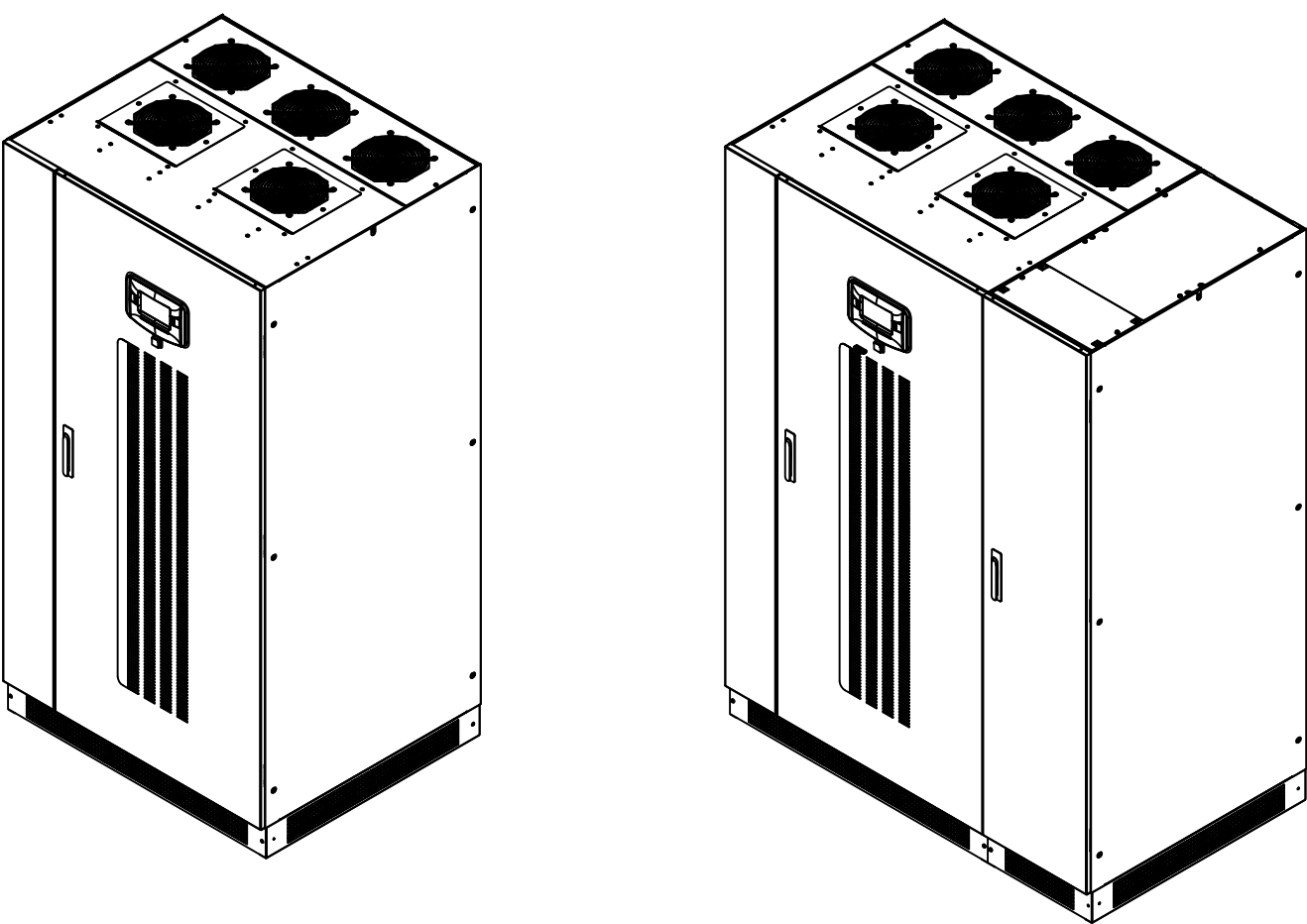


**INSTALLATION INSTRUCTIONS**  
 Read "User Manual" before starting with installation

General characteristics for environmental consideration							
MASTER HP-UL Series		W/O TCE			W TCE		
Type		MHT 160	MHT 200	MHT 250	MHT 160	MHT200	MHT 250
Rated Power	kVA/ kW	160/144	200/180	250/225	160/144	200/180	250/225
Power loss (kW) 50%/load/100%/load	kW	4,6/10	5,75/12,5	7,2/15,6	4,6/10	5,75/12,5	7,2/15,6
Air flow	m <sup>3</sup> /h	3200					
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	840 / 1852	970 / 2139	1110 / 2448	1000 / 2205	1145 / 2525	1270 / 2800
Dimensions WxDxH	mm / in	1000x850x1900 39,37x33,46x74,8			1400x850x1900 55,12x33,46x74,8		
Footprint area	m <sup>2</sup> / ft <sup>2</sup>	0,85 / 9,146			1,19 / 12,8		
Opening for Cable Entry							
TOP	m <sup>2</sup> / ft <sup>2</sup>	NA			0,25 / 2,69		
BOTTOM		0,12 / 1,29			0,19 / 1,93		



**POWER CONNECTIONS**

**WARNING**

The UPS is provided 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. When a Neutral is provided in a Wye configured input connection, the bond should be removed, in accordance with Local code requirements. 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 UL size (kVA)	160	200	250
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**SHORT CIRCUIT WITHSTAND RATING\***

Without TCE	50 kArms @ 480Vac
With TCE	18 kArms @ 480Vac, max 50ms

\*Note: Maximum short-circuit current level at the UPS input terminals

**INPUT AC LINE - SINGLE LINE**

Input Line 3Ph + N + PE 277/480V 60Hz

Branch-OCP device size (A)	300	350	450
Phase and neutral cond. Size (kcmil/Awg)	500 or 2x2/0	2x4/0	2x4/0

**INPUT AC LINE - DUAL SEPARATE LINE**  
 (Remove the busbars connecting Input Mains line and Bypass Line  
 See details on picture)

Input Mains 3Ph + PE 480V 60Hz

Phase and neutral cond. Size (kcmil/Awg)	500 or 2x2/0	2x4/0	2x4/0
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Input Bypass Line 3Ph + N + PE 277/480V 60Hz

Branch-OCP device size (A)	250	325	400
Phase and neutral cond. Size (kcmil/Awg)	300 or 2x2/0	2x4/0	2x4/0

Output 3Ph + N 277/480V 60Hz

Branch-OCP device size (A)	300	350	450
Phase and neutral cond. Size (kcmil/Awg)	300 or 2x2/0	2x4/0	2x4/0

**Battery DC Input**

Branch-OCP device size (A) *	400	500	600
Polarities + and - conductors (Kcmil/Awg)	2x4/0	2x300	3x4/0 or 4x2/0

\*If "Riello BBX 1900 480V UL L8 3U" battery cabinets are provided, 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 UPS Cabinet.



EDIT. F.MASTROPASQUA	DATA: 19 / 05 / 2020	VARIATION:ADDED NOTE PAGE 8-10	DRAW. No	REV.
CONT. F.MASTROPASQUA	DATA: 19 / 05 / 2020	...	0MLMHTM16RUENIC	01
APPR. F. Amodeo	DATA: 19 / 05 / 2020	...	PAG. 1	DI 10
REPLACE: 0MLMHTM16RUENIC_00	Scala: 1:20	Peso/Weight: 3.60 Kg		

NOTE: ... TITLE: MAN MHT UL 160-250 DRW EN ...

CART ISO\_A3