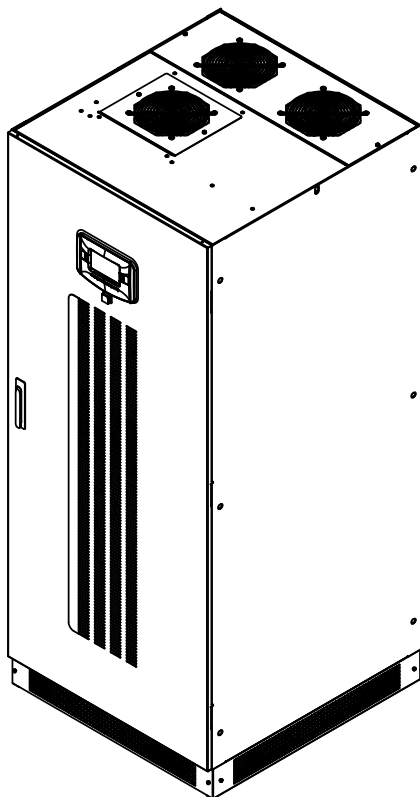


# INSTALLATION INSTRUCTIONS

Read "User Manual" before starting with installation

General characteristics for environmental consideration			
MASTER HP FC-UL Series		MFC 80	MFC 100
Rated Power	kVA/ kW	80/72	100/90
Power loss (kW) 50%/load/100%/load	kW	2.9/5.0	3.7/6.3
Air flow	m <sup>3</sup> /h	2100	
Max ambient temperature	°C/°F	40/104	
Altitude without derating	m/feet	1000/3300	
Relative Umidity		≤ 95% non condensing	
Dimensions and weight			
UPS weight	kg / lb	730 / 1610	790 / 1742
Dimensions WxDxH	mm / in	800x850x1900 / 31.5x33.46x74.8	
Footprint area	m <sup>2</sup> / ft <sup>2</sup>	0.85 / 9.146	
Opening for Cable Entry			
TOP		NA	
BOTTOM	m <sup>2</sup> / ft <sup>2</sup>	0.089 / 0.96	



## POWER CONNECTIONS

### WARNING

The FC is provide with Bond that connects the Neutral Output to the frame Ground for delta input connection. This is required to meet NEC grounding code for separately derived neutrals. Refer to NEC article 250(Grounding and Bonding) for identify system of grounding and size of Equipment grounding conductor

Branch OCP devices must be provided as parts of plant.

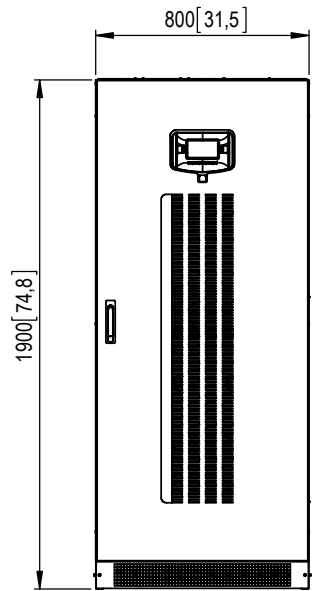
Use at least 75°C rated copper wires. The size of cables are reported from NEC Table 310.16. Could be required a larger awg size than shown in these tables, because of temperature, number of conductors in conduit or long service runs.

MASTER HP FC-UL size(kVA)	80	100
INPUT AC LINE		
Input Line 3Ph + PE 480V 60Hz		
Branch-OCP device size (A)	175	200
Phase and neutral cond. size (kcmil/Awg)	3/0 Awg	250kcmil
OUTPUT 3Ph + N 230/400V 50Hz		
Rated current (A)	115	144
Phase and Neutral cnd. Size (kcmil / Awg)	2/0 AWG or 250kcmil	4/0 AWG or 250kcmil
Battery (if provide) DC INPUT		
Branch-OCP-device size (A)	200	250
Polarities + and - cond.(kcmil / Awg)	300kcmil	400kcmil
*If "Riello BBX 1900 480V UL L8 3U" battery cabinets are provide, the OCP device is included in the cabinet. For other applications read "User Manual" Battery connections.		
Ground terminal of Battery Cabinet must to connected to Ground terminal of FC Cabinet.		

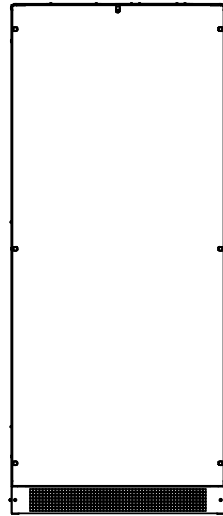
RPS	EDIT.	M. Fontana	DATA:	08/07/2014	VARIATION:	...	DRAW. No	REV.		
	CONT.	M. Fontana	DATA:	08/07/2014	...	...	OMLMFCK80RUENIA	00		
	APPR.	F. Amodeo	DATA:	08/07/2014	REPLACE:	...				
NOTE:	TITLE: MAN HP FC-UL 80-100 DRW EN						PAG.	1	DI	3

# INSTALLATION INSTRUCTIONS

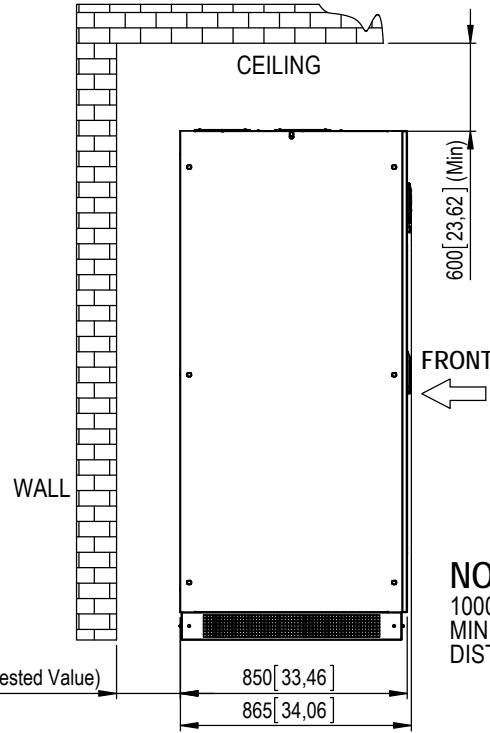
FRONT VIEW



REAR VIEW



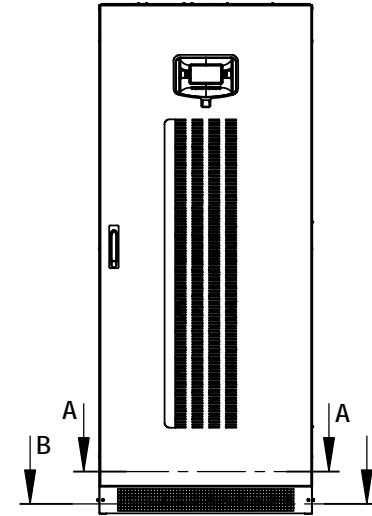
SIDE VIEW



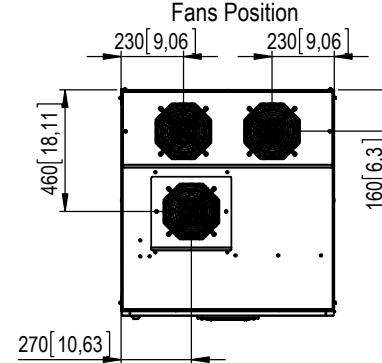
FRONT  
←

**NOTE:**  
1000mm [39,37in]  
MINIMUM FRONT  
DISTANCE TO THE WALL

FRONT VIEW



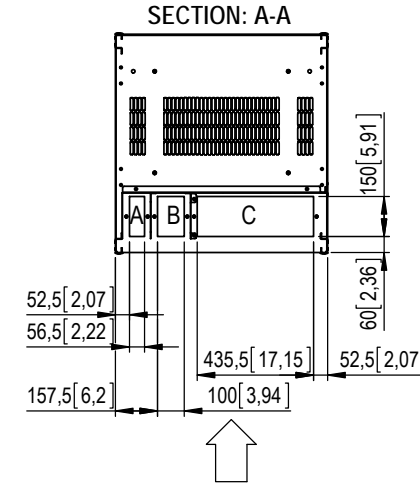
TOP VIEW



FRONT  
↑

**NOTE:**  
High temperature rise  
may occur if the minimum  
value indicated is not  
maintained above the UPS

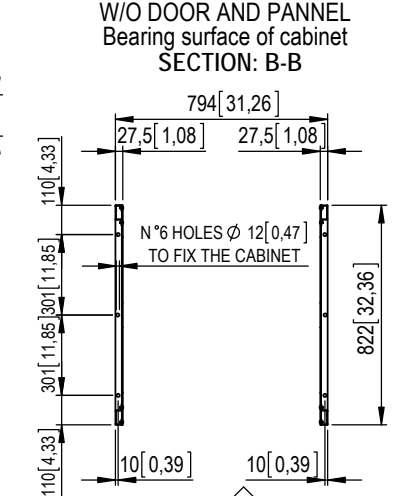
BOTTOM VIEW



FRONT  
↑

W/O DOOR AND PANNEL  
Opening for Cable entry:  
A= SIGNAL CABLES  
B= BATTERY CABLES  
C= INPUT-OUTPUT CABLES

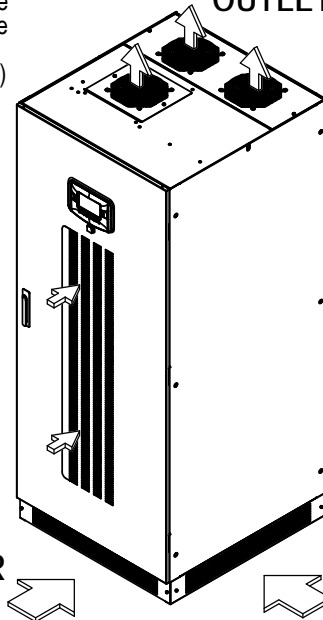
BOTTOM VIEW



FRONT  
↑

**NOTE:**  
Do not mount side kickplate  
when there are cabinet side  
by side. Leave at least one  
of the three (right, rear, left)  
of cabinet free

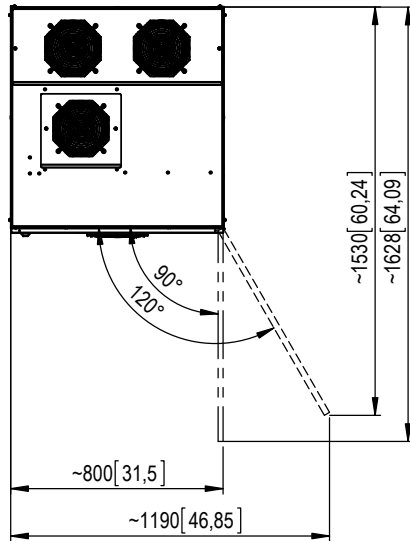
OUTLET AIR  
AIR FLOW



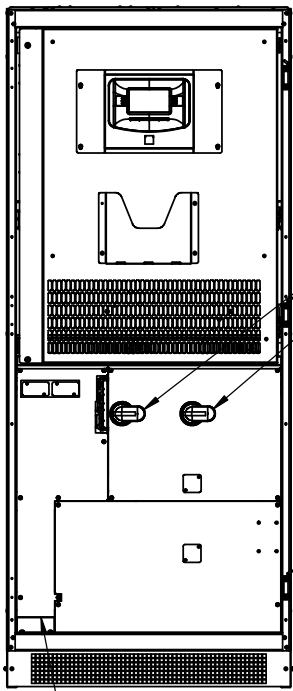
INLET AIR  
↘

INLET AIR  
↘

TOP VIEW



<b>RPS</b>	DRAW. No	REV.
	OMLMFCK80RUENIA	00
	PAG. 2	DI 3

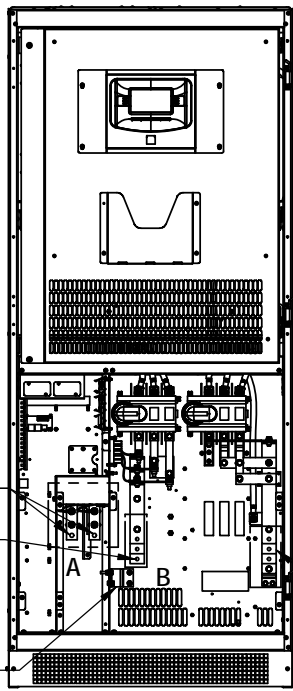


SWIN  
SWOUT

BATTERY  
INPUT

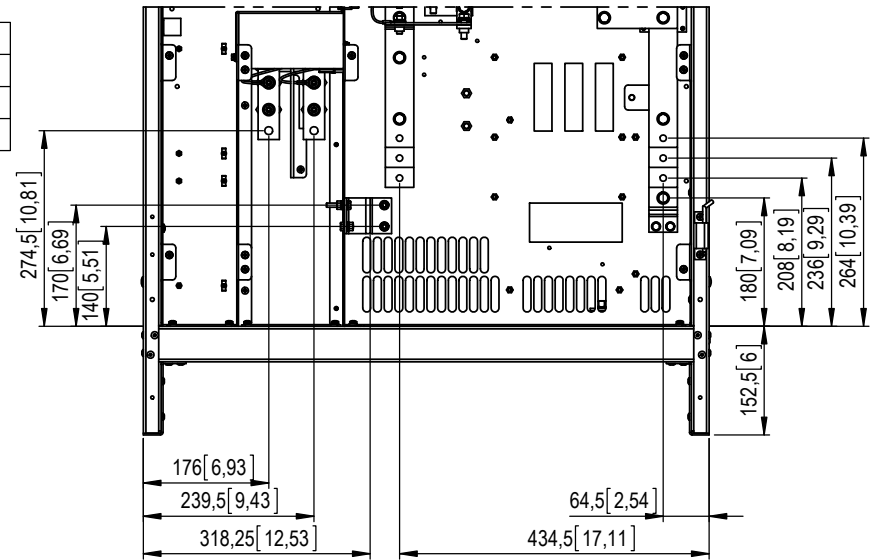
GROUND

SLOT FOR RS232 AND  
NETMAN-MULTICOM  
CABLES ENTRY

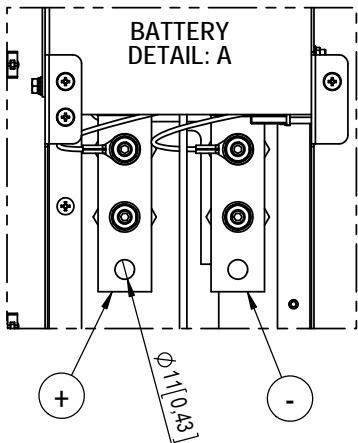
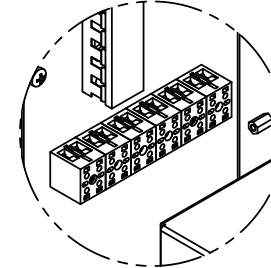


Torque specification		
Bolt size	Torque Load	
3/8 - M10	40Nm	29,5lbf-ft
5/16 - M8	20 Nm	14,75 lbf-ft

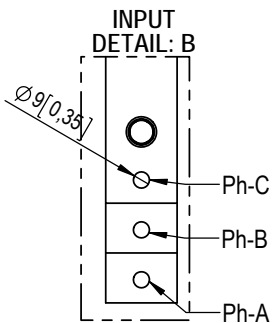
OUTPUT



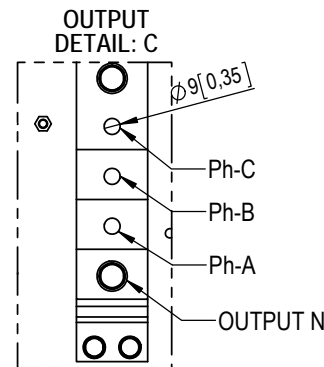
AUX CONNECTIONS  
DETAIL: D



BATTERY  
DETAIL: A



INPUT  
DETAIL: B



OUTPUT  
DETAIL: C

AUX CABLE ENTRY  
CONDUIT LANDING  
PLATE

BATTERY CABLE ENTRY  
CONDUIT LANDING  
PLATE

POWER CABLE ENTRY  
CONDUIT LANDING  
PLATE

