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## MT-PDT-CRC-R7-3P-DVP-100KVA-YR-A5-KZ-CZ-1Z-ZZ-Z-N3-M1

# 100 KVA Cast Resin Core Transformer, 20000V Delta Primary, 220Y/127 Wye-N Secondary, AN, Class F, W/O Fans, W/ Wheels

**Product ID: 321720**



Image: MT-PDT-CRC-R7-3P-DVP-100KVA-YR-A5-KZ-CZ-1Z-ZZ-Z-N3-M1

**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-PDT-CRC-R7-3P-DVP-100KVA-YR-A5-KZ-CZ-1Z-ZZ-Z-N3-M1 Cast Resin Core Transformer**

**Transformer Type:** Cast Resin Core Transformer (CRC)
**Transformer Configuration:** Dry Type, Ventilated
**Phase:** Three Phase
**Capacity:** 100 KVA
**Vector Group:** Dyn11
**Primary Voltage:** 20000V AC
**Primary Voltage Class:** 25 kV Class
**Primary Phasor:** Delta
**Primary BIL:** 110 KV
**Secondary Voltage:** 220Y/127
**Secondary Voltage Class:** 1.2 kV Class
**Secondary Phasor:** Wye-N
**Secondary BIL:** 30 KV
**Frequency:** 50 Hz
**Temperature Rise:** 90°C
**Cooling Class:** AN
**Forced Air (Fans):** N/A
**Insulation Class:** Class F
**Tap Changer:** 5-Position Tap changer
**Tap Qty:** (2) FCAN Above, (2) FCBN Below
**Tap %:** 2.5%
**Tap Changer Switch Location:** HV Compartment

**Ratings**

NRTL Listed for United States and Canada
Complies with ANSI / IEEE C57.12.00
Complies with ANSI / IEEE C57.12.01
Complies with ANSI / IEEE C57 12.35
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C57.12.59
Meets or Exceeds NEMA ST-20 Standards
Meets/Exceeds DOE 2016 Efficiency Ratings
Meets/Exceeds CSA Efficiency Ratings
Seismic Qualified for Earthquake Loads
NEMA 3 Indoor/Outdoor Steel Enclosure
CE Certified
RoHS Certified

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

**Load Losses at 145°C Reference Temp.**
**No Load Loss (@ $V_n$):** 2,900W
**Full Load Loss (@ 120°C):** 3,300W
**Total Load Loss:** 6,200W

**Impedance (at 120°C):** 6.0%
**Primary Connection Type:** Terminal Lugs, Suitable For 33 kV Armoured Cables
**Primary Terminal Qty:** (3) Terminals, enclosed in a cable box
**Primary Surge Arrestors:** N/A
**Primary Surge Arrestor Voltage Rating:** N/A
**Primary Surge Arrestor MCOV Rating:** N/A
**Primary Overcurrent Protection (OCP):** N/A
**Primary Overcurrent Protection Method:** N/A
**Primary Grounding Provisions:** N/A
**Secondary Connection Type:** Terminal Lugs, Suitable For 1 kV Armoured Cables
**Secondary Terminal Qty:** (4) Terminals, enclosed in a cable box
**Secondary Surge Arrestors:** N/A
**Secondary Surge Arrestor Voltage Rating:** N/A
**Secondary Surge Arrestor MCOV Rating:** N/A
**Secondary Overcurrent Protection (OCP):** N/A
**Grounding Terminals:** Included, (2)
**Metering Current Transformer (CT):** N/A
**Transient Voltage Protection (TVP) System:** N/A
**Metering Panel:** N/A
**Auxiliary Control Panel:** Included, NEMA 3 Marshalling Box
**Load Break Switch:** N/A
**Load Break Switch Qty:** N/A
**Load Break Switch Location:** N/A
**Efficiency Standard(s):** DOE 2016, IEEE, ANSI
**K-Factor Rating (Harmonic Mitigation):** K-1 (Standard)
**Temperature Monitoring Relay:** Included, TSX1, w/ Contacts
**Temperature Sensors in Coil:** Included, (3) PT100 Wired to Auxiliary Connection Box
**Temperature Gauge:** Included
**Seismic Bracing:** Included
**Weather Shield:** N/A
**Space Heaters:** N/A
**Wheels:** Included, w/ (4) Bi-directional Flat Rollers
**Winding Material:** Copper
**Ambient Temperature Rating:** 40°C
**Sound Level / power [Lp(A)/Lw(A)] :** 50/63 dBA
**Partial Discharge:** ≤ 10 pC
**Environmental, Climatic and Fire Classes:** E2-C2-F1
**Elevation (Altitude) Rating:** 3300ft (1000 meters) Above Sea Level
**Enclosure Material:** Coated Steel
**Enclosure Rating:** NEMA 3 Weatherproof
**System Form Factor:** N/A
**Paint Type:** Epoxy Paint
**Finish:** ANSI 61 Grey
**Lifting Eyes:** Included, w/ Tow Attachment
**Mount:** Wheels Cart Mount
**Wheel Clearance:** 20.47 inches
**Dimensions:** 61"-W x 68.9"-L x 86.6"-H
**Weight:** 2,425 lbs
*Please note that numbers are approximate and subject to change

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

**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-PDT-CRC-R7-3P-DVP-100KVA-YR-A5-KZ-CZ-1Z-ZZ-Z-N3-M1 Cast Resin Transformer from Larson Electronics converts three-phase 20000V Delta electrical to three-phase 220Y/127 Wye-N. This power distribution unit provides operators the ability to safely tap into and distribute 100 KVA AC power from a variety of sources, such as direct grid power. The entire system is secured to a skid mount platform.**

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

**Transformer Features:** With a transformer rating of 100 KVA [Natural Cooled], the industrial dry type transformer features a primary voltage of three-phase 20000V AC Delta and a secondary voltage of three-phase 220Y/127 Wye-N. This transformer is equipped with a 5-position tap changer with five +/-2.5% taps (two FCAN above and two FCBN below) to allow small changes in voltage. The system has copper windings for high strength and electrical conductivity. This cast coil transformer features coils casted in epoxy resin under a vacuum using molds. The structure makes this type of transformer ideal for installations in extreme weather environments, offshore platforms, mining and rugged sites.

The MT-PDT-CRC-R7-3P-DVP-100KVA-YR-A5-KZ-CZ-1Z-ZZ-Z-N3-M1 doesn't have fans for forced air cooling, but has mounting provisions for future fans.

**Transformer Efficiency:** The Class F transformer meets standard efficiency requirements. High efficiency makes this unit suitable for use in electrical rooms, air conditioned spaces in buildings, underground vaults and similar locations, in addition to outdoor areas.

**Temperature Sensor:** The MT-PDT-CRC-R7-3P-DVP-100KVA-YR-A5-KZ-CZ-1Z-ZZ-Z-N3-M1 is equipped with temperature sensors inside the system for controls and monitoring. A monitoring service is not included with the transformer.

**Temperature Gauge:** This transformer comes with a temperature gauge.

**Load Break Switch:** This CRC transformer does not include a load break switch. We can add a load break switch at an additional cost.

**Surge Arresters:** This transformer include surge arresters on the primary side. Designed for over-voltage and transient voltage protection, the components prevent damage caused by lightning, internal switching or voltage surges. We can offer models without surge arresters that have mounting provisions for customer-provided surge arresters.

**Control Transformer:** This CRC transformer does not include a control transformer. We can add a control transformer for operating equipment at an additional cost.

**Seismic Bracing:** This system does not include seismic bracing. We can add seismic bracing for added protection in areas prone to earthquakes at an additional cost.

**Weather Shield:** This transformer does not include a weather shield. We can add a weather shield for protection in outdoor areas, humid environments and rodents at an additional cost.

**Space Heaters:** This system does not include a space heater. We can add a space heater for preventing condensation during extended shutdown at an additional cost.

**Enclosure Design:** This CRC transformer is protected by a steel housing. The enclosure carries a NEMA 3 rating for protection from exposure to moisture, rain, dust and debris.

**Mount:** The power distribution unit is mounted atop a skid plate base that allows this

transformer to easily be moved from one location to another using a forklift. The skid platform is designed for serious use and is ruggedly constructed to withstand demanding conditions and heavy duty industrial applications. The industrial grade skid platform can be modified to meet the needs of job-site requirements.

**Benefits:** The MT-PDT-CRC-R7-3P-DVP-100KVA-YR-A5-KZ-CZ-1Z-ZZ-Z-N3-M1 transformer offers many benefits to consumers. This transformer provides owners with significant energy savings, as well as offering environmental benefits. Higher efficiency not only extends the life of the transformer, but also turns into cost savings for owners in the form of lower energy bills and decreased cost of ownership.

**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)

There are no Faqs