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**MT-PML-R15-3P-DMR-2.5MVA-YE-LT-DF-A6-BB-CZ-2B4-M1**

# Austin Energy, 2500 KVA Pad Mount Transformer, 12470V Pri., 480Y/277 Sec., Mineral Oil, ONAN, CU, Green, City of Austin Spec

**Product ID: 294173**

**Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).**



**Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.**

| MT-PML-R15-3P-DMR-2.5MVA-YE-LT-DF-A6-BB-CZ-2B4-M1 Pad Mount Transformer | Ratings |
|---|---|
| **Transformer Type: Pad Mounted, Compartmental-Type** | Meets/Exceeds DOE 2016 Efficiency Ratings |
| **Transformer Configuration: Liquid Filled Pad Mounted** | Meets/Exceeds CSA Efficiency Ratings |
| **Transformer Feed Type: Loop Feed** | Complies with ANSI / IEEE C57.12.00 |
| **Operation: Step-Down Operation (Not Approved for Step-Up)** | Complies with ANSI / IEEE C57 12.28 |
| **Phase: Three Phase** | Complies with ANSI / IEEE C57 12.29 |
| **Capacity: 2.5 MVA (2500 KVA)** | Complies with ANSI / IEEE C57 12.34 |
| **Vector Group: DYN1** | Complies with ANSI / IEEE C57 12.35 |
| **Primary Voltage: 12470GrdY/7200** | Complies with ANSI / IEEE C57.12.70 |
| **Primary Voltage Switch: N/A** | Complies with ANSI / IEEE C57.12.110 |
| **Primary Voltage Class: 15 kV Class** | Complies with ANSI / IEEE C57.12.131 |
| **Primary Phasor: Grounded Wye** | Complies with ANSI / IEEE C62.11 |
| **Primary BIL: 95 KV** | Complies with ANSI / IEEE C62.22 |
| **Secondary Voltage: 480Y/277** | Complies with ANSI / IEEE 386 |
| **Secondary Voltage Class: 1.2 kV Class** | Complies with ANSI / IEEE C2 |
| **Secondary Phasor: Wye-N** | Complies with ANSI / IEEE C37.47 |
| **Secondary BIL: 30 KV** | Complies with ANSI Z535.4 |
| **Frequency: 60 Hz** | Complies with ASTM D3487 |
| **Temperature Rise: 65°C** | Complies with ASTM D6871 |
| **Insulation Rating: Class E Insulation - 120°C, 248°F** | Complies with NEMA 260-1996 |
| **Cooling Class: ONAN; Self-Cooled** | Complies with 10 CFR Part 431 |
| **Forced Air (Fans): None** | Complies with CSA C2.1-06 |
| **Tap Changer: 5-position Tap Changer** | Complies with CSA C50 |
| **Tap Qty: (2) FCAN Above Taps, (2) FCBN Below Taps** | Complies with CSA C88 |
| **Tap %: 2.5%** | Complies with CSA C88.1 |
| **Tap Changer Switch Rating: 200-Amp, 15 kV, 10kA RMS** | Complies with CSA C88-16 |

**Tap Changer Switch Location: High Voltage (HV) [Left Side] Front Compartment**
**Impedance (Typical): 5.0-7.5% Typical, Target 5.75%**
**Primary Connection Type: Dead Front**
**Primary Termination Arrangement: V Terminal Arrangement**
**Primary Termination: Externally Clamped Well Bushings w/ Removable Studs, 200A Load Break Elbows w/ Inserts**
**Primary Connection Qty: (6) Primary Connections for use w/ Elbow Connectors**
**Primary Parking Stand Qty: (6) Welded Brackets for Installing Accessory Parking Stand Bushings**
**Primary Bushing Rating: 15 kV Class, 95 kV BIL, 200A, Load Break, IEEE 386 Color Red**
**Primary Neutral Connection: N/A**
**Primary Surge Arrestors: (3) High Voltage Elbow Surge Arrestors, Included**
**Primary Surge Arrestor Voltage Rating: 18 kV Class Elbow Arrestor**
**Primary Surge Arrestor MCOV Rating: 15.3 kVrms**
**Primary Over Current Protection (OCP): C05CB Curve, 250-Amp Bayonet Expulsion Fuse, in series w/ (2) 125-Amp (Wired in Parallel), In-Tank Oil Immersed Partial-Range Current-Limiting Fuse**
**Primary Over Current Protection Method: Fused, Oil-Immersed**
**Primary Over Current Protection Holder: Bayonet Fuse Holder w/ Flapper Valve and External Drip Shield**
**Primary Grounding Provisions: (1) NEMA Ground Bar attached to tank via (2) Welded Ground Bungs in HV Cabinet**
**Secondary Connection Type: Live Front**
**Secondary Termination Arrangement: Staggered Terminal Arrangement**
**Secondary Connections: NEMA Spade Terminals, 10-Hole Spade, Externally Clamped, Accepts up to (6) Double Lug connections with (3) cables per side of Spade connector**
**Secondary Connection Qty: (4) Externally Clamped One-Piece Epoxy Bushings Copper Threaded Studs**
**Secondary Connection Supports: Phenolic Spade End Supports**
**Secondary Over Current Protection (OCP): N/A**
**Secondary Neutral Connection: Secondary X2 Neutral Grounded to Tank via 1/2”-13 UNC Tapped Hole, 7/16” Deep Bung & Copper Ground Strap**
**Secondary Grounding Provisions: (1) NEMA Ground Bar attached to tank via (2) Welded Ground Bungs in LV Cabinet**
**Metering Current Transformer (CT): N/A**
**Metering Panel: N/A**
**Auxiliary Control Panel : N/A**
**Load Break Switch: 4-Position Load Break Switch**
**Load Break Switch Qty: (1)**
**Load Break Switch Rating: 200-Amp, 15 kV, 10kA RMS**
**Load Break Switch Location: High Voltage (HV) Front Compartment**
**Efficiency Standard(s): Meets DOE 2016 Standards, Meets CSA Standards Meets ANSI/IEEE Standards**
**K-Factor Rating (Harmonic Mitigation): K-1 (Standard)**
**Pulse Drive Rating: N/A**
**Insulation Fluid: Mineral Oil - Non PCB Fluid**
**Fluid (Oil) Capacity*: 310 Gallons**
**Fluid (Oil) Weight*: 2,410 lb**
**Liquid Level Indicator: Analog Dial Gauge, Located in HV Cabinet**
**Temperature Indicator: Analog Dial Gauge, Located in HV Cabinet**
**Pressure/Vacuum Indicator: Analog Dial Gauge, Located in LV Cabinet**
**Pressure Relief Device: Automatic Action, Combination Fault Indicator & Pressure Relif Device, (comparable to IFD Corporation part number IFD-ORCA-10PSI-aA), Resettable, Installed on Tank Face Inside HV Cabinet**
**Fault Indicator: Combination Fault Indicator & Pressure Relif Device; External Fault Indicator Light Mounting Provisions (Light not included)**
**Gas Sampler Valve: Included, Schrader Valve, Located in HV Cabinet**
**Fill Valve: 1" NPT Port w/ Removable Bolt Plug**
**Fill Valve Location: Front Compartment, HV Cabinet**
**Drain Valve: 1" NPT Port w/ 5/8" NPT Sampler Valve**
**Drain Valve Location: Front Compartment, HV Cabinet**
**Winding Material: Copper**
**Ambient Temperature Rating: 40°C**
**Ambient Operating Temperature Range: -40°C to +40°C (-50°F to +104°F)**
**Sound Level: 62 dBA**

**Elevation (Altitude): 3300ft (1000 meters) Above Sea Level**

**Core Material: Grain Oriented Steel**
**Tank Material: Coated Steel**
**Cabinet Material: Coated Steel**
**Base Platform Material: Coated Steel**

Complies with CSA C227.4
Complies with CSA C227.5
Complies with CSA C802-3
Complies with CSA C802.1

**Features**

Pentahead Bolt Entry Assembly

High-Fire Point Insulating Fluid

Non-PCB Insulating Fluid
Tamper Proof Housing
Hinged Front Compartment Doors, Pad Lockable
NEMA 3R Wiring Compartment

Hot Stick Included, HV Door Mount

**Efficiency %: 99.40%**

*Based on transformer operating at 50% of nameplate base kVA.*

**Load Losses Based on 85°C Reference Temp.**

**No Load Loss (in watts): +/- 2,700W**

**Full Load Loss (in watts) at 100%: +/- 15,500W**

**Total Load Loss (in watts) at 100%: +/- 18,200W**

**Total Losses at 55°C LL Temp.& 20°C NL Temp.**

**Total Load Loss (in watts) at 50%: +/- 6,408W**

***Note: Losses offered are typical only, not guaranteed***

**Labeling:**

“Three in One Warning Sign," "SIZE kVA,"
"City ID Number" "Secondary Voltage"
"Type of XFMR" "Circuit Number"
"Transformer Number" "CLEARANCE REQUIRED,"
and "NO PCBs" labels per Austin Energy #1000-14A

External Barcode Label
Internal Busing & Accessory Labeling
Stainless Steel Riveted Nameplate

**Factory Tests:**

Winding Resistance Test
Insulation Resistance Test
Voltage Ratio Error Test

Short-circuit Impedance Test

No-load Loss (Wattage) Test

Load Loss (Wattage) Test
Induced Voltage Withstand Test
Separate Source Voltage Withstand Test
Pressure Integrity Test Test

**Shipping:**

Shipped on pallet on open flatbed
Palletized on Wooden Pallet w/ Skid Pockets
Pallet Skid Facing Outward Sides of Truck
***Note: Crated shipping in lieu of palletizing can be done upon request for an additional fee***

**Cross for Austin Energy Product**
**Complies with Specification E-649**
Fault Indicator Light Provisions

**Portability: Lifting lugs, provisions for jacking under base, w/ base construction suitable for using rollers or skidding**
**Housing Type: Compartmental Air-Filled Cabinet w/ Locking Doors, HV Compartment Left, LV Compartment Right, Steel Barrier Separation, HV Door Spring-Loaded Release Pin in LV Compartment**
**Enclosure Rating: NEMA 3R Weatherproof Wiring Cabinet, Sealed Tank**
**Seismic Rating: Yes**
**Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating**
**Finish Color: Munsell™ 7.0 GY 3.29/1.5 Bell Green**
**Mounting: Pad Mounted**
**Conduit Opening: Bottom Feed Underground Entry/Exit**
**HV Cabinet Dimensions*: 40"-W x 26"-D**
**LV Cabinet Dimensions*: 30"-W x 26"-D**
**HV Compartment Base Wireway Dimensions*: 31"-W x 18"-D for (2) 6" Conduit per AE Drawing**
**LV Compartment Base Wireway Dimensions*: 24"-W x 18"-D for (10) 4", (1) 2", & (2) 1-1/4" Conduit per AE Drawing**
**MV/LV Compartment Cabinet Depth*: 24"-D**
**Tank Cover Access Handhole: N/A**
**Dimensions*: 75"-W x 75"-D x 73"-H**
**Dry Weight (w/o Oil)*: 4,918 lb**
**Total Weight (Liquid Filled)*: 11,534 lb**
*Please note that numbers are approximate and subject to change

Resettable Fault Indicator / Pressure Relief Device

**Special Orders - Special Requirements**
Contact us for special requirements
**Toll Free: 1-800-369-6671**
**Intl: 1-903-270-1187**
**Fax: 1-903-498-3364**
**E-mail: sales@larsonelectronics.com**

**The MT-PML-R15-3P-DMR-2.5MVA-YE-LT-DF-A6-BB-CZ-2B4-M1 Industrial Pad Mount Transformer from Larson Electronics is equivilant to Austin Energy Products. This unit complies with the City of Austin Electric Utility Department (Austin Energy) Specification E-649 for TRANSFORMER, DIST, URD, 3PH, 75 2500KVA, 15KV**

***PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS****

**Transformer Design Features:**

12470V Delta High Voltage
95 kV HV BIL
480Y/277 Low Voltage
30 kV LV BIL
65°C Temp rise (85°C Hotspot)
HV lead length shall be sufficient to allow for 3.0" withdrawal of the bushing well
200A Primary Well Bushings w/ Removable Well Inserts
Primary Bay-O-Net type draw out the fuse in a flapper valve holder & removable drip shield (non metallic), sidewall-mount bayonet draw-out fuse holder assembly with flapper seal.
Primary Dual Sensing dual sensing expulsion fuse in series w/ oil-immersed current Limiting Fuses. Fuses shall be designed so that the fuses can be removed by using a hot stick
HV/LV Barrier
Epoxy Secondary Bushings w/ Copper Studs
6-Hole H-Space Double Row Spade Secondary Bushings w/ Phenolic End Supports
4-Position Load Break Switch. T-Blade Switch, 200A rated, 10,000 amps symmetrical.
Mineral Oil, Non-PCBs Containing Cooling Fluid, ONAN Cooling Class
Padlock Provisions & Pentahead Bolt Lock
Oil Fill Port w/ Plug, in HV compartment
Oil Drain Valve w/ sampling device, in HV compartment
Analog Liquid Level Gauge, in HV compartment
Analog Temperature Indicator Gauge, in HV compartment
Automatic action pressure relief device, automatically venting 35 scfm at 15 psig, located in LV compartment
19/64” hole in the upper left-hand corner 10” from the top and 10” from the left-hand side for customer provided fault indicator light w/ factory installed plug
Resettable Fault Indicator & Pressure Relief Device (comparable to IFD Corporation part number IFD-ORCA-10PSI-aA)
Removable Base Sill

Stainless Steel Hinges & Pins
Transformer to fit on 120" x 120" Concrete Pad
Minumum 31"-W x 18"-D Primary (HV) Wireway Hole for (2) 6" Conduit - Includes Removable Bolt-On Base Plate w/ Knockout Holes
Minimum 24"-W x 18"-D Secondary (LV) Wireway Cutout for (10) 10" Conduit, plus (1) 2" Conduit for contraction look, and (2) 1-1/4" Conduit - Includes Removable Bolt-On Base Plate w/ Knockout Holes
Munsell Number 7GY 3.29/1.5 pad-mount green finish
Nameplate w/ Barcode per E-649
"Three in One Warning Sign," "SIZE kVA," "City ID Number" "Secondary Voltage" "Type of XFMR" "Circuit Number" "Transformer Number" "CLEARANCE REQUIRED," and "NO PCBs" labels per Austin Energy #1000-14A
**Applications:** General purposes, industrial sites, electrical rooms, underground vaults, manufacturing facilities, steel plants, offshore, commercial, military, processing plants, electric power distribution, utilities, public locations and more. Larson Electronics is a manufacturer and as such can build stationary and portable transformer systems to your specifications. Although we carry several models of power distribution transformer systems, we can deliver custom ordered units almost as quickly as our prebuilt units. If this model does not meet your needs, please contact us at 1-800-369-6671 or sales@larsonelectronics.com to discuss your specific requirements.

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# Frequently Asked Questions (FAQ)

**Q. What type of transformers does Larson Electronics offer?**

A. Larson Electronics offered dry type transformers and liquid filled transformers. For liquid filled transformers, Larson Electronics' offers overhead distribution transformers (utility pole mount), pad mounted distribution transformers (mounts to a concrete pad), pad mounted power transformers, underground submersible distribution transformers, and substation transformers.

**Q. What are the main benefits of a liquid filled transformer?**

A. Liquid filled transformers have higher energy efficiency, durability, short circuit strength, low sound level, lower maintenance costs, and longer useful life expectancy compared to dry type transformers.

**Q. What types of transformer liquids does Larson Electronics use?**

A. Larson Electronics offered mineral oil fluid (ONAN) and biodegradable fluid (KNAN). On request we can provide brand name FR3 fluid or other brand name fluids for additional cost and lead time. All fluids offered by Larson Electronics are non-PCB containing fluids.

**Q. What is the difference between mineral oil (ONAN) and biodegradable fluid (KNAN)?**

A. Mineral oil has a flash point of 147-165°C. Biodegradable insulation fluids have a higher flash point up to 350°C. Using biodegradable fluids reduce the risk of potential fire due to the transformer overheating. Utilizing biodegradable fluids extends the lifespan on the transformer due to better insulation, higher flash point, better moisture resistance, and higher maximum voltage breakdown points over mineral oils.

**Q. What is the difference between FR3 fluid and biodegradable fluid?**

A. Envirotemp FR3 is a brand name of biodegradable ester oils made by Cargill. Cargill is not the only manufacturer of biodegradable ester fluids used for cooling liquid filled transformers. Larson Electronics stocks RAPO biodegradable fluid that exceeds testing for ASTM D6871. Cargill Envirotemp FR3 can be used in substitution of the standard biodegradable fluid. This substitution will increase cost and lead times.

**Q. Do Larson Electronics transformers contain PCB?**

A. All dry-type and liquid filled transformers manufactured by Larson Electronics are PCB (polychlorinated biphenyl) free at the time of shipment. Mixtures of polychlorinated biphenyls (PCB's) were banned commercially for use as transformers cooling fluids in 1977 due to being toxic, bio-accumulative, not at all biodegradable, and difficult to dispose of safely. None of Larson Electronics transformers contain PCB and only use PCB-free fluids.

**Q. What are the transformer ratings?**

A. IEEE Std C57.12.20 (Overhead Type), IEEE Std C57.12.34 (Three-Phase Pad-Mounted Compartmental), IEEE Std C57.12.38 (Single-Phase Pad-Mounted), IEEE Std C57.12.36 (Distribution Substation Transformers). For more detailed list of standards, please see the ASTM Certificate 1 link.

**Q. Is this transformer UL Listed? Is this transformer CSA Listed?**

A. By default, no. The majority of medium voltage transformer installations do not require certification by a Nationally Recognized Testing Laboratory (NRTL) unless being installed inside a building. Medium voltage equipment is built to and complies to ANSI, ASTM, DOE, IEEE, and NETA standards. UL is one of multiple NRTLs per OSHA certification for testing

facilities for USA standards. CSA is one of multiple NRTLs per Canada certification standards. For an additional fee, we can submit your order for NRTL testing after completion of build. This testing service is per order, requires payment of testing fees, and will increase lead time.

**Q. What is the lifespan of a transformer?**

A. The average lifespan of a liquid filled transformer is 25 years. Many transformers will survive past the 25 year mark and are still in service for up to 35 years.

**Q. What is the difference between Loop Feed and Radial Feed?**

A. Radial feed Transformers will have three high voltage bushings (H1, H2, and H3). There is one bushing for each phase to allow for the incoming high voltage cables. On Wye and Grounded Wye connected Transformers, there will also be an H0 bushing. Loop feed Transformers will have six high voltage bushings (H1A, H2A, H3A, H1B, H2B, and H3B). There are two bushings for each phase. This allows the customer to connect all of their Transformers in a loop configuration. It will also allow the customer to bring two feeds to the Transformer. A four position switch can be used to switch between the A feed and the B feed.

**Q. What is the difference between Dead Front and Live Front?**

A. Live-front: The voltage-carrying parts are exposed. Live-front terminations have high voltage connectors, arresters, or fuses are exposed to the operator after cabinet has been opened. Dead-front: Often referred to as dead-front bushings. Safety is enhanced as there are no current-carrying parts exposed to the operator. For overhead distribution transformers and underground submersible transformers, live front is common. For pad mount transformers, the primary is typically dead front and the secondary is live front. Protection barriers can be added to live front pad mounted transformers.

**Q. What is the difference between copper and aluminum windings inside the transformer?**

A. Transformers wound with aluminum or copper wire have similar losses and performance. The choice of using copper or aluminum windings depends upon the application and the individual preferences. The type of winding material does not affect the transformer's reliability. A transformer's life is defined by the life of its insulation system.

**Q. How many BTU's of heat does a transformer generate?**

A. The heat a transformer generates is dependent upon the transformer losses. To determine air conditioning requirements multiply the sum of the full load losses (obtained from factory or test report) of all transformers in the room by 3.41 to obtain the BTUs/hour. For example: A transformer with losses of 2000 watts will generate 6820 BTUs/hour.

**Q. Do you have to ground this transformer?**

A. In most cases the enclosure of the transformer is grounded for safety reasons. However, a transformer will function properly without being grounded. Be sure to research all grounding requirements for your specific application against the NETA and NEC as well as any local electrical codes.

**Q. I plan to utilize this transformer for a solar or green energy related project to back feed the grid, can this unit be reverse fed for providing electric back to the utility grid?**

A. We offer a line of transformers for step up / step down operation that is designed for solar and renewable energy applications. Larson Electronics utilizes a R designation of R3 and R4 for these applications. Our standard R2 and R7 models are not designed for step up operation for reverse feeding and should not be utilized for these applications.

**Q. What types of transformer protection are available?**

A. For over-current protection, Larson Electronics offers Fuses, breakers and interrupters. For over-voltage protection, Larson Electronics offers arresters. Larson Electronics can provide both Primary and Secondary protection equipment.

**Q. What primary connectors are included with this transformer?**

A. We offer elbow connectors standard for dead front primary transformers. 200-amp load break well bushings with inserts and elbows are standard up to 500 KVA. 600-amp dead break integral bushings and elbows are standard for 500 KVA through 3750 KVA. 900 amp dead break integral bushings and elbows are standard for units above 3750 KVA. We can change the standard bushing to a higher or lower amperage upon request providing the primary amperage does not exceed the amperage rating of the bushing.

**Q. Are primary elbows included with purchase?**

A. Primary mating elbows that match the bushings the transformer is configured with are included with purchase for standard units.

**Q. What type of surge arrestors are included?**

A. Elbow surge arrestors are included with standard builds if specified that surge arrestors are included (check specifications). Tank wall mounted surge arrestors and under oil can be configured upon request.

**Q. What secondary connectors are included?**

A. NEMA spade connectors are included standard for live front secondary connections, and elbow connectors are included standard for dead front secondary connections. Jam nuts on secondary side or waterproof connectors on secondary side are optional. The specific hole quantity and hole spacing are referenced on preliminary drawings and in the specifications.

**Q. What accessories are included?**

A. Temperature gauge, oil level gauge, pressure/vacuum gauge, tap changer, load break switch, surge arrestors, fill plug, and drain plug are included standard. Gauges can be offered with auxiliary dry form contacts on request. Please review specifications for all accessories included with this specific unit.

**Q. What is required for mounting this transformer?**

A. For mounting requirements, please see the Concrete Pad document hyperlinked on the spec sheet and seen on the product page.

**Q. Does my primary and secondary voltage matter for a transformer?**

A. Yes, this matters greatly. For primary voltage, most transformers will be equipped with a tap changer for small primary voltage changes due to voltage drop for losses experienced in the transmission line. Some transformers will be equipped with dual voltage primaries with a voltage selector switch to choose which voltage to operate the transformer on. In both cases, these are designed to provide a steady output voltage. It is very important to confirm what voltage your primary voltage being delivered from the utility provider and what the required electrical voltage for the building or house is. You cannot only provide the KVA size, or the abbreviated primary voltage as there is not standardized voltage across the country and each region can be different. Once manufacturing has started, these cannot be changed.

**Q. Where is the detailed dimensional drawing for this unit?**

A. We can provide a feature drawing that shows accessories and estimated form factor. Due to the variety of options and

varying voltages, an exact dimensional drawing for the specific unit you have ordered is not available until after purchase and engineering has completed the drawing for your sales order. We do not offer completed detailed engineered drawings before purchase. The feature drawings are detailed enough for concrete pad designs and preliminary engineering site designs.

**Q. What is the warranty of this transformer?**

A. 12 months from point of connecting electrical service to the transformer or 18 months from point of ordering, whichever comes first.

**Q. Can this transformer be customized?**

A. Yes, Larson Electronics allows for customization of all transformers. Please send customization requests to sales@larsonelectronics.com. If you have an engineered specification or engineered drawings, please provide those at the time of request.

**Q. What materials do you offer?**

A. We offer coated steel and stainless steel tank and housing materials. Stainless steel options include 429 stainless and 304 stainless. For winding materials we offer aluminum and copper conductors.

**Q. What standard colors do you offer?**

A. Our standard build finish color for pad mounted transformers is Munsell™ 7GY 3.29/1.5 Pad-Mount Green. We do have other standard finishes available on request, including: Munsell™ 9GY 1.5/2.6 Canadian Green, Munsell™ 5BG 7.0/0.4 Light Grey (ANSI #70), Grey (ANSI #61), Munsell™ 10bg 6/1 Blue Grey, Munsell™ 10bg 6/1 Steel Blue, Munsell™ N 9/ Safety White, Federal Standard Desert Tan FS595B-33446, Federal Standard Eagle Feather Tan FS-595-23578, and Federal Standard Tobacco Brown FS595C-30108. If you need a color not listed here, please contact us.

**Q. What labeling is on the transformer?**

A. Standard labeling includes external stenciling of the KVA, stenciling of high and low voltages, non-PCB sticker, "Mr. Ouchy" warning label, and stainless steel riveted nameplate. Additional labeling to your specifications can be provided at request.

**Q. How come Larson Electronics is able to provide a shorter leadtime than ABB, GE, Eaton, ERMCO, Hitachi Energy, Central Moloney, Squad D, Weg and other transformer manufacturers?**

A. Larson Electronics is not constrained by a fully integrated supply chain. Many transformer manufactuers in this industry have a fully integrated supply chain system with a long and outdated process for adding new vendors for components. This prevents or adds significant delays to these companies attempting to change existing vendors in their integrated supply chain. Larson Electronics works on a flexibly supply chain system that has been perfected over many decades of vetting and scaling up or down as needed. Given the current market contraits and supply chain distruption, Larson Electronics supply chain processes has allowed Larson Electronics to continue moving forwad and provide shorter lead times.

**Q. Does this transformer comply with (insert utility provider) specifications?**

A. This unit is designed to The City of Austin (Austin Energy) Standards per Austin Energy Specification E-1581 and Drawing 1510-33. Larson Electronics utilities a dedicated R designation in the part number for specific build designs. R1-R10 are internal build designs. Utility specific builds begin at R11. If the part number contains R2, R5, R6, R7, R8, or R9 the unit may comply with a specific local utility for primary and secondary voltages but may not comply for equipment connections, included accessories, labeling, or barcoding. Units that comply with a specific utility will have reference to the utility company

that the unit complies with, and include the utility's internal part number and utility's specification standard if applicable. If you are unable to find the part number that meets your local utility specifications, please contact us and we will assist in crossing the correct unit for you.

**Q. Does this transformer comply with (insert utility provider) specifications?**

A. This unit is designed to Entergy Specifications per Entergy Standard DE03-01, Rev. 12. Larson Electronics utilities a dedicated R designation in the part number for specific build designs. R1-R10 are internal build designs. Utility specific builds begin at R11. If the part number contains R2, R5, R6, R7, R8, or R9 the unit may comply with a specific local utility for primary and secondary voltages but may not comply for equipment connections, included accessories, labeling, or barcoding. Units that comply with a specific utility will have reference to the utility company that the unit complies with, and include the utility's internal part number and utility's specification standard if applicable. If you are unable to find the part number that meets your local utility specifications, please contact us and we will assist in crossing the correct unit for you.

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**Harmonized System (HS) Code:** 85043300
**Export Control Classification Number (ECCN):** EAR99

Links (Click on the below items to view):

- ANSI Certificate 1
- Catalog Page - Product Series
- FCC Certificate (Federal Communications Commission, USA)
- Internal Component Spec Sheet 3
- Operations Manual
- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- HigResPic8
- HigResPic9
- HigResPic10
- Video1
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map