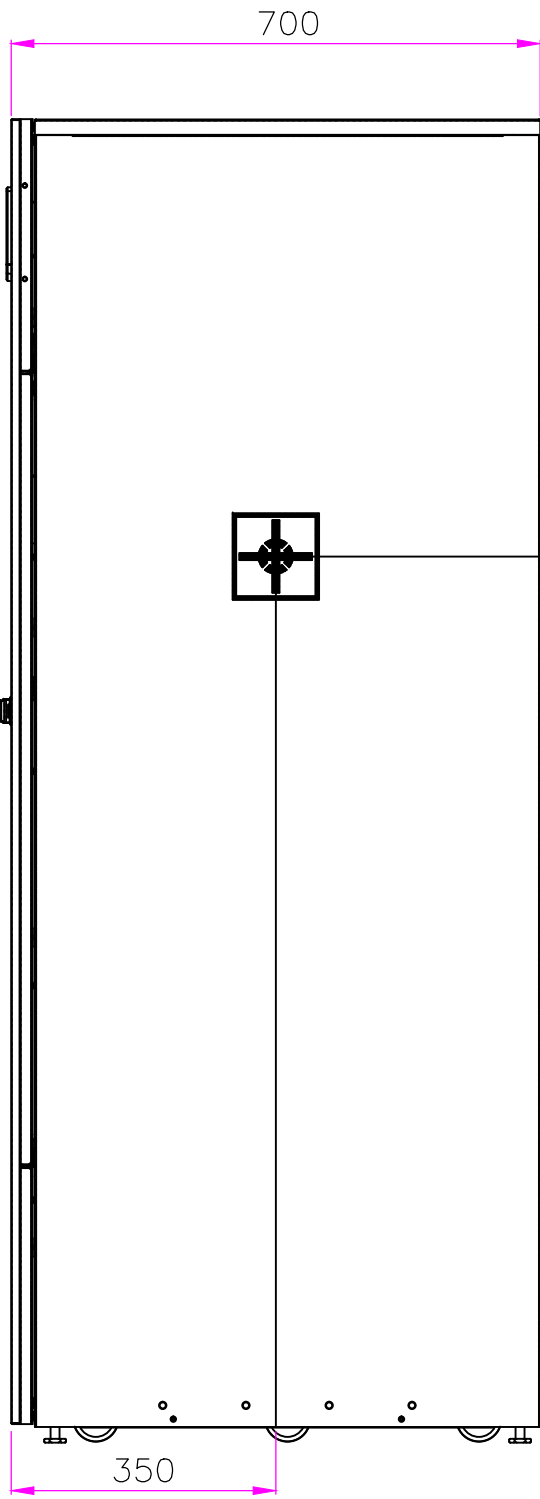


SIDE VIEW



FRONT VIEW

COG Dimensions without Internal Batteries

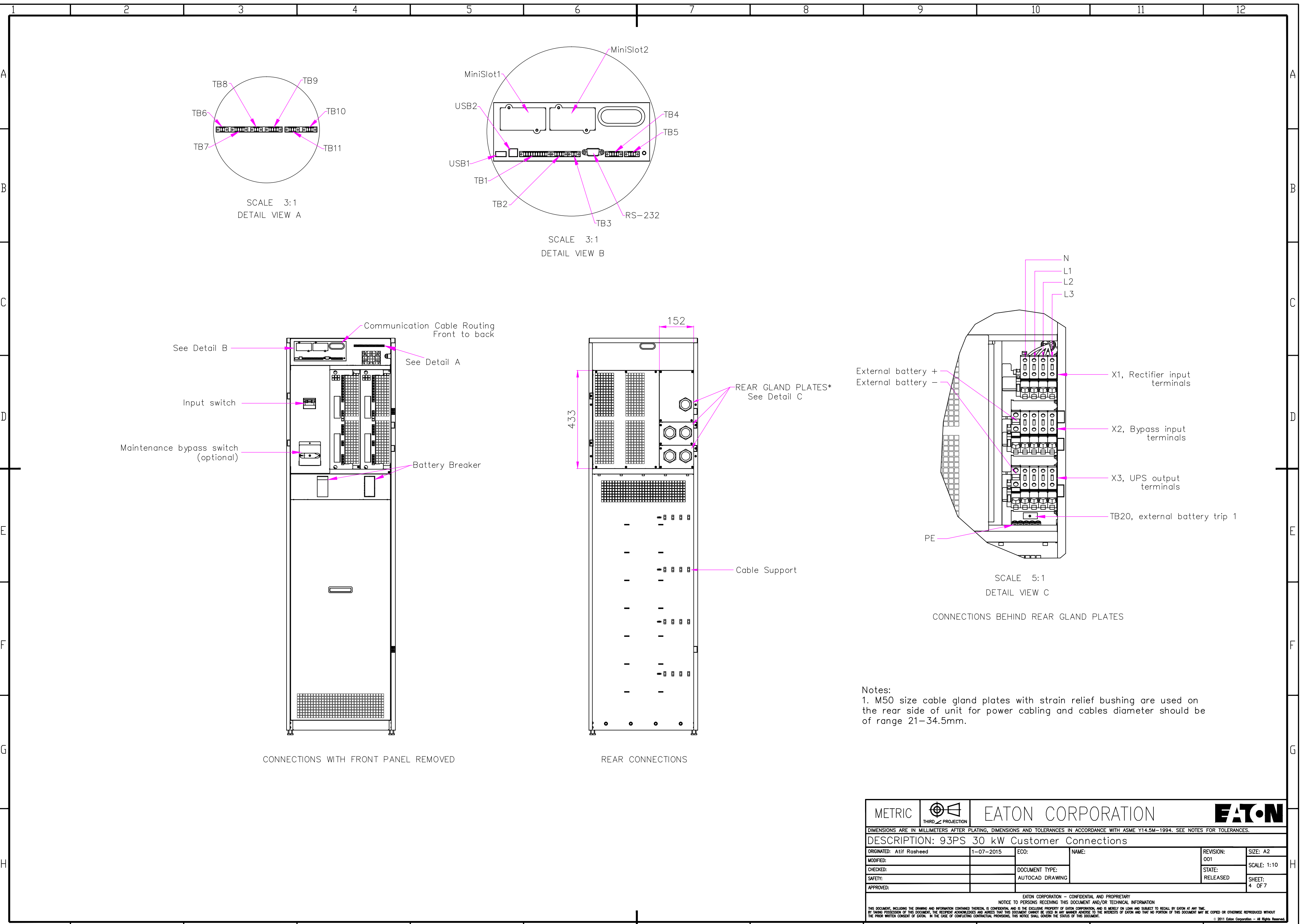


SIDE VIEW



- Notes:
1. The COG dimensions for UPS cabinet are approximated including Batteries and without Batteries.
  2. The COG dimensions of UPS cabinet without package are X=245mm , Y=350mm, Z=890mm including Batteries and X=255mm , Y=350mm, Z=1172mm without Batteries.
  3. Minimum overhead clearance above the UPS cabinet is 500mm (20in.) for servicing space.
  4. Minimum 650mm (26in.) clearance in front of the UPS cabinet is required for cooling air intake and servicing space.
  5. Minimum 250mm (10in.) clearance in back of the UPS cabinet is required for cooling air and servicing space.

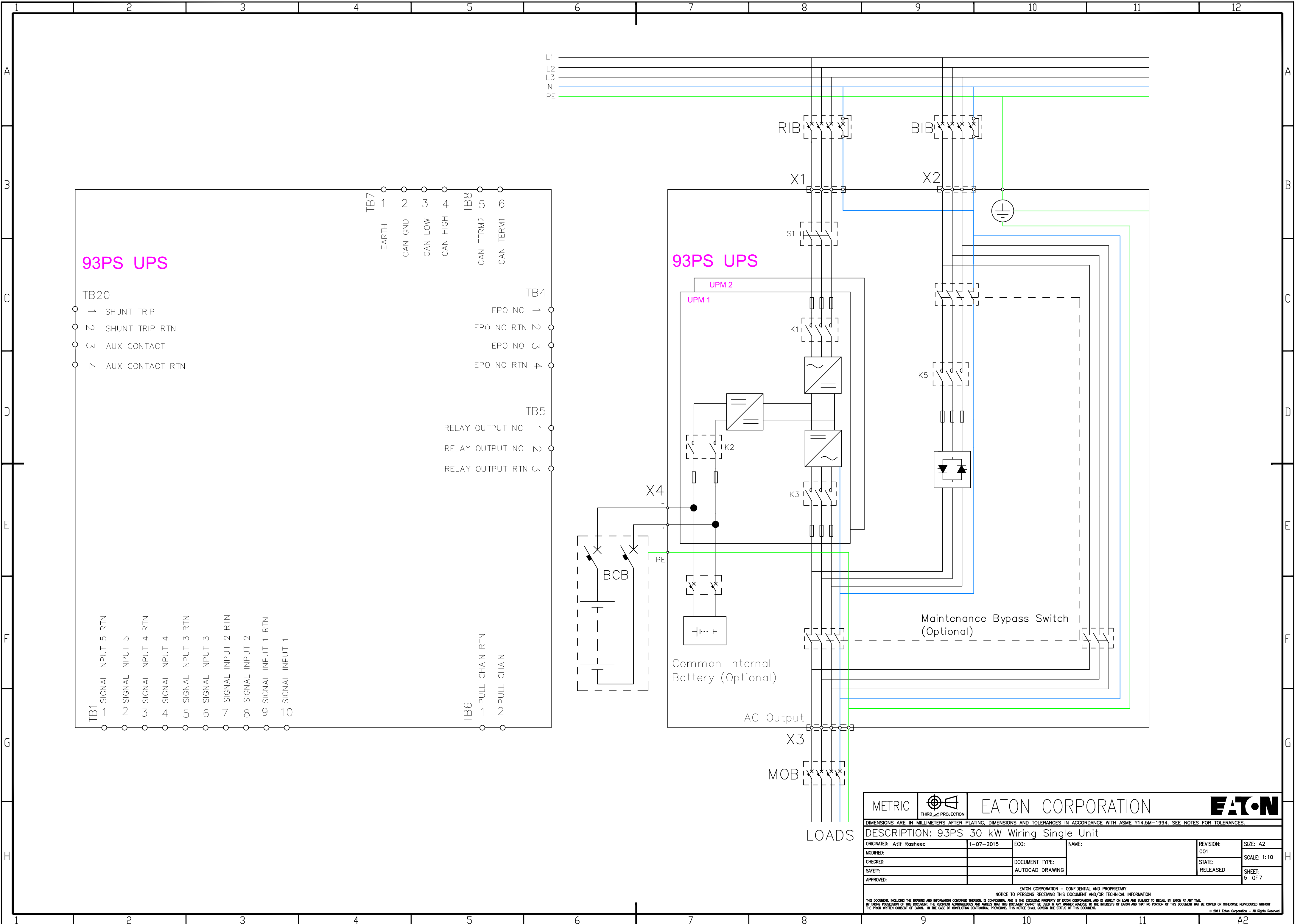
Clearances	
From Top of cabinet	500 mm
From Front of cabinet	650 mm
From Back of cabinet	250 mm

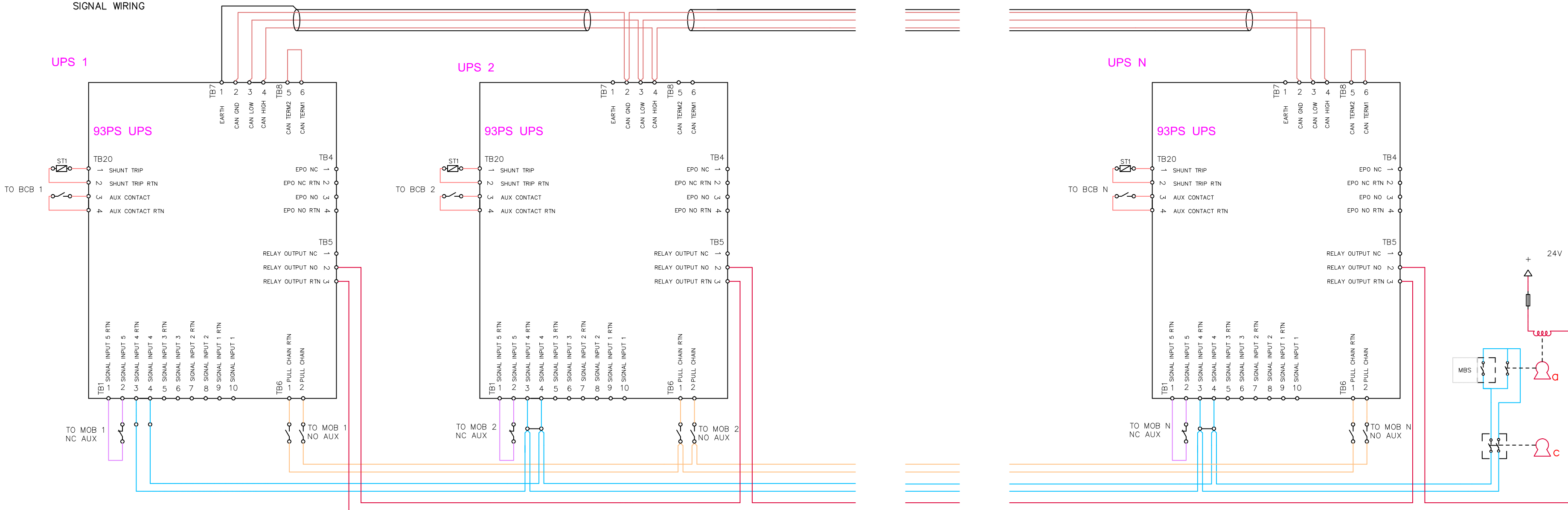
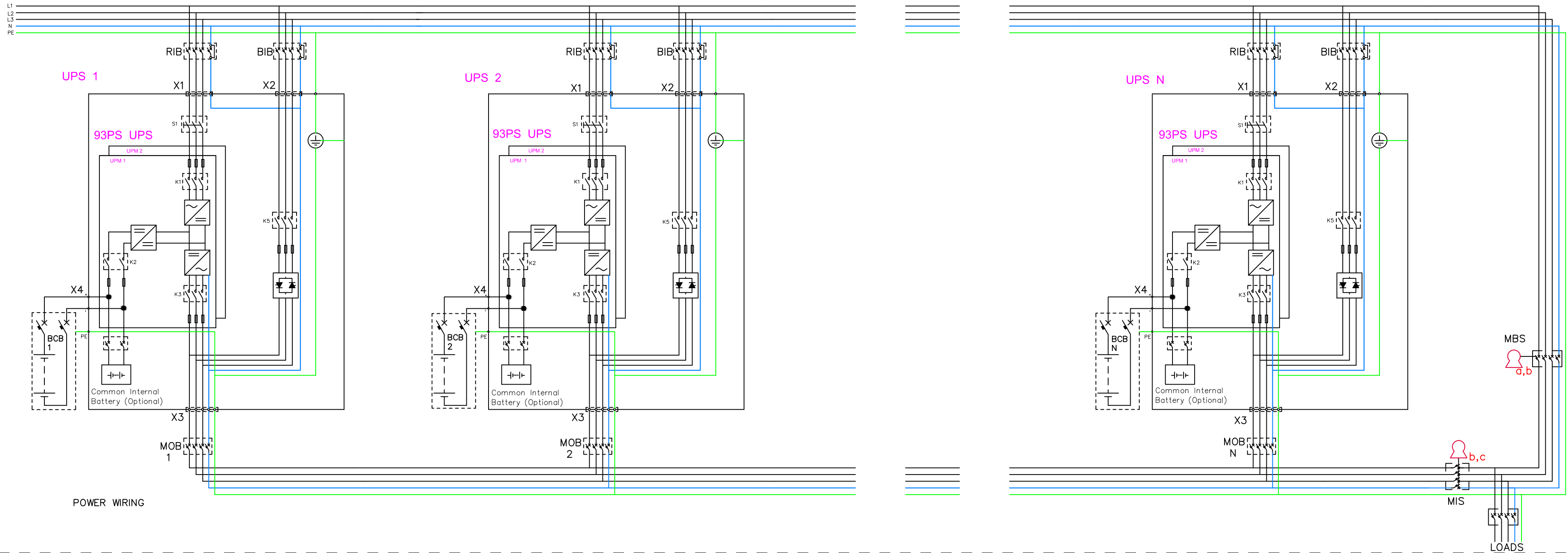
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Notes:  
1. M50 size cable gland plates with strain relief bushing are used on the rear side of unit for power cabling and cables diameter should be of range 21–34.5mm.

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- MBS STATUS (Provided by others, Installed by others)  
0.75 - 2.5mm<sup>2</sup> twisted pair (if possible, else shielded)  
No earth needed
- MOB STATUS (Provided by others, Installed by others)  
0.75 - 2.5mm<sup>2</sup> twisted pair (if possible, else shielded)  
No earth needed
- PCAN (DUAL AS OPTION)  
Provided by Eaton, Installed by Eaton
- PULL CHAIN (REDUNDANT ON BYP STATUS)  
Provided by Eaton, Installed by Eaton
- ON BYPASS STATUS (NO INVERTORS ONLINE)  
1.5 - 2.5mm<sup>2</sup>, provided by others, Installed by others

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

METRIC

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THIRD ANGLE PROJECTION

DESCRIPTION: 93PS 30 kW Wiring Parallel Units

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	2		3		4		5		6		7		8		9		10		11		12	
A																						A
	93PS 30-40KW UPS Site Planning Data																					
B	Product Specifications																					B
C	UPS Rating		AC Input	3P Rectifier Input Breaker (RIB)		3P+Bolted N Bypass Input Breaker (BIB)			AC Output	4P Inverter AC output Breaker MOB			Battery Breaker (BCB) (Ratings at the end of discharge, 1.67VPC)				For Single Unit Maintenance Bypass Switch (MBS)	For Parallel Units Common Maintenance Bypass Switch (MBS)				
				Nominal Current	Maximum Current	Nominal Current at 400v Input	Maximum Current at 15% under voltage	Integrated Bypass Fuse		Output Current	Inverter Short Circuit Current	Auxiliary Switches	Rating	Separate Battery Configration (UPM Bttery)	Common Battery Configuration (UPSBattery)	Trip Device (Shunt Trip)	Auxiliary Switches	Rating	Rating	Auxiliary Switches		
	KVA	KW	v	A	A	A	A	Type	v	A	A / 300ms	Qty	VDC	A	A	VDC	Qty	A	A	Qty		
	30	30	400	45	57	44	64	200 FEE	400	44	144	2	500	63	143	24	1	44	44 x N	1		
D																						D
E	Minimum recommended cable and fuse sizes																					E
	UPS RATING KW	Cable [mm²]	Rectifier Fuse [A]	Bypass Fuse [A]	PE Cable [mm²]	POS. & NEG. Line [mm²]	Battery Fuse [A]	EX BATT PE Cable [mm²]														
	30	4*16	63	63	1*16	1*35	160	1*16														
F	Notes:																					F
G	1. Rectifier AC input current calculations: Nominal – 100% load without charging; Maximum – 100% load with maximum charging (Rectifier current limit).																					
	2. Inverter AC output current calculation: At 100% rated output load.																					
	3. The system must be installed on a level floor suitable for computer or electronic equipment.																					
H	4. All wiring and installations must be in accordance with applicable National and Local Electric Regulations.																					
	5. 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.																					
H	6. All breakers should be adjusted according to the specified Ampere values to protect the UPS and installation.																					
	7. The static bypass switch is rated to a maximum value of 59 Amperes, nominal current at 400v and 85 Amperes, maximum current at 15% under voltage.If using the bigger rating BIB than mentioned in the table, output cable thermal protection should be rechecked.																					
	8. .For UPS installation that utilizes single feed input, The input breaker should be configured according to the rated rectifier input current.																					
	9. Cable sizing is based on the standard IEC 60364–5–52 and IEC 60364–5–54.The sizing is for 70°C rated copper cables.																					
H	10. Specifications are subject to change.																					
1	2	3	4	5	6	7	8	9	10	11	A2											

METRIC



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DESCRIPTION: 93PS 30 kW Specifications

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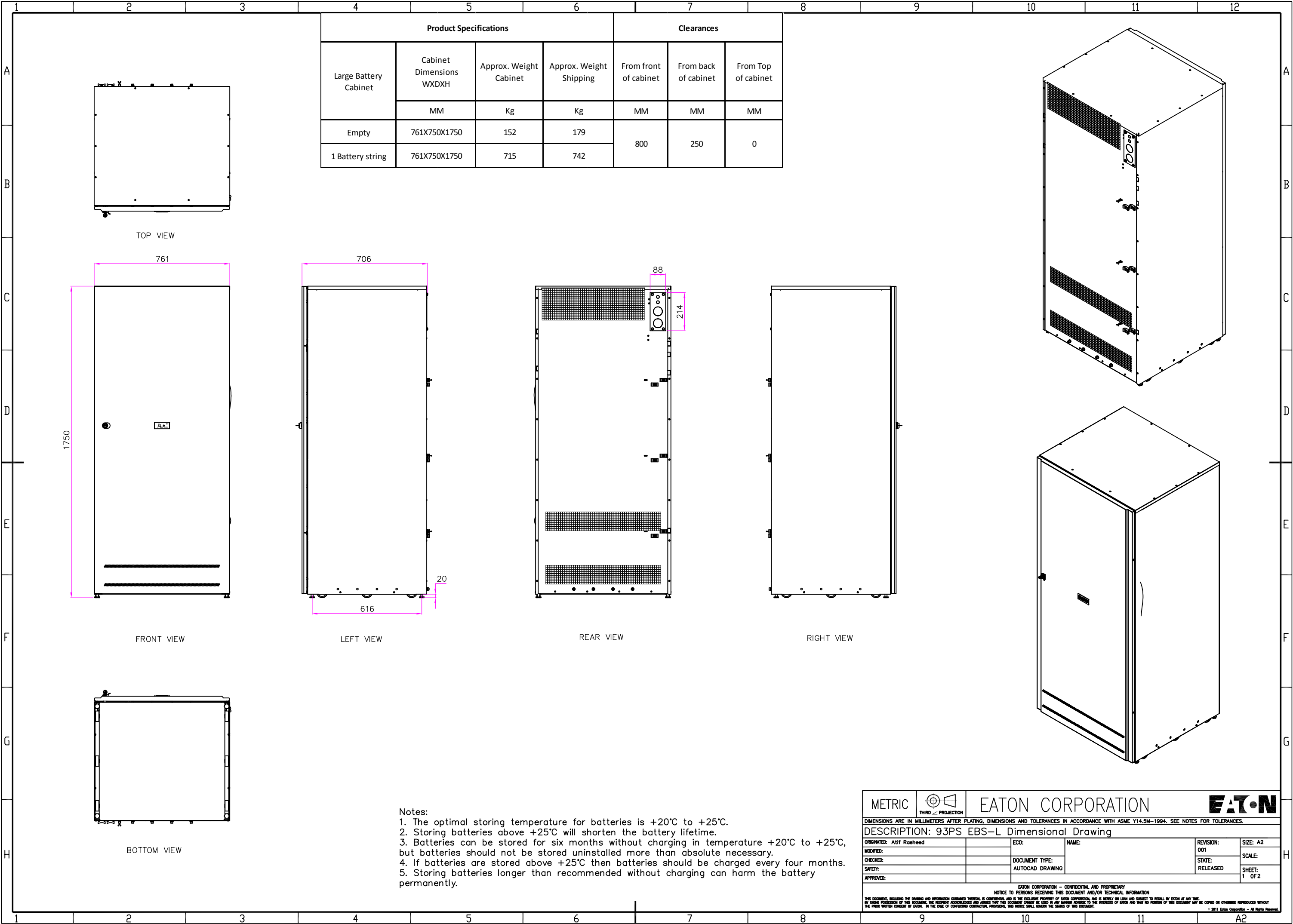
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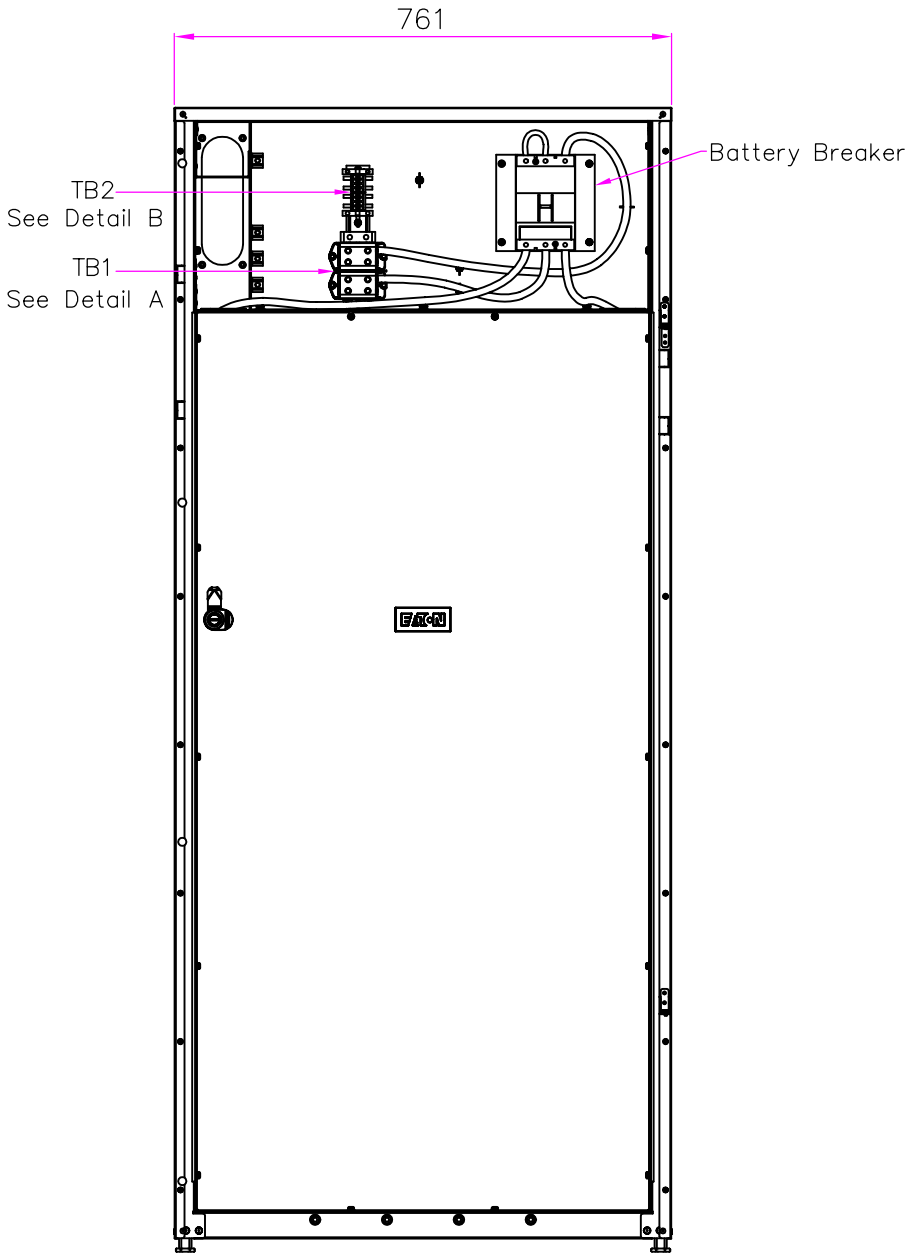
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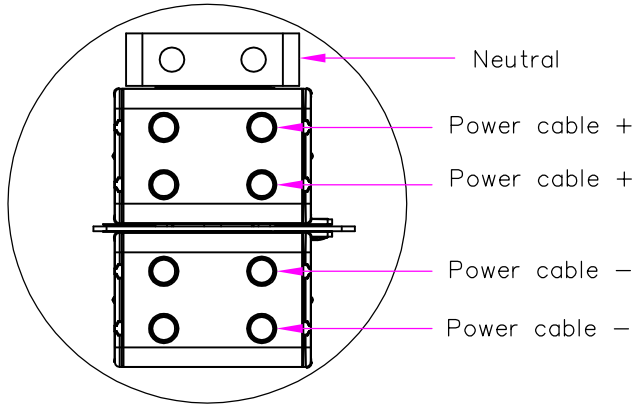


- Notes:
- 1. The optimal storing temperature for batteries is +20°C to +25°C.
  - 2. Storing batteries above +25°C will shorten the battery lifetime.
  - 3. Batteries can be stored for six months without charging in temperature +20°C to +25°C, but batteries should not be stored uninstalled more than absolute necessary.
  - 4. If batteries are stored above +25°C then batteries should be charged every four months.
  - 5. Storing batteries longer than recommended without charging can harm the battery permanently.

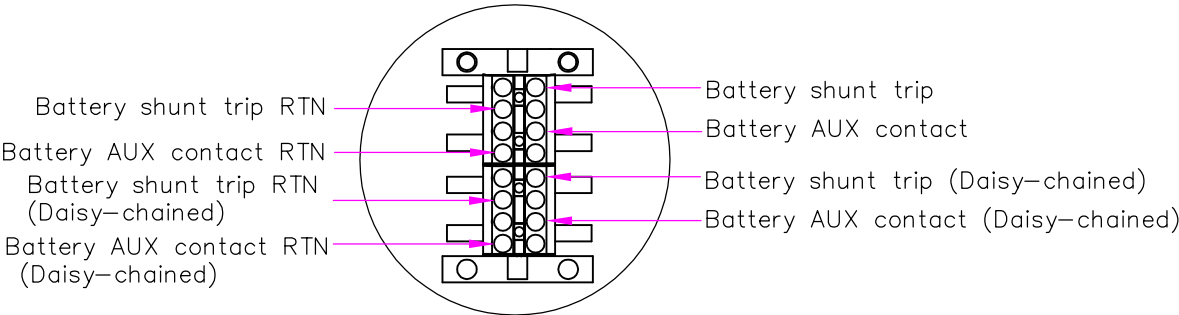
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Front View with door removed



Detail A



Detail B

Product Specifications			
Battery Breaker Rating	Minimum Cable recomended	cable connector size (Solid Cable)	cable connector size (Flexible cable)
A	MM <sup>2</sup>	MM <sup>2</sup>	MM <sup>2</sup>
160	1 X 35	25	16

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