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1. Applicable Models

- This document provides data and specifications for all Avid AEI-UPGR-CPT-XX Models.

2. Safety Instructions

- Care has been taken with the design of this product to ensure that it is safe. However, in common with all products of this type, misuse can result in injury or death. Therefore, it is very important that the instructions in this Data Sheet are observed during transportation, commissioning, operation, maintenance and disposal.
- Local safety laws and regulations must always be observed.
- Installation and maintenance on this equipment must only be carried out by trained and qualified individuals.
- The product is a component designed for incorporation in installations, apparatus and machines.
- The product must not be used as a single item safety system. In applications where maloperation of the product could cause danger, additional means must be used to prevent danger to persons.
- Product approvals and certifications will be invalidated if the product is transported, used or stored outside its ratings or if the instructions in this Data Sheet are not observed.
- **This equipment is heavy and should be handled accordingly.**
- This equipment or any part of the equipment should be disposed of in accordance with the laws of the country of use.

3. Specification

3.1 Electrical

Specification	<i>Value</i>
Input Voltage	480/600/690Vac, tap selected 50/60 Hz
Over Voltage at Input	+15% of Nominal Continuous +20% of Nominal for 60s
Output Voltage	175Vac, +/- 3% at Nominal Input NEUTRAL is grounded to enclosure
Maximum Output Current	11.4 A
Typical Input Current	4.17 A @ 480V 3.33 A @ 600V 2.90 A @ 690V
Isolation Test Voltage, Primary to Secondary and Ground	3.8 kV DC

3.2 Environmental

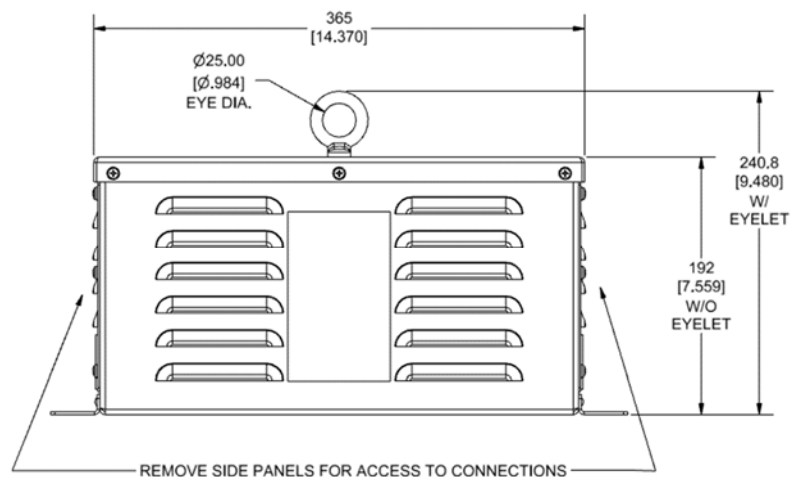
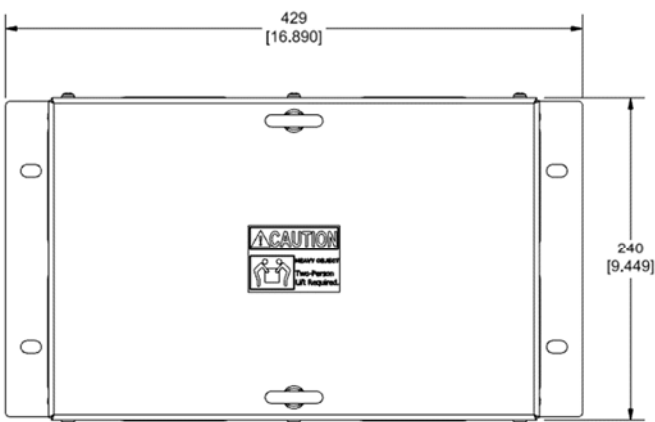
Specification	<i>Value</i>
<u>Operating</u>	
Ambient air temperature range	0 to 50°C (32°F to 122°F)
Relative humidity	5 to 95 % (non-condensing)
Maximum Heat to Ambient	200 W
Altitude	Normal operating altitude up to 1000 m above sea level. From 1000 m (3280 ft) to a maximum of 2000 m (6551 ft) derate by 7.3% per 1000 m (3280 ft).
Atmosphere	Pollution Degree 2 (IEC 61800-5-1 and IEC 60664-1) i.e. clean, free from dust, condensation and conductive or corrosive gases.
Atmospheric chemicals (max)	15 ppm H ₂ S 25 ppm NO ₂ 25 ppm SO ₂
Enclosure Ingress Protection	IP21 when fitted in supplied enclosure with suitable cable glands. Unit must be mounted upright i.e. louvres at bottom for IP21.
<u>Storage</u>	
Temperature range	-25°C to +55°C (-13°F to 131°F)
Relative humidity	5 to 95 % (non-condensing)
<u>Transport</u>	
Temperature range	-25°C to +70°C (-13°F to 158°F)
Relative humidity	≤ 95 % (non-condensing)
Altitude	Will withstand air transport

3.3 Mechanical

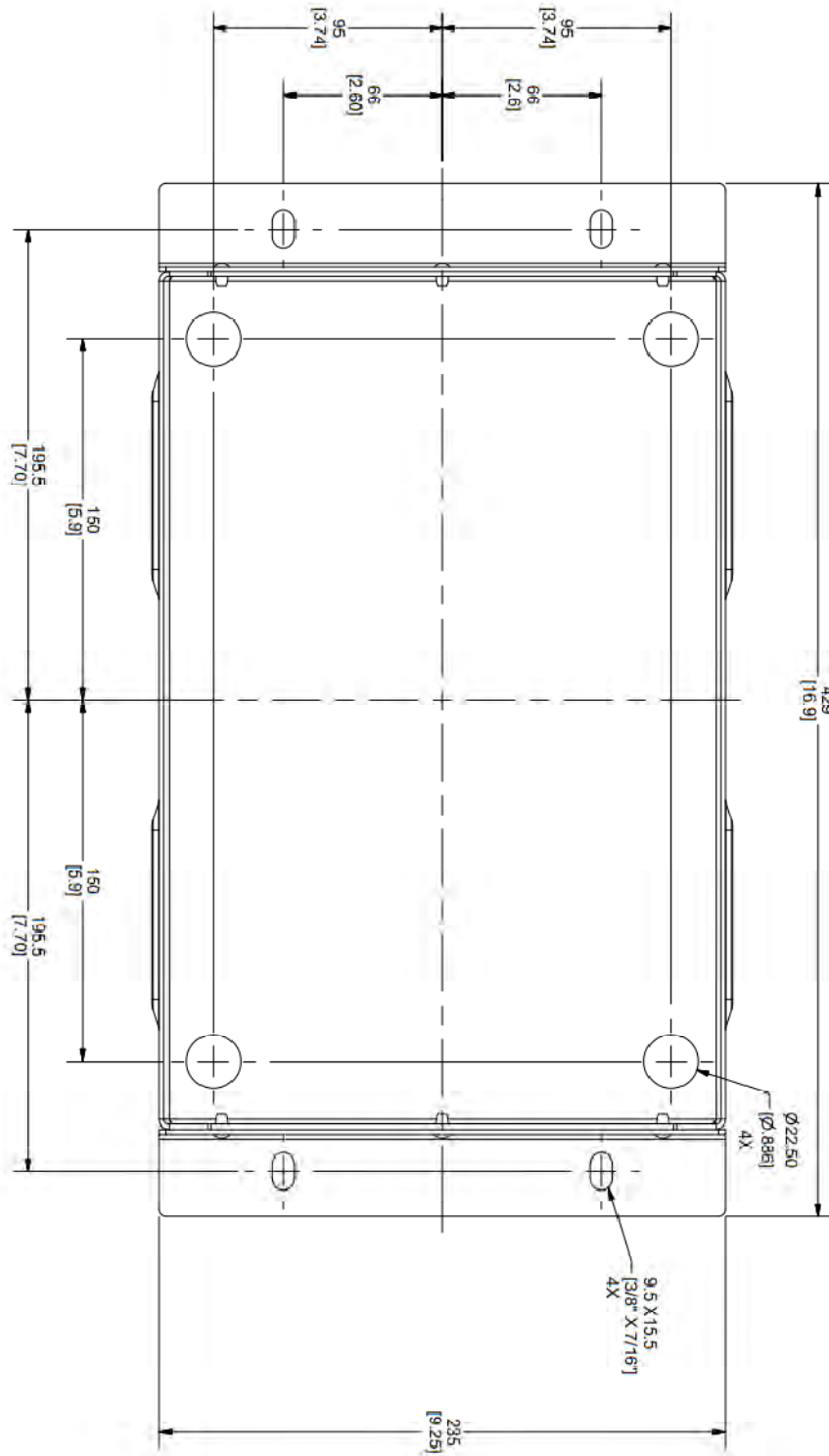
3.3.1 General

Specification	<i>Value</i>
Weight	34.5 Kg / 76 lb.
Dimensions	429 mm (L) x 239 mm (W) x 191.5 mm (H) 17.20 ” (L) x 9.41 ” (W) x 7.54 ” (H)
Mounting	May be mounted using cable glands or using 4 x 6.35mm slotted mounting holes See section 0
Ingress Protection	IP21
Cable Access	Bottom panel, 4 x 22.5mm holes for Thomas & Betts 2921 Cable Gland or equivalent
Internal Access	Removable Side Panels

3.3.2 Dimensions




3.3.3 Mounting and Cable Access Hole Locations



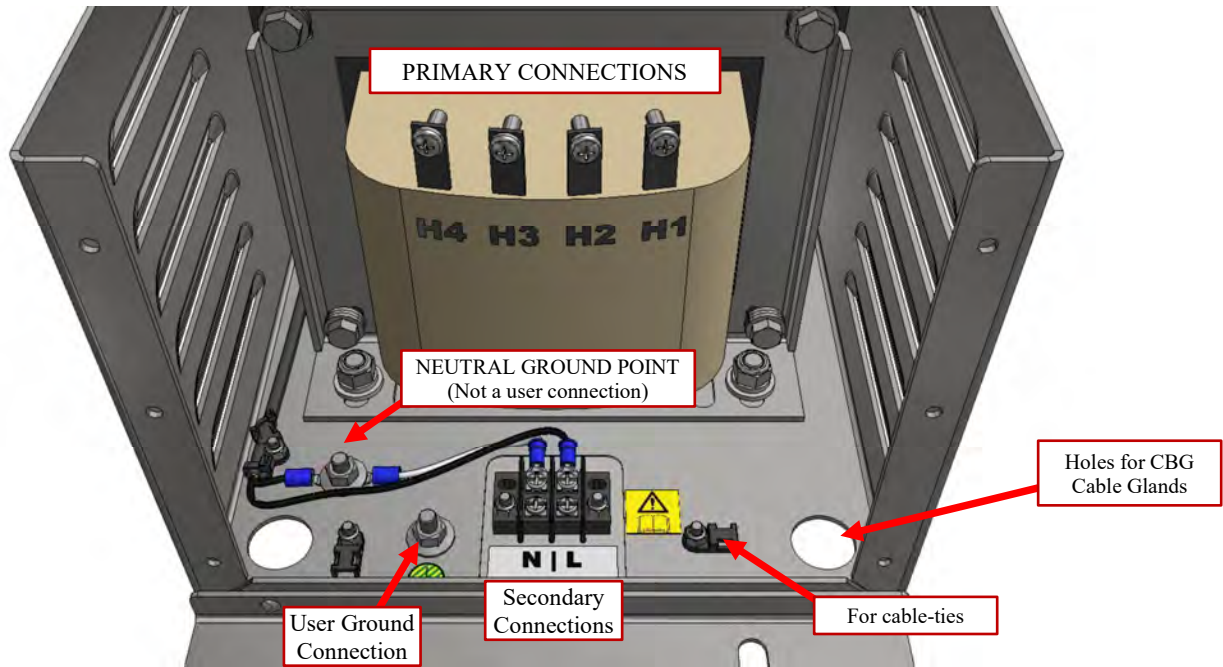
4. Input Supply Fuses

- The primary supply conductors must be protected by fuses of suitable current and voltage rating.
- Avid recommends MERSEN Ultra-Safe Fuse Holders (e.g. US14 or US22) and associated MERSEN G Series ceramic fuses to IEC 60269-1 & 2.

5. Connections

Connection	<i>Details</i>
Primary Voltage Connections	Direct to transformer as follows: 480V: H1 to H2 600V: H1 to H3 690V: H1 to H4 Use M5 Torx head screws provided External fuses must be included in primary circuit.
Secondary Connections	Live (175V): L Terminal Neutral (Grounded): N Terminal Use Captive Screws in Terminal Block (provided)
Ground Connection	M6 Stud with nut provided
Cable Access	4 x 22.5mm holes provided for Thomas & Betts 2921 Cable Gland or equivalent: <div style="text-align: center;">  </div>

- The locations of connections are shown (lid removed in this picture to aid visibility):



High Voltages

Replace all covers, shrouds and close all doors before energizing the equipment.
Connect this equipment to ground (earth) using the ground terminal provided.
The minimum size of the protective conductor must be in accordance with local safety regulations.



6. Document Revision History

Rev.	Date	Author	Changes
00	Dec 24 2019	G. Pace	Document created
01	Apr 10 2020	G. Pace	Cable gland hardware is not provided
02	Sept 20 2022	Z. Gordon	Updated illustrations to show lifting eyelets