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## MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1

# Automatic Circuit Recloser, 630 Amp, 46000V AC, 3-Phase, NEMA 3R, Pole Mounted

**Product ID: 338493**

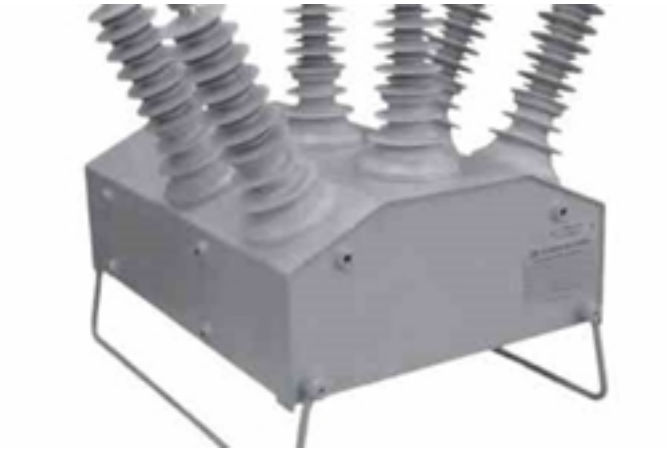

Image: MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1

**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-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1Automatic Circuit Recloser**

**Product Type:** Automatic Circuit Recloser
**Current Type:** AC
**Phases:** 3 Phase
**Nominal Operating Voltage:** 46 kV
**Rated Maximum Voltage:** 52 kV
**Rated lightning impulse withstand voltage (BIL):** 250 kV
**Power Frequency Withstand Voltage:** 95 kV (1 minute)
**Creepage Distance:** ≥ 1,300 mm
**Rated power frequency:** 60 Hz
**Rated Continuous Current:** 630 A
**Short-Circuit Breaking Capacity:** 25 kA Symmetrical
**Making Current (Peak):** 63 kA
**Protection:** O/C, E/F, Sensitive Ground Fault, Directional OC
**Closing Voltage:** 120 V AC
**Tripping Voltage:** 120 V AC
**Interrupting Medium:** Vacuum
**Mechanical Operation:** 10,000 Minimum
**Full Load Operation:** 10,000 Minimum
**Closing Mechanism:** Magnetic Actuator
**Tripping Mechanism:** Magnetic Actuator
**Bushing Type:** Silicon Rubber (Polymer)
**Terminals:** NEMA Pad Type
**Operating mechanism:** Dual-Coil (Bi-stable), Magnetic actuator

**Ratings/Approvals**

Complies with ANSI C37.60-2012

**Factory Tests**

High potential withstand test
Pressure test for sealing verification
Functional Protection Relay Testing
TCC Curve Verification
Vacuum Integrity Test
Mechanical Operation Test
Dielectric Test
Heat Run Test
Production Tests per ANSI C37.60 and IEEE Standards

**Manual Operation Handle:** Handle: External Manual Open/Close Handle

**Energy Storage:** Capacitor-Based Trip/Close Reserve

**Current Transformers:** (3) Integrated CTs

**Auxiliary Supply Voltage:** 120 VAC, 60 Hz

**Voltage Transformer:** 52kV Class VT with 120 VAC Secondary Output (optional)

**SCADA Interface:** DNP3, Modbus, IEC 60870-5-101/104

**Communications:** RS-232, Ethernet, Fiber Optional

**Programmable I/O:** Minimum (8) inputs and (8) outputs

**Operating Modes:** Single-Phase & Three-Phase Tripping Selectable

**Lockout Feature:** Electronic and Mechanical Lockout
**Position Indicator:** Mechanical Open/Closed Indicator
**Ambient Temperature:** -40°C to +65°C
**Humidity:** Up to 95% non-condensing
**Altitude:** Up to 1,000 m (standard), higher on request
**Protection Degree:** NEMA 3R (Control Cabinet)
**Mounting:** Pole-mounted via galvanized mounting brackets
**Mounting Frame:** Hot-Dip Galvanized Steel
**Finish Paint:** Munsell™ 5BG 7.0/0.4 Light Grey (ANSI #70)
**Weight:** Approx. 450 kg (992 lbs)
**Dimensions:** Approx. 900 mm W × 450 mm D × 850 mm H (Recloser ); Approx. 700 mm W × 350 mm D × 900 mm H (Control Cabinet)

**Special Orders - Special Requirements**
Contact us for special requirements
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**Made in the USA**

**The MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1 from Larson Electronics is an Automatic Circuit Recloser (ACR), designed for use on overhead distribution lines and distribution substation applications for voltage class 46 kV (maximum 52 kV).**

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

The MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1 is completely supplied with a recloser control (RC) unit and communications control cabinet. The RC control cubicle provides comprehensive protection, metering, event logging, and communication capabilities within a single integrated system. The MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1 is engineered for standalone operation and can be easily integrated into distribution automation systems and SCADA networks using built-in communication protocols such as DNP3, Modbus, and IEC 60870-5.

The MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1 incorporates vacuum interrupters housed within solid dielectric insulated poles, enclosed in a sealed, arc fault vented, stainless steel tank. This design provides a rated maximum voltage of 52 kV, a continuous current rating of 630 amps, a 25 kA symmetrical interrupting capacity, and a 250 kV BIL insulation level. The vacuum interruption technology ensures exceptional reliability, reduced maintenance requirements, and extended service life in demanding outdoor utility environments.

**Operation:** Each phase of the recloser is operated by an individual magnetic actuator. In three-phase operation, the actuators are mechanically linked to ensure synchronized performance. The mechanism utilizes magnetic latching for secure closed-position holding, and each actuator operates with a dual-coil system. Capacitor-based energy storage provides

close and trip functionality even during auxiliary power interruptions. The unit can be manually tripped using a yellow hook stick-operated handle located at the base of the tank. A mechanical position indicator displays contact status, with green indicating open and red indicating closed.

**Control Power**: The MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1 operates from a 120 VAC, 60 Hz auxiliary supply and may be equipped with an optional 52 kV class voltage transformer (VT) with 120 VAC secondary output when a dedicated auxiliary source is unavailable.

**Mount:** The MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1 is pole-mounted using a galvanized steel mounting frame and brackets designed for overhead line installations.

**Certification:** This MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1 is manufactured in compliance with ANSI/IEEE C37.60 standards and meets ISO 9001 quality management standards. Additional compliance with environmental and safety standards such as ISO 14001 and OHSAS 18001 is available upon request.

**Applications:** The MT-ACR-VA-R7-3P-AC-DTA-630A-25KA-6-UPM-Z-Z-N3R-M1 is ideal for medium-voltage power distribution systems, providing automatic fault isolation and service restoration. Typical applications include protection of overhead feeders, transformers, substations, capacitor banks, and industrial distribution networks.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

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# Frequently Asked Questions (FAQ)

There are no Faqs