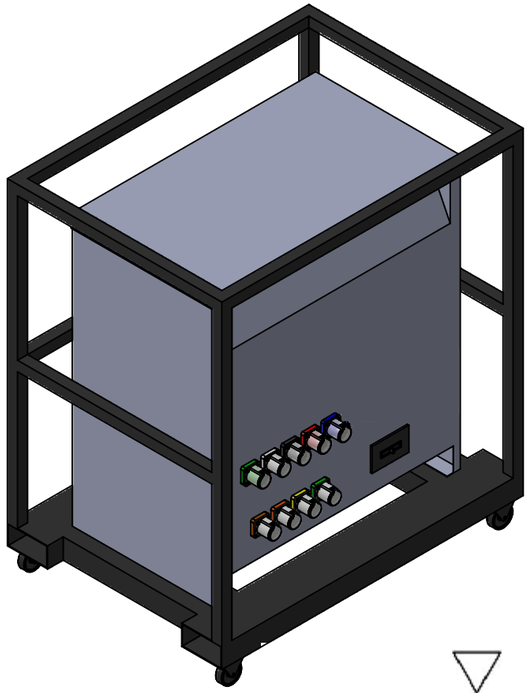
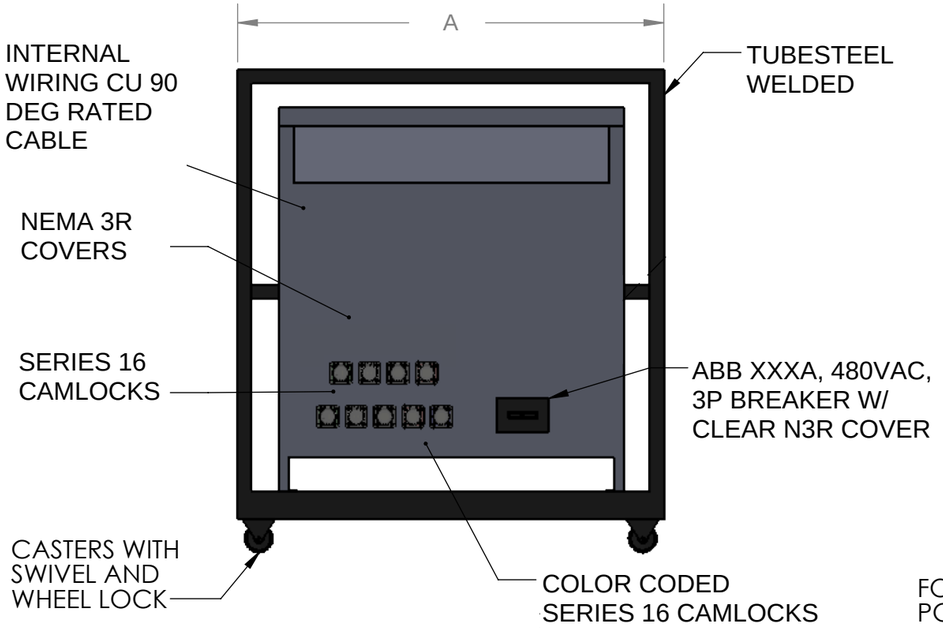
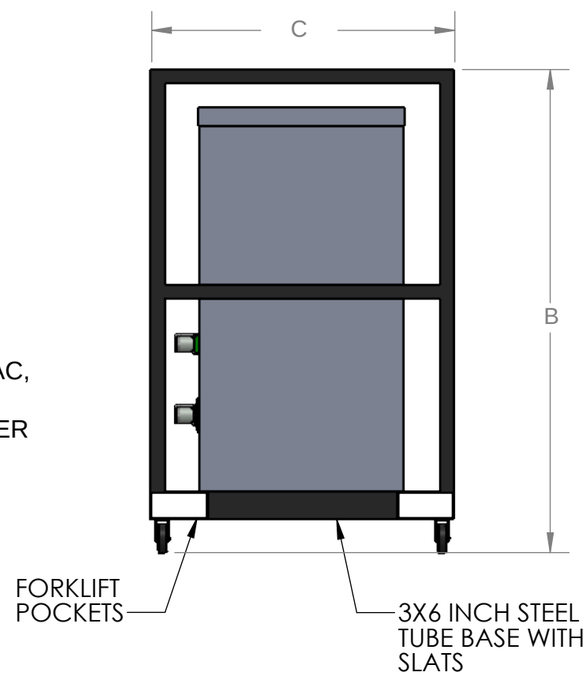
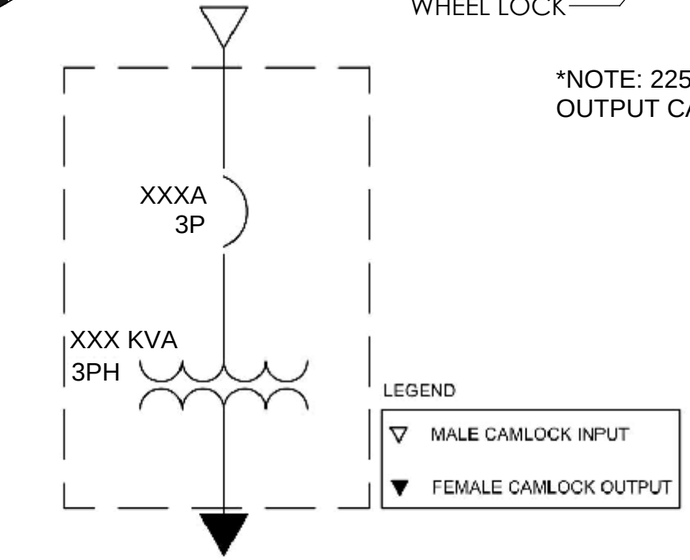






*NOTE: 225 & 300 KVA UNITS HAVE (2) SETS OUTPUT CAMLOCKS



ONE-LINE DIAGRAM

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	RC	7-09-18
	CHECKED	JT	7-19-18
	ENG APPR.	JT	7-19-18
	MFG APPR.	JT	7-27-18
	Q.A.	JD	8-15-18
INTERPRET GEOMETRIC TOLERANCING PER:			
MATERIAL			
FINISH			
DO NOT SCALE DRAWING			

POWER ASSEMBLIES
INNOVATIVE POWER SOLUTIONS

TITLE:
TRANSFORMER DISTRIBUTION UNIT

SIZE	DWG. NO.	REV
B	TDU-XPXXXXX3R-X	

SCALE: 1:16 | WEIGHT: | SHEET 1 OF 2

No.	Part Number	PHASE	KVA	TEMP RISE	PRI VOLTAGE	PRI AMPS	OL PROTECT	SEC VOLTAGE	SEC AMPS	FRAME?	NEMA	WIDTH (A)	HEIGHT (B)	DEPTH (C)	APPROX WEIGHT
1	TDU-1P100AB3R	1	100	150	480 D	207	300	240/120	415	N	3R	36.50	40.50	24.75	925
2	TDU-1P100AB3R-F	1	100	150	480 D	207	300	240/120	415	Y	3R	45.00	51.00	32.00	1425
3	TDU-1P100A03R	1	100	150	480 D	207	N/A	240/120	415	N	3R	36.50	40.50	24.75	905
4	TDU-1P100A03R-F	1	100	150	480 D	207	N/A	240/120	415	Y	3R	45.00	51.00	32.00	1405
5	TDU-3P112CB3R	3	112.5	150	480 D	135	175	208Y/120	312	N	3R	31.50	40.50	24.75	925
6	TDU-3P112CB3R-F	3	112.5	150	480 D	135	175	208Y/120	312	Y	3R	40.00	51.00	32.00	1425
7	TDU-3P112C03R	3	112.5	150	480 D	135	N/A	208Y/120	312	N	3R	31.50	40.50	24.75	905
8	TDU-3P112C03R-F	3	112.5	150	480 D	135	N/A	208Y/120	312	Y	3R	40.00	51.00	32.00	1405
9	TDU-3P150CB3R	3	150	150	480 D	180	225	208Y/120	415	N	3R	36.50	40.50	24.75	1120
10	TDU-3P150CB3R-F	3	150	150	480 D	180	225	208Y/120	415	Y	3R	45.00	51.00	32.00	1605
11	TDU-3P150C03R	3	150	150	480 D	180	N/A	208Y/120	415	N	3R	36.50	40.50	24.75	1095
12	TDU-3P150C03R-F	3	150	150	480 D	180	N/A	208Y/120	415	Y	3R	45.00	51.00	32.00	1580
13	TDU-3P225CB3R	3	225	150	480 D	270	350	208Y/120	625	N	3R	40.50	51.50	35.50	1740
14	TDU-3P225CB3R-F	3	225	150	480 D	270	350	208Y/120	625	Y	3R	50.00	61.00	43.00	2260
15	TDU-3P225C03R	3	225	150	480 D	270	N/A	208Y/120	625	N	3R	40.50	51.50	35.50	1710
16	TDU-3P225C03R-F	3	225	150	480 D	270	N/A	208Y/120	625	Y	3R	50.00	61.00	43.00	2230
17	TDU-3P300CB3R	3	300	150	480 D	360	450	208Y/120	830	N	3R	40.50	51.50	35.50	2025
18	TDU-3P300CB3R-F	3	300	150	480 D	360	450	208Y/120	830	Y	3R	50.00	61.00	43.00	2635
19	TDU-3P300C03R	3	300	150	480 D	360	N/A	208Y/120	830	N	3R	40.50	51.50	35.50	1995
20	TDU-3P300C03R-F	3	300	150	480 D	360	N/A	208Y/120	830	Y	3R	50.00	61.00	43.00	2605

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL

FINISH

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	RC	7-09-18
CHECKED	JT	7-19-18
ENG APPR.	JT	7-19-18
MFG APPR.	JT	7-27-18
Q.A.	JD	8-15-18

POWER ASSEMBLIES
INNOVATIVE POWER SOLUTIONS

TITLE:
TRANSFORMER DISTRIBUTION UNIT

SIZE	DWG. NO.	REV
B	TDU-XPXXXXX3R-X	

SCALE: 1:16 | WEIGHT: | SHEET 2 OF 2

Transformer Distribution Units Specification Document

PART 1 – GENERAL

1.1 SUMMARY
- A. Section Includes:
  1. Transformer Distribution Units Specifications
- B. Related Sections:
  1. Division 00 – Bidding Requirements
  2. Division 01 – General Requirements
  3. Section 26 00 00 – Electrical: Basic Requirements

1.2 QUALITY ASSURANCE
- A. Referenced Standards:
  1. Underwriters Laboratories, Inc.
     a. UL 1561 Listed – Dry Type General Purpose and Power Transformers

1.3 QUALIFICATIONS
- A. Transformer distribution unit manufacturer shall provide a complete factory assembled and tested unit.

1.4 SUBMITTALS
- A. Shop Drawings
  1. Product technical data:
     a. Product dimensions with front and side elevation views
     b. Enclosure type
     c. Assembly ratings including amperage, voltage, OL protection

1.5 WARRANTY
- A. Factory Warranty
  1. Transformer Distribution Unit shall be covered by a manufacturer's warranty for a period of one (1) year from date of shipment from the manufacturer.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS
- A. Power Assemblies LLC.
- B. No Substitutions

2.2 TRANSFORMER DISTRIBUTION UNITS
- A. DRY TYPE TRANSFORMER
  1. GENERAL
     a. Transforms are defined as 600V class, dry type general purpose distribution transformers

  2. CONSTRUCTION
     a. Equipment shall be new
     b. Transformer enclosure shall be NEMA Type 3R
        1. Unit shall utilize aluminum or copper windings
        2. Transformer shall be UL listed
        3. Transformer will have removable panels front and rear

c. ANSI-61 gray powder coating

3. ENCLOSURE
   a. Mount: Floor Mount
   b. Material: Steel
   c. Finish: ANSI 61 Gray
   d. Additional Requirements
      1. NEMA Type 3R
      2. UL506
      3. UL1561

4. CAMLOCKS
   a. Camlocks shall be male for input, female for output with clear snapback covers
   b. Camlocks shall be series 16 and 90 deg threaded post type
   c. Camlocks shall be color coded by standard voltage color coding
   d. Camlocks shall be provided in appropriate configuration to support required amperage

B. MOLDED CASE CIRCUIT BREAKER
   1. GENERAL
      a. The molded case circuit breaker is defined as a single enclosed 2 or 3 pole overload electrical protection device designed to protect down stream conductors.

   2. CONSTRUCTION
      a. Equipment shall be new
      b. Breaker shall include dual aluminum lugs suitable for 90 deg rated cable
      c. Breaker shall be molded case thermal magnetic overload type
      d. Breaker shall be 80% rated

C. FRAME
   1. GENERAL
      a. The frame is defined as the protective welded steel enclosure that all previous equipment is mounted.

   2. CONSTRUCTION
      a. Equipment shall be new
      b. The frame shall be constructed of 1.5'' x 1.5'' x .125'' steel
      c. The frame shall be outfitted with (2) ridged and (2) swivel casters
      d. The frame shall be coated with ArmorTek protective coating