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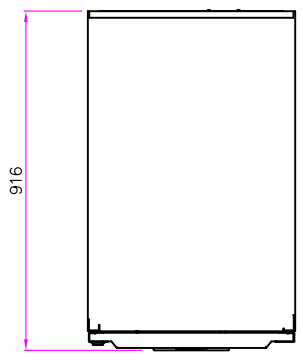
## SITE PLANNING DATA Eaton 93PM 30-60 kVA

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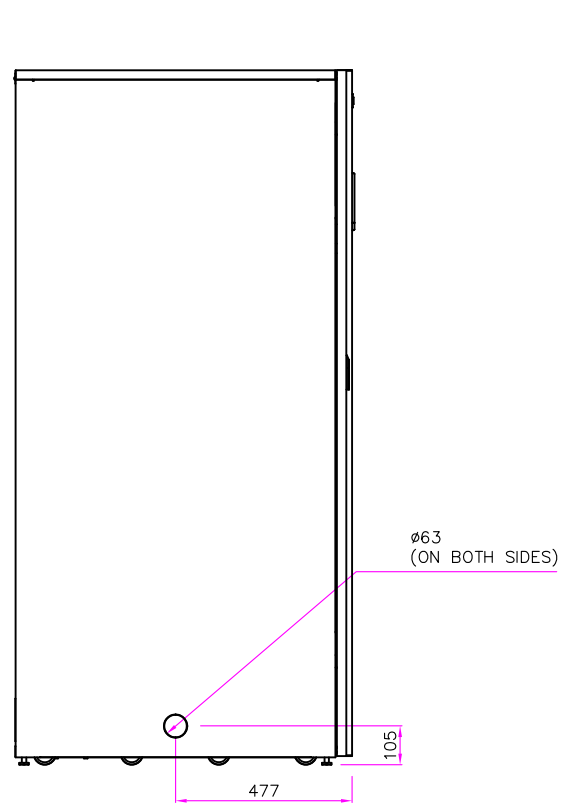


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DIMENSIONS ARE IN MILLIMETERS AFTER PLATING, DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M-1994. SEE NOTES FOR TOLERANCES.					
DESCRIPTION: Eaton 93PM 30-60 kVA					
ORIGINATED: Atif Rasheed	03.08.2015	ECO:	NAME:	REVISION: 002	SIZE: A2
CHECKED: Meron Gameda	18.04.2018	DOCUMENT TYPE: AUTOCAD DRAWING	P-110000454	STATE: RELEASED	SCALE: N/A
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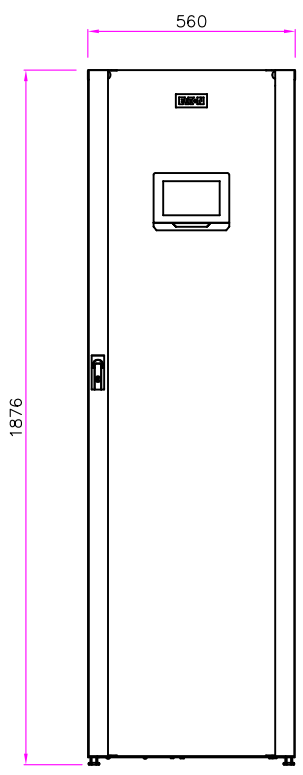
Product Specifications										
UPS Rating		Max Heat Dissipation at 100% Load	Cabinet Dimensions WXD <sub>X</sub> H	Shipping Dimensions WXD <sub>X</sub> H	Approx. Weight Installed Without Batteries	Approx. Weight Installed With Batteries	Approx. Weight Shipping Without Batteries	Approx. Weight Shipping With Batteries	Floor Landing	Cooling Air
kVA	kW	kW	mm	mm	kg	kg	kg	kg	kg/m <sup>2</sup>	l/s
30	30	1,1	560X914X1876	750X1135X2050	288	860	338	910	1760	167
40	40	1,5	560X914X1876	750X1135X2050	288	860	338	910	1760	167
50	50	2,0	560X914X1876	750X1135X2050	288	860	338	910	1760	167
60	54	2,2	560X914X1876	750X1135X2050	288	860	338	910	1760	167



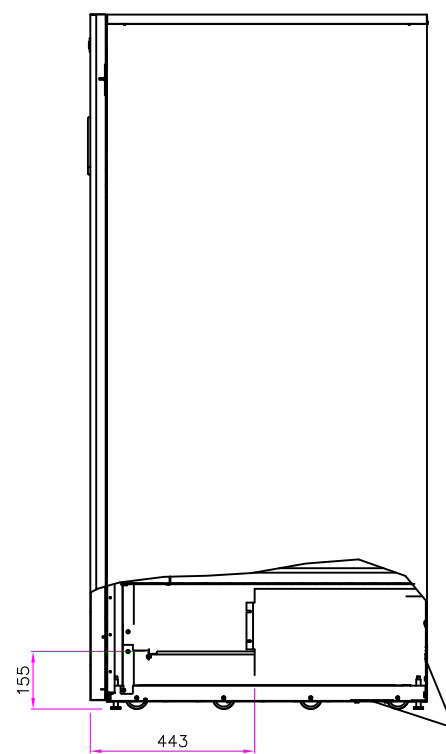
TOP VIEW



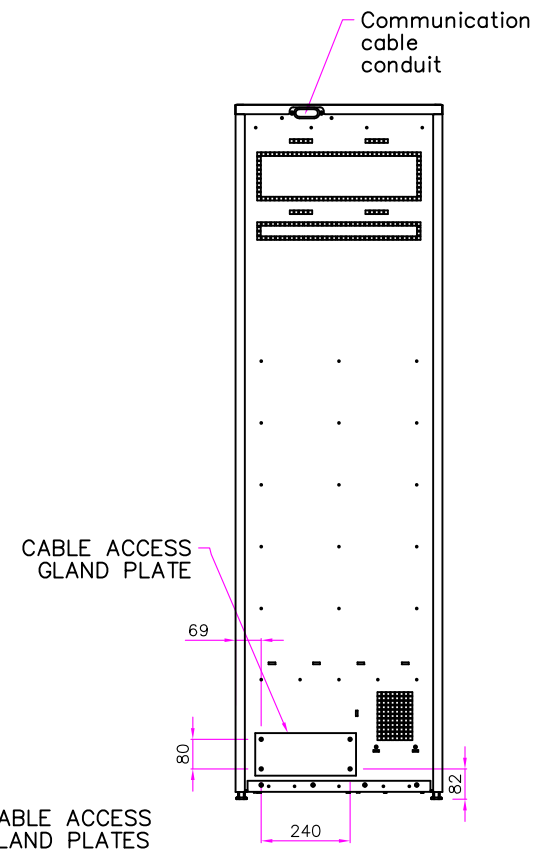
LEFT VIEW



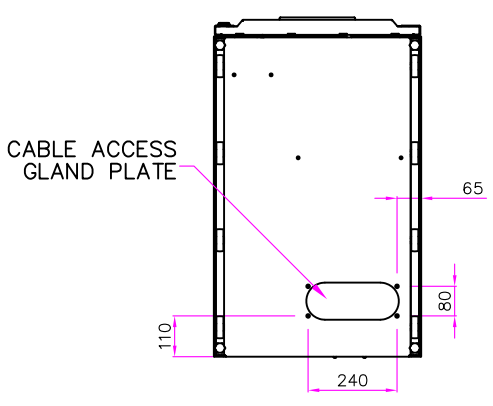
FRONT VIEW



RIGHT VIEW



REAR VIEW



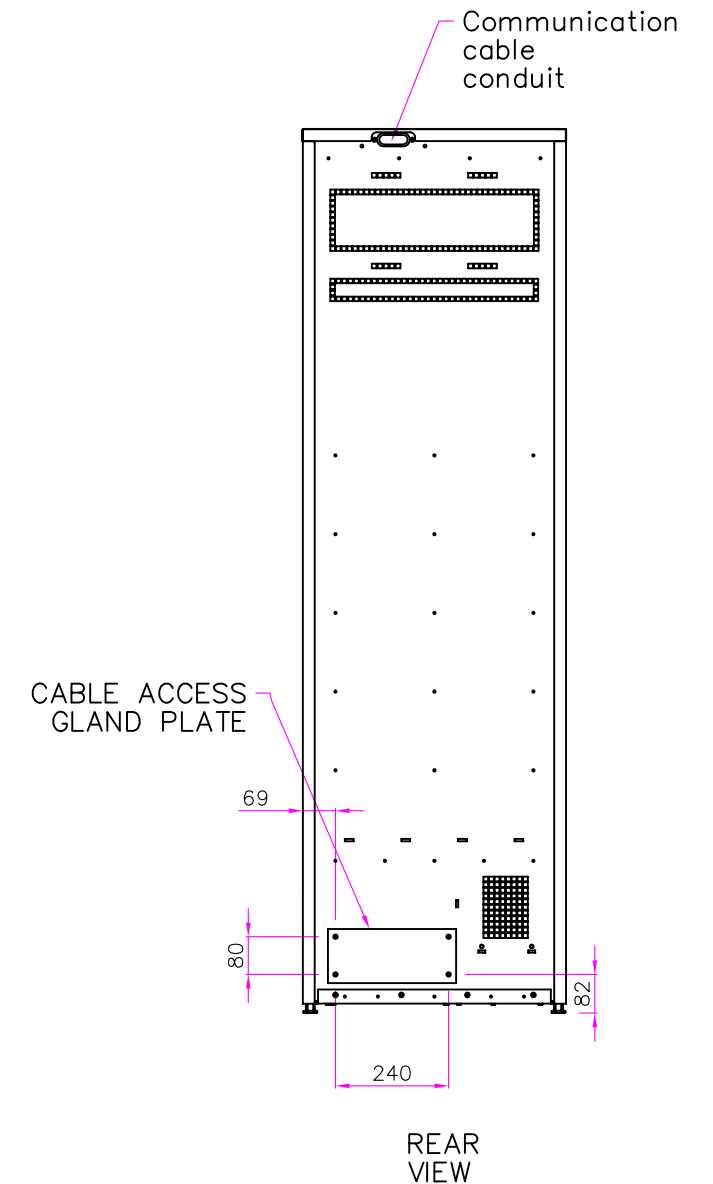
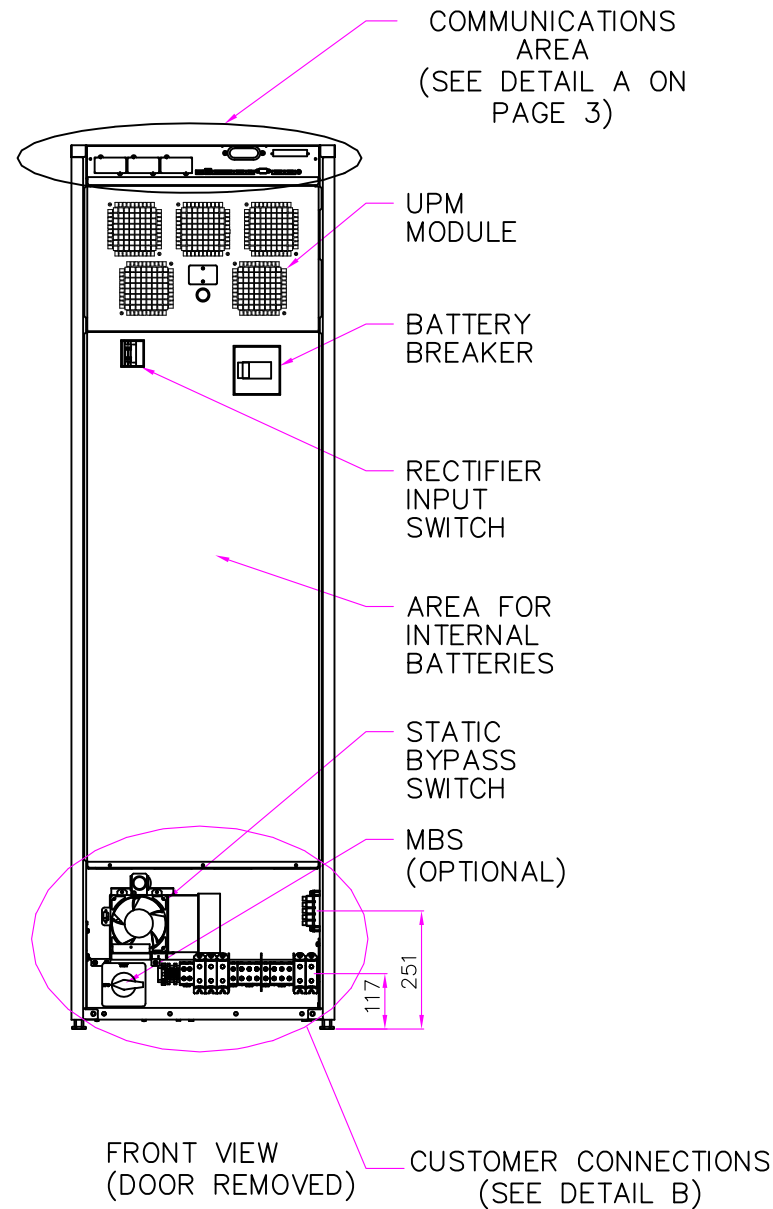
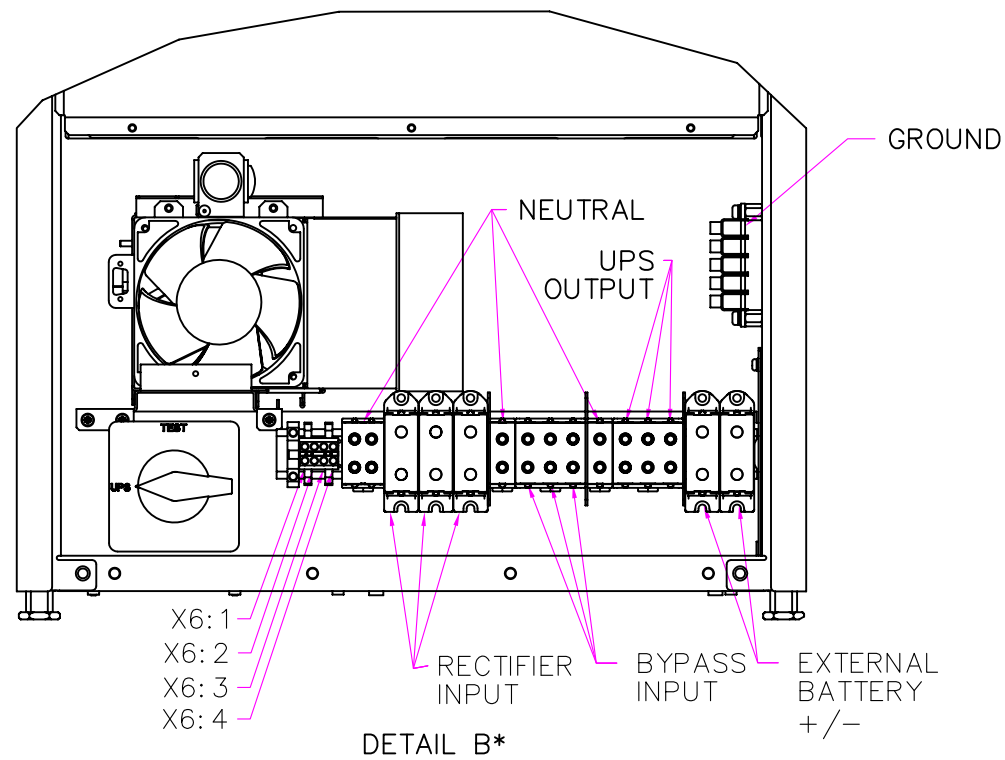
BOTTOM VIEW

Notes:

- The system must be installed in a temperature and humidity controlled indoor area free of conductive contaminants.
- Continuous ambient temperature range for 93PM unity output pf models: 5–40°C; Maximum relative humidity: 95% non–condensing.
- Continuous ambient temperature range, 93PM 0.9 output pf models, 5–35°C. Maximum relative humidity: 95% non–condensing
- Minimum overhead clearance for ventilation above the UPS cabinet is 500mm (20in.).
- Minimum 900mm (35in.) clearance in front of the UPS cabinet is required for cooling air intake and servicing space.
- Minimum 200mm (8in.) of clearance required in the back of the UPS cabinet for air exhaust
- When using Top air exhaust kit add 200 mm to the total depth, add 28kg to the total weight. No additional cooling clearance required at the back.
- When using top cable access kit, add 18 kg to the total weight and 100mm to the total width.
- Cablings may require more space.

Cabinet Installation Clearances	
From Top of cabinet	500 mm
From Front of cabinet	900 mm
From Back of cabinet	200 mm

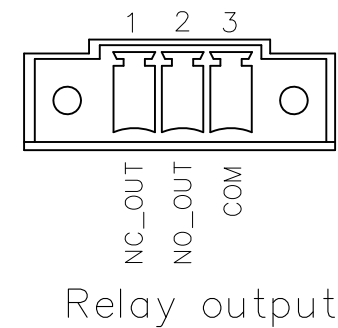
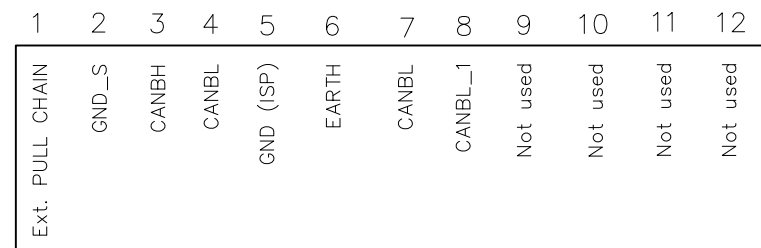
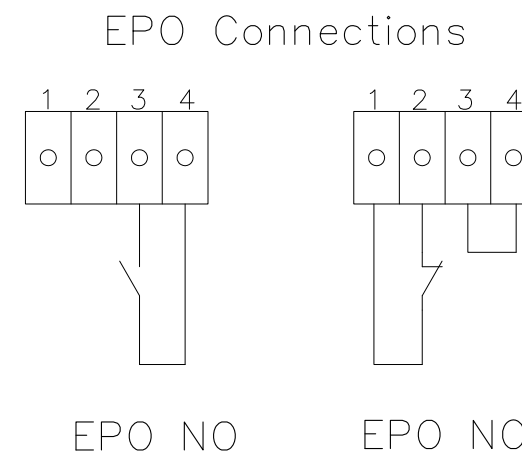
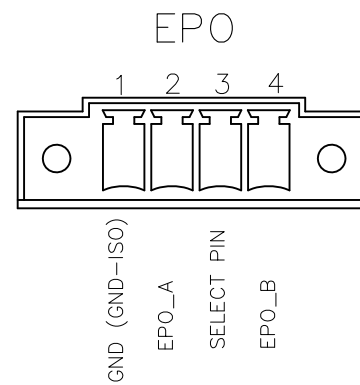
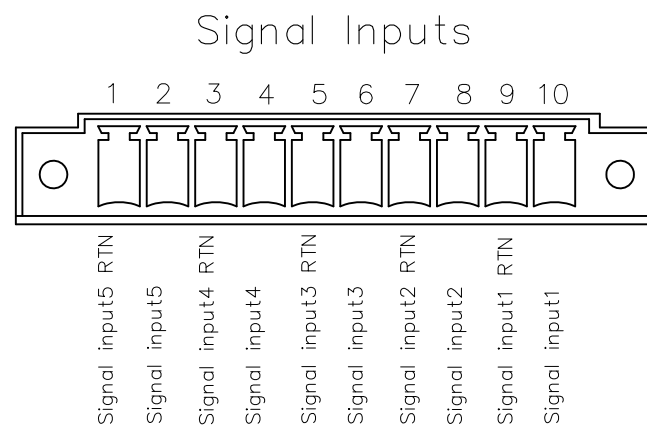
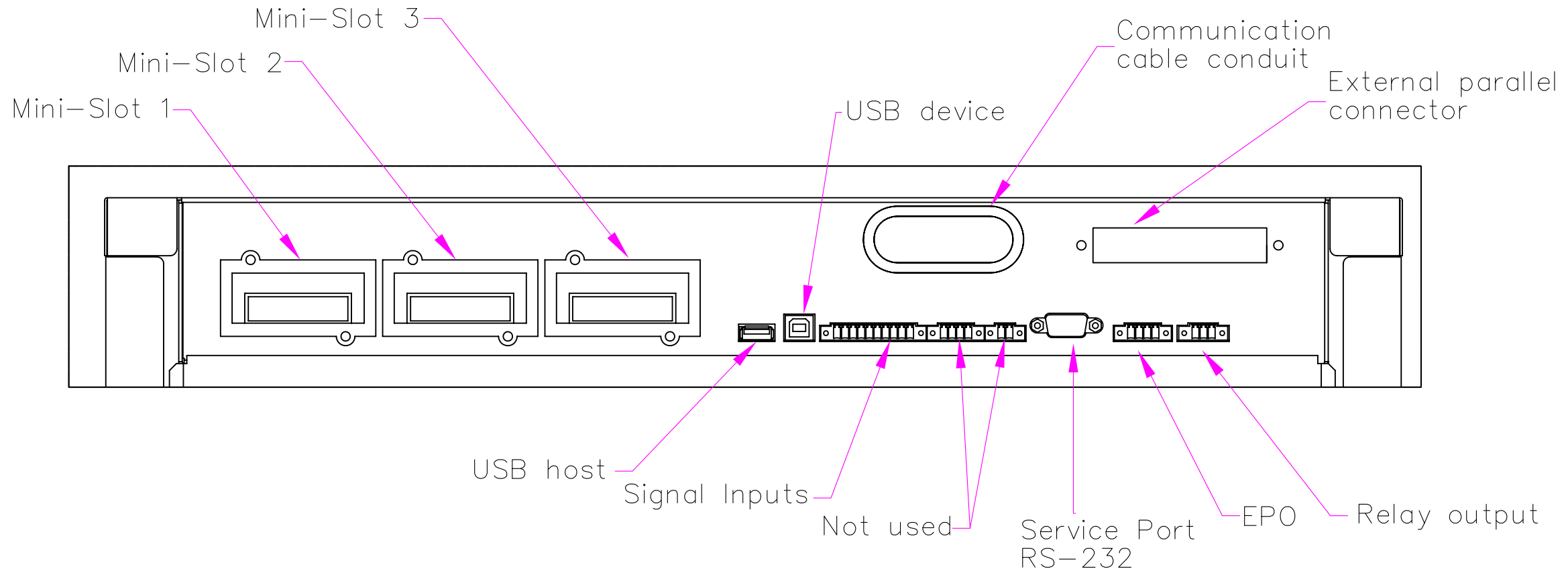
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DIMENSIONS ARE IN MILLIMETERS AFTER PLATING, DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M-1994. SEE NOTES FOR TOLERANCES.								
DESCRIPTION: Eaton 93PM 30–60 kVA Dimensional Drawing								
ORIGINATED: Atif Rasheed	03.08.2015	ECO:	NAME:	REVISION: 002	SIZE: A2			
MODIFIED: Meron Gameda	18.04.2018	DOCUMENT TYPE: AUTOCAD DRAWING	P-110000454	STATE: RELEASED	SCALE: 1:12			
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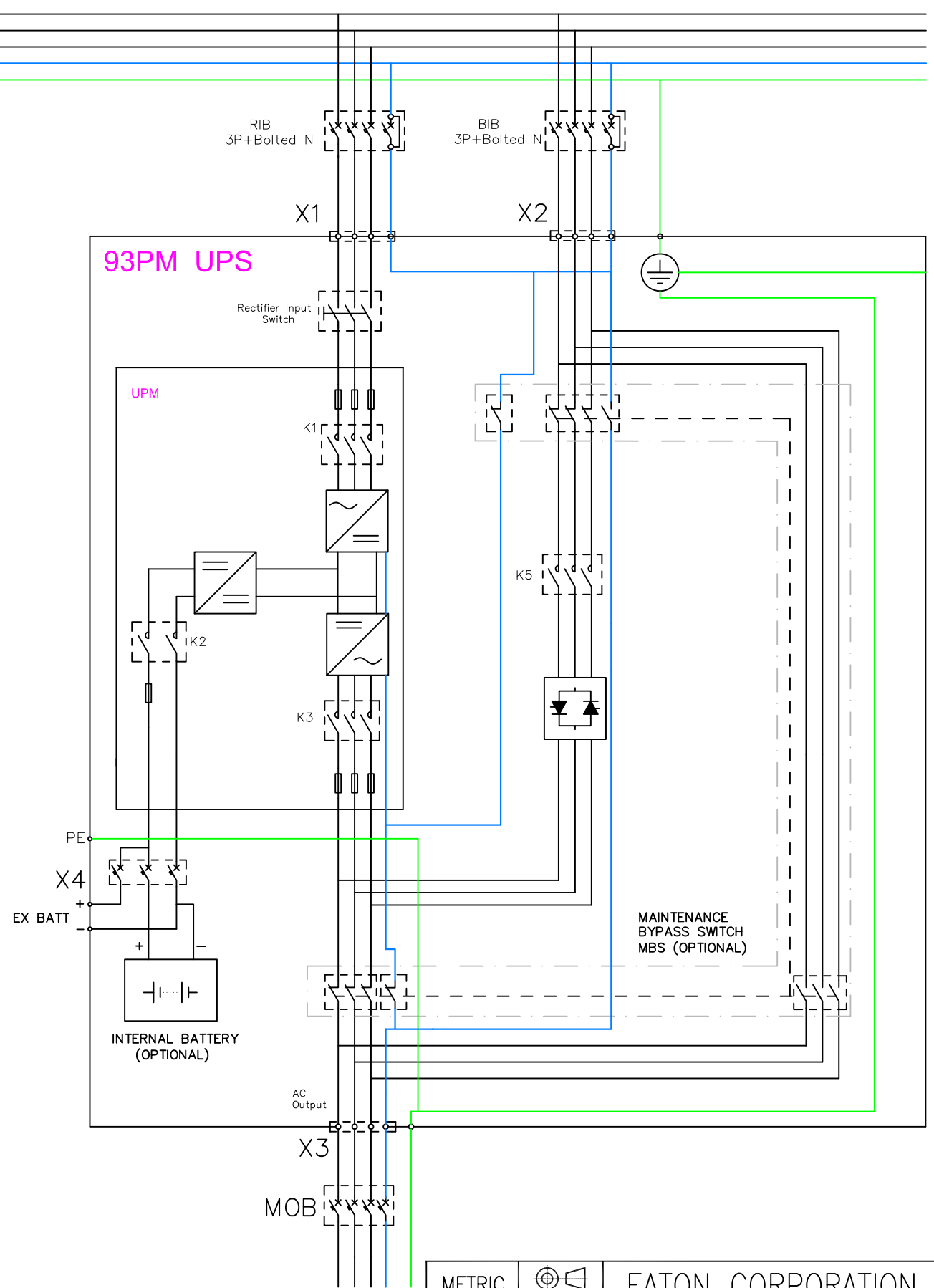
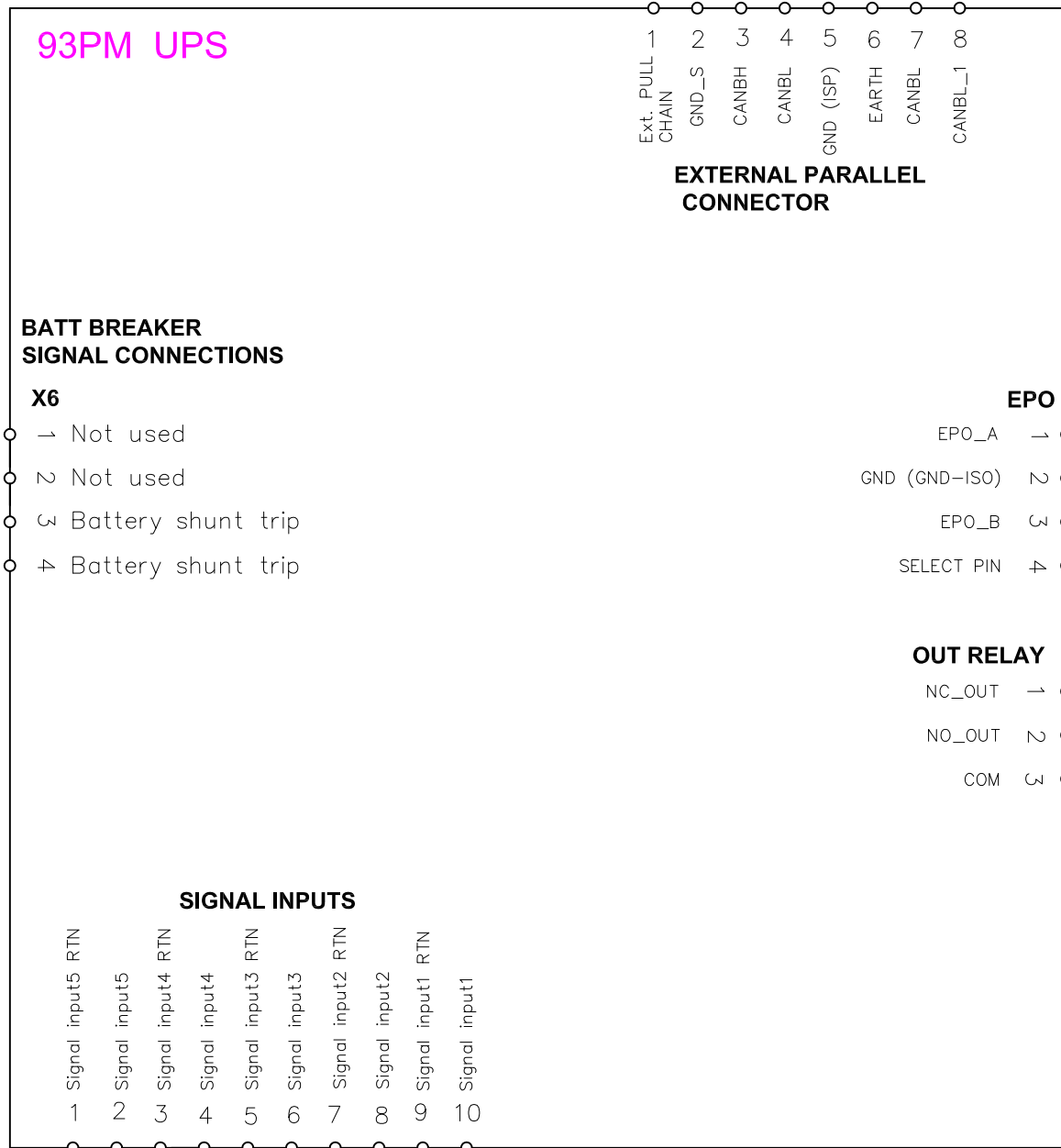
- Notes:
1. The bypass input and UPS output connector sizes are 2.5–50mm<sup>2</sup>, if using Cu connectors and 6–50mm<sup>2</sup>, if using Al connectors.
  2. The Cu and Al connector sizes for rectifier input and external battery connections are 16–95mm<sup>2</sup>.
  3. Approximately 14Nm of tightening torque is required for rectifier input connectors (L1,L2,L3) and external battery connectors.
  4. Approximately 12Nm of tightening torque is required for rectifier input (N), bypass input and output cable connectors.

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DESCRIPTION: Eaton 93PM 30-60 kVA Customer Connections								
ORIGINATED: Atif Rasheed	03.08.2015	ECO:	NAME:	REVISION: 002	SIZE: A2			
CHECKED: Atif Rasheed	22.09.2016	DOCUMENT TYPE: AUTOCAD DRAWING	P-110000454	STATE: RELEASED	SCALE: 1:11			
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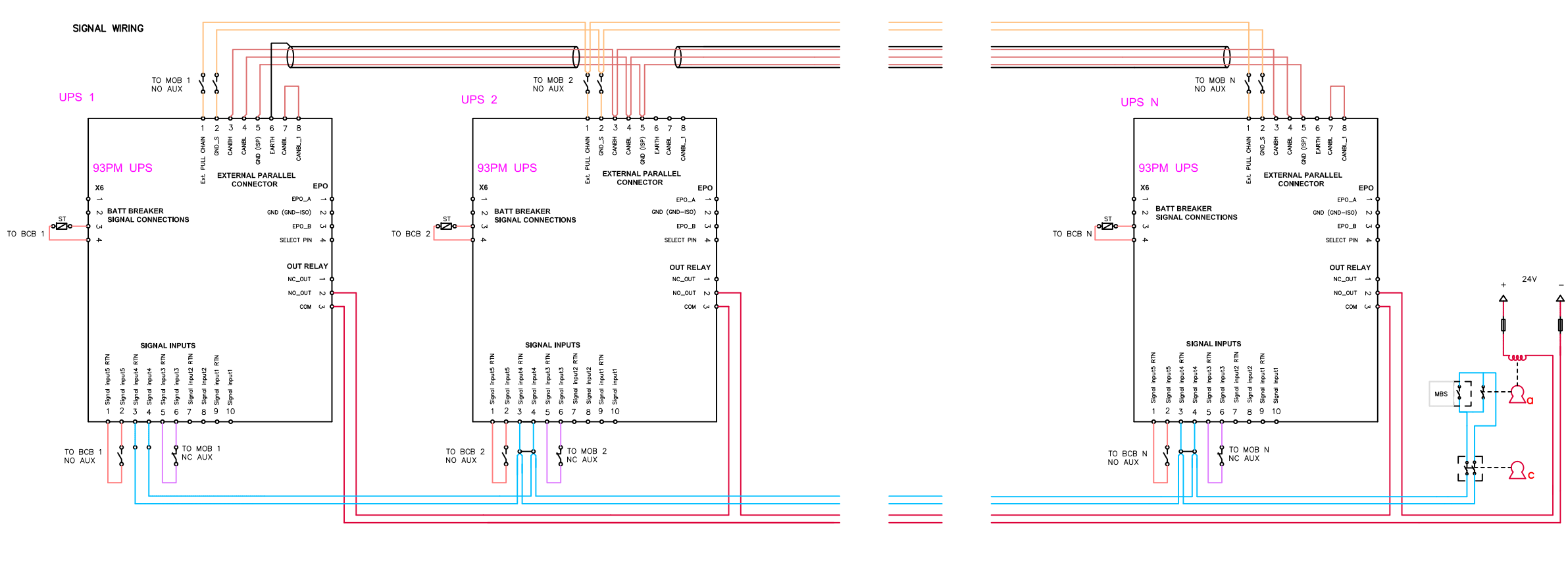
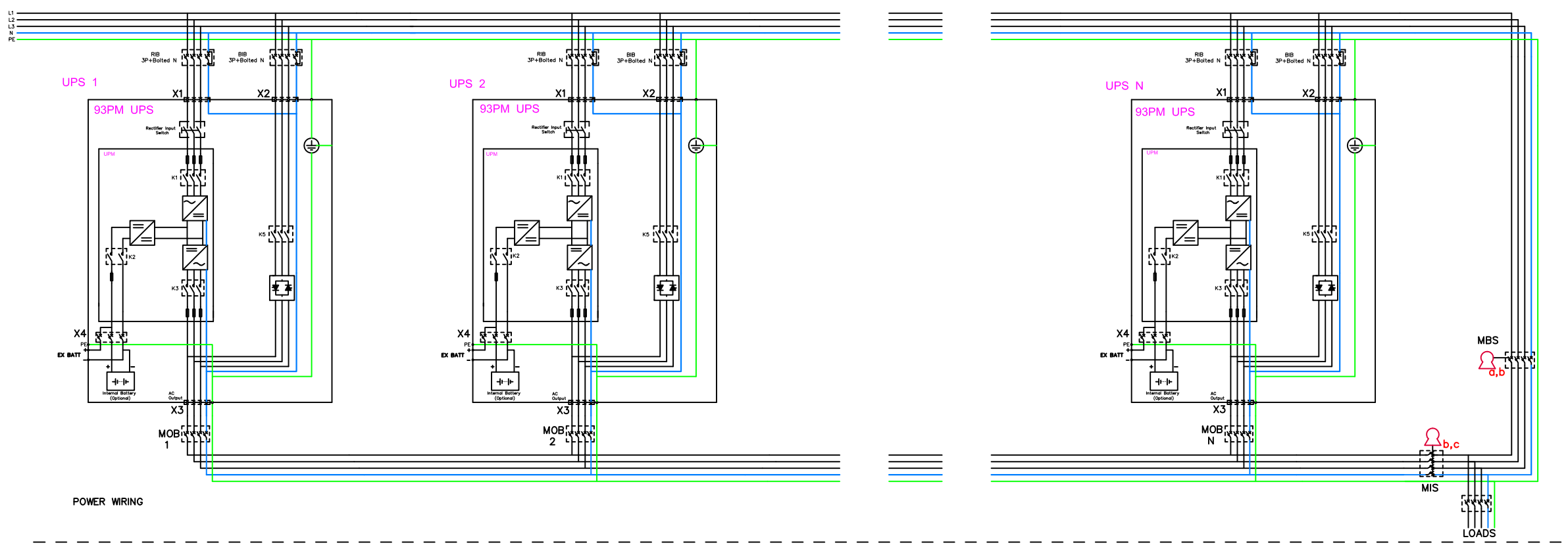
# COMMUNICATION AREA (DETAIL A)



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DESCRIPTION: Eaton 93PM 30-60 kVA Customer Connections Detail View								
ORIGINATED: Atif Rasheed	03.08.2015	ECO:	NAME:	REVISION: 002	SIZE: A2			
CHECKED: Atif Rasheed	22.09.2016	DOCUMENT TYPE: AUTOCAD DRAWING	P-110000454	STATE: RELEASED	SCALE: 1:6			
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DESCRIPTION: Eaton 93PM 30-60 kVA Wiring Single Unit					
ORIGINATED: Atif Rasheed	03.08.2015	ECO:	NAME:	REVISION: 002	SIZE: A2
CHECKED: Atif Rasheed	22.09.2016	DOCUMENT TYPE:	P-110000454	STATE: RELEASED	SCALE: 1:20
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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)  
Provided by others, Installed by others  
1.5 - 2.5mm<sup>2</sup>, 600v
- BATT AUX AND SHUNT TRIP  
Provided by Eaton, Installed by Eaton  
1.5 - 2.5mm<sup>2</sup>

- 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

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DIMENSIONS ARE IN MILLIMETERS AFTER PLATING, DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M-1994. SEE NOTES FOR TOLERANCES.				
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## Eaton 93PM 30-60k 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)		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	Maximum Current	Nominal Current	Integrated bypass fuse	Output Current	Inverter Short Circuit Current	Auxiliary Switches	Rating	Common Battery Configuration (UPS Battery)		Trip Device (Shunt Trip)	Auxiliary Switches	Rating	Auxiliary Switches
kVA	kW	V	A	A	A	Type	V	A	A / 400ms	Qty	VDC	Rated current(A)	Maximum current(A)	VDC	Qty	A	Qty
30	30	400	56	57	43	Bussmann 160LET	400	43	170	2	500	74	95	24	1	43 x N	1
40	40	400	71	76	58	Bussmann 160LET	400	58	170	2	500	99	127	24	1	58 x N	1
50	50	400	86	95	72	Bussmann 160LET	400	72	170	2	500	123	141	24	1	72 x N	1
60	54	400	97	101	87	Bussmann 160LET	400	87	170	2	500	133	152	24	1	87 x N	1

**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 calculations: Nominal, 100% rated load.
4. The system must be installed on a level floor suitable for computer or electronic equipment.
5. All wiring and installations must be in accordance with applicable National and Local Electric Regulations.
6. 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.
7. All breakers should be adjusted according to the specified Ampere values to protect the UPS and installation.
8. For UPS installation that utilizes single feed input, The input breaker should be configured according to the rated rectifier input current..
9. Specifications are subject to change.

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