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1. Overview and Applicable Models

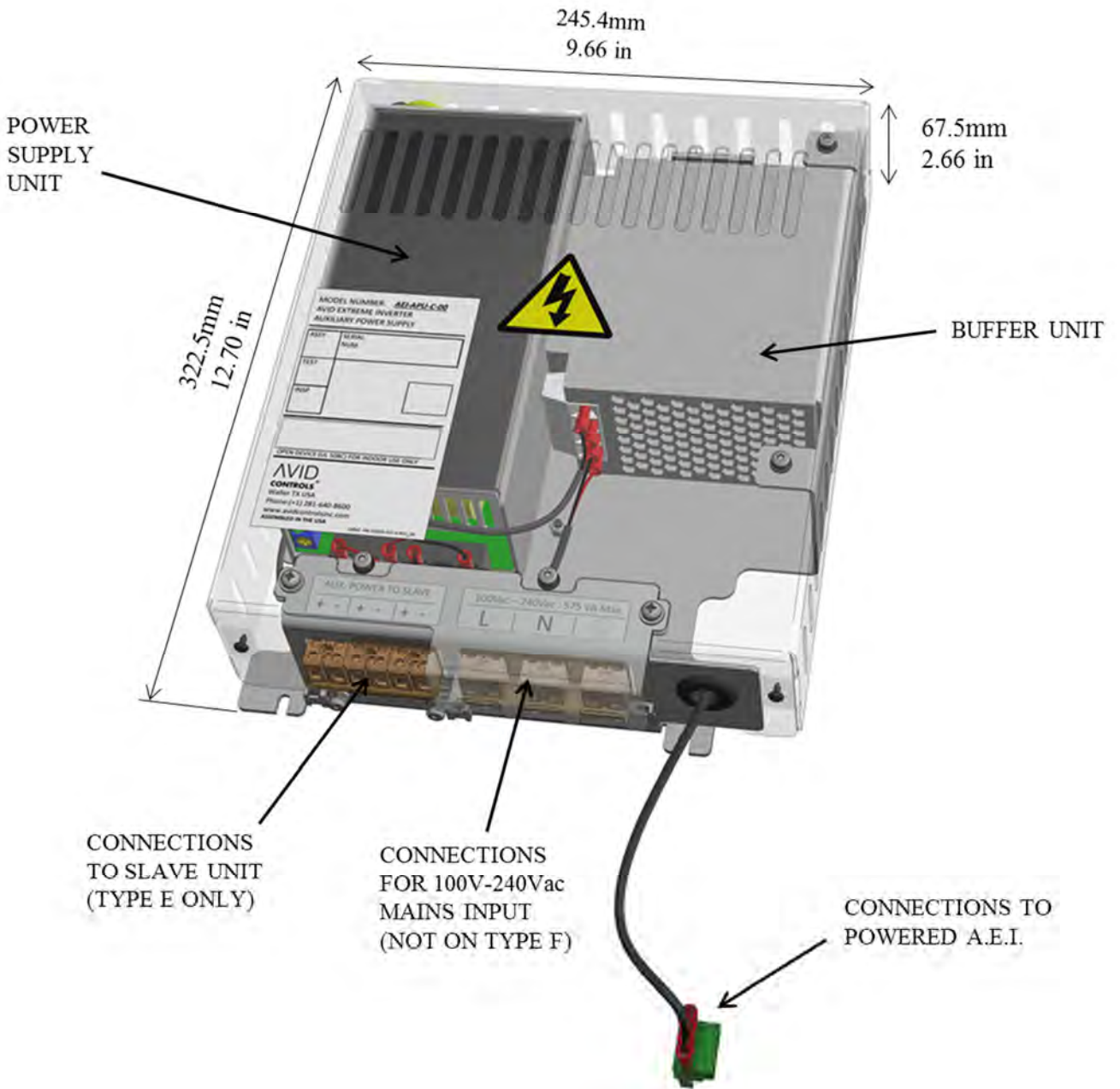
- Avid Extreme Inverter modules (*AEI's*) require a 24V auxiliary supply – the rating of which varies according to model and details are provided in the appropriate data sheets.
- Avid *Auxiliary Power Units (AEI-APU's)* provide this supply from a 100V-240Vac control supply, by packaging high quality off-the-shelf components in an assembly that is compatible with mechanical mounting directly to the inverter module and is pre-fitted with the necessary connector to the AEI's.
- This Data Sheet does not duplicate information regarding the components (Power Supply and Buffer Unit) – instead we provide links to manufacturer's data for these components.
- The following table lists the specific models of APU described in this Data Sheet:

Model Number	Where Used	Attributes
AEI-APU-D-00	Used to power a single AEI550A, AEI900L, AEI1000L, AEI1250L or AEI1400L	<ul style="list-style-type: none"> • High rating power supply unit • Buffer unit
AEI-APU-E-00	Used as a Master APU to power up to four AEI550A, AEI900L or AEI1000L modules when combined with AEI-APU-F Slave APU's. May also be used where -D version is used.	<ul style="list-style-type: none"> • High rating power supply unit • Buffer unit • Auxiliary 24V outputs connect to Slave APU's
AEI-APU-F-00	Used as a Slave APU to buffer the supply for each AEI module connected to a Master APU unit.	<ul style="list-style-type: none"> • Buffer unit only • Input is 24VDC from Master APU

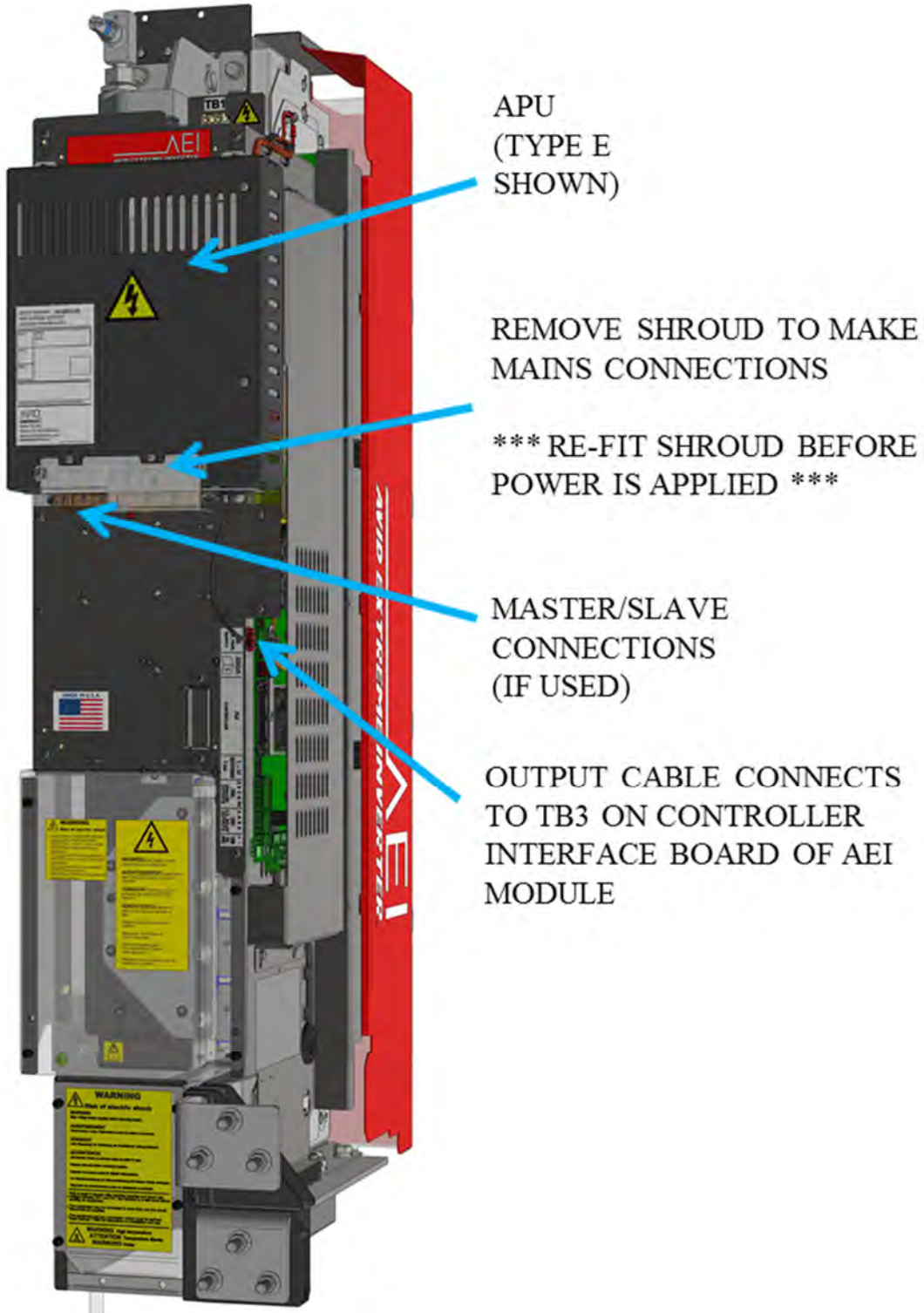
*: The “-00” at the end of the APU Model Number indicates the compatibility of the APU designs. The 00 value indicates that the APU's have no design revisions that create compatibility issues between revisions.

2. Mechanical

- The following figure shows the general mechanical layout and overall dimensions of the unit (cover is shown as clear for clarity):



3. Fitting to Inverter Unit

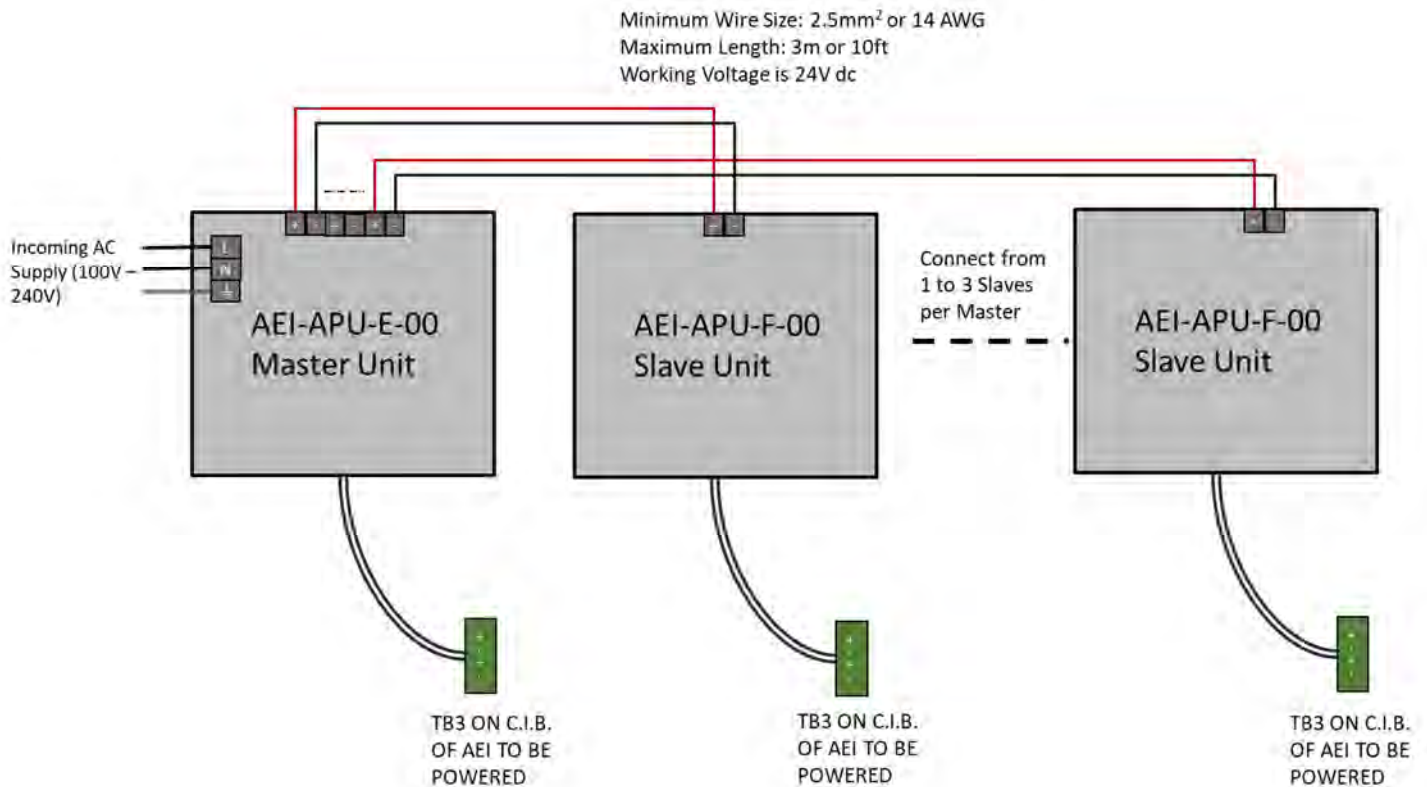


4. Connection of Incoming Supply

- The incoming single-phase AC supply voltage must be in the range 100V to 240V and be able to supply a maximum of 575 VA of power.
- Two connections are provided for each of L, N and Earth/Ground to allow for easy chaining of multiple APU's – either terminal may be used for “in” and “out” in each case.

5. Connecting Master (Model -E) and Slave (Model -F) Units

- For systems using multiple of the smaller AEI modules (AEI550A to AEI1000L), the high-power power supply used in model -D and -E APU's has ample rating to supply up to four AEI modules.
- In this case, only a buffer unit (APU model -F) is needed on each of the additional units.
- These units are connected like this:



- Do not use MASTER/SLAVE arrangement for AEI1250L or higher rated unit – use an AEI-APU-D unit for each inverter.

6. Main Component List

Item	Manufacturer	Manufacturer Part Number	Complete Manufacturer's Data
Power Supply Unit	Mean Well	HRP-600-24CC	www.meanwell.com and search for HRP-600 or go directly to https://www.meanwell.com/productPdf.aspx?i=471
Buffer Option 1	Phoenix Contact	2866213	www.phoenixcontact.com and search for 2866213
Buffer Option 2	PULS Power	UF20.241	www.pulsepower.com and search for UF20.241 or go directly to https://www.pulspower.com/products/show/product/detail/uf20241/
Buffer Option 3	Phoenix Contact	2907913	www.phoenixcontact.com and search for 2907913

7. Document Revision History

Rev.	Date	Author	Changes
00	July 2 2019	G. Pace	Document created
01	Sept 2 2020	G. Pace	Format changed