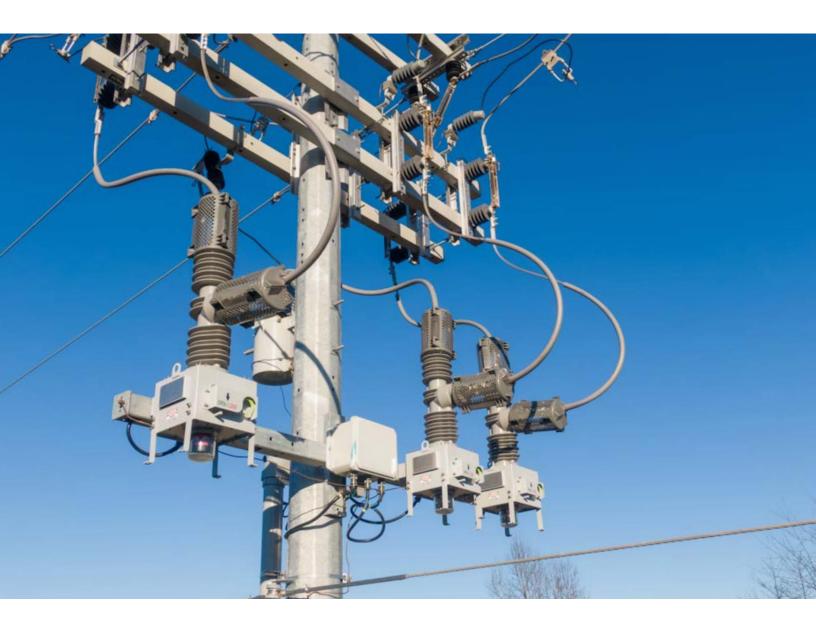
# **Distribution Reclosers**

PRODUCT CATALOG









Southern States Distribution Automation Division is dedicated to delivering innovative solutions tailored to address the toughest challenges in the distribution utility market. Guided by direct feedback from distribution utilities, our recloser device was specifically designed to tackle persistent field issues faced by utilities, enhancing system reliability, minimizing maintenance cost, and providing unmatched application versatility.

### **Protection Devices that Support Greater System Resiliency**

#### INTRODUCTION

As the demand for improved reliability and resiliency of the grid continues to increase, distributio-level utilities must implement efficient strategies to minimize the impact of both planned and unplanned power interruptions. When reclosers are used to sectionalize the feeder, they can automatically reduce the outage size upstream, by not requiring manual intervention and switching. When they are combined with automation systems, a downstream reduction of the outage area can be achieved, only leaving the affected feeder segment out of power. By restoring power faster, utilities can minimize lost revenues that would otherwise take place during an outage. In addition, this can help to eliminate regulatory fines associated with poor reliability numbers such as SAIDI.

Over the years, the industry has seen a transition from mechanically operated hydraulic oil-filled reclosers to more robust, digitally operated vacuum reclosers that have a longer life and are more reliable. This has helped to provide reductions in maintenance, better integration with SCADA and automation systems, as well as increased environmental compliance.

In a vendor-agnostic manner, Southern States was able to understand unresolved customer needs and identify gaps in the distribution market for reclosers. In collaboration with these utilities, Southern States developed a product that helps achieve improved system reliability, cost efficiency, and versatility.

The bulletin highlights our recloser product line's customer-driven design approach, application flexibility, as well as ratings and technical information to guide the selection process by the utility.







Installation
Overview Video

Promotional Overview Video

24/7 emergency support line: (770) 946-4565

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## **Southern States Distribution Reclosers**

#### **Southern States' DISTRIBUTION AUTOMATION**

**DIVISION** provides cost-effective vacuum switching devices designed to enhance the reliability and efficiency of distribution systems. With flexible standard designs, utilities can deploy the device as a recloser, sectionalizer, or SCADA-automated switch. It is compatible with SEL 751, 651RA, 651R, 351RS, Beckwith M7679, and Siemens programmable automation controllers, offering both manual and remote SCADA operation. This versatile, all-in-one solution helps utilities reduce total inventory, minimize training requirements, as well as provide applicational flexibility to their systems.

### **Design Features**

- 360° position indicator
- · 19 LED fault indicating lights
- Six built-in resistive voltage sensors (+-1% rated accuracy)
- Three Current Transformers (CTs)
- · HCEP encapsulated vacuum interrupters
- Painted 304 stainless steel tank / cabinet
- · Increased size yellow lockout handle opening



### **APPLICATION CHART**

#### STANDARD PRODUCT COMPARISON

FEATURES / BENEFITS:	Ganged Operated Recloser	Triple-Tank / Triple-Single Recloser	Single-Tank / Triple-Single Recloser
Three-Phase Operation Capability	<b>√</b>	✓	✓
Independent-Phase Operation	X	✓	✓
Number of Fault / Position Indicators	1	3	3
Phase Spacing	15.5 in.	19.5 - 37 in.	15.5 in.
Optional Animal Guards	<b>√</b>	✓	✓
Optional Arrester & Transformer Brackets	✓	✓	✓

### **RATINGS**

### RECLOSER SPECIFICATIONS

MAXIMUM VOLTAGE	15.5 kV	27 kV	38 kV
Continuous Current	900 A		800 A*
Basic Insulation Level (BIL)	110 kV	150 kV	170 kV
Symmetrical Interrupting Current	12.5 kA / 16 kA	12.5 kA	12.5 kA*
Asymmetric Peak-Making Current	40 kA	32.5 kA	32.5 kA*
Weight of Mechanism	265 lbs	308 lbs	440 lbs
Weight of Standard-Mounting Bracket	73 lbs		

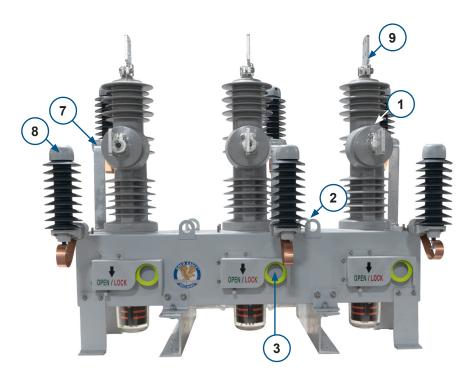
CREEPAGE DISTANCES (MM / IN):	15.5 kV	27 kV	38 kV
Terminal-to-Terminal	673 / 26.5	876 / 34.5	1160 / 45.7
Lower-Terminal-to-Ground	679 / 26.7	938 / 36.9	1500 / 59.0
IEC Pollution-Class Terminal-to-Ground	Very Heavy		
Mechanical Life (Close / Open Operations)	10,000		
Ambient Temperature (°C)	-40 to +60		

<sup>\*</sup>Contact Factory for higher ratings

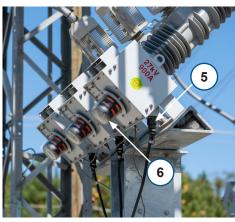
### CONTROL CABINET & OTHER SPECIFICATIONS

Control Cabinet	Southern States LLC
Cabinet Enclosure Type	NEMA 4X
Cabinet & Tank Material	304 Stainless Steel (Painted)
Control / Power Cables	Included, 32' or 52' standard Optional, custom length available
Voltage Sensors	6 x resistive sensors (+-1% accuracy)
Fault Indicator	19 LED lights visible on the bottom of the tank
Interrupter Housing Material	Hydrophobic cycloaliphatic epoxy (HCEP)
Mounting Orientation Available	Horizontal & Vertical

### **FEATURES & BENEFITS**







- 1 Polymer Housing
- 2 Lifting Lug
- 3 Manual Handle (Open/Lock)
- 4 Nameplate
- 5 Mil Spec Control Connection
- 6 Fault & Position Indicator
- 7 Arrester Bracket (optional)
- 8 Arrester (optional)
- (9) Four-hole Terminal Pad

# 360° Field-of-View Fault & Position Indicator

- Open / closed position can be clearly identified
- Replaceable tempered glass cover addresses visibility concerns of other market options which may use plastic or epoxy
- Programmable 19-LED fault indication
- · Flashing light supports fault identification from the ground
- Faulted phase(s) can be identified for triple-single recloser models

## 90° Rotated Poles (optional)

- Greater horizontal terminal-to-terminal clearance
- · Avoid flashover situations caused by wildlife
- Shorter jumpers result in easier installation
- Available with 15 kV and 27 kV recloser models





### **ACCESSORY & ENHANCEMENT OPTIONS**

### **NEMA Terminal Pads**

· High-conductivity tin-plated copper



Available options include:







- 1 Two-hole flat pad straight
- (2) Two-hole flat pad 90°

(1)

- 3 Four-hole flat pad
- 4 Clamp-style aerial lug
- 5 Bolt-on air gap switch



## Control, Power, & Testing Cables

- Terminated control cables No point-to-point wiring
- 32' or 52' standard control & power cable lengths
- · Security sleeves & armored cable option available
- Southern States supplied test cables that work with Omicron CMC style test or equivalent
- Omicron supplied test cables available for Arco 400 test set



### Wildlife Guards (optional)

- Provides protection of energized connection points
- Minimizes operational and avian risks that can lead to outages
- · Durable and effective in all weather conditions
- · Easy and minimal installation requirements
- Top, side, and 90° terminal fittings available
- Fire-rated V-0 per UL 94 standard
- · Mesh or solid-type wildlife guards available



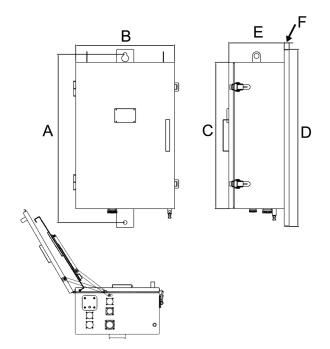
### Surge Arresters & Brackets (optional)

- Protects recloser from over-voltage transients caused by external (lightning) or internal (switching) events.
- Minimizes risk of customer interruption
- Available with 15 kV, 27 kV, and 38 kV recloser models
- · Optional factory-mounted, grounded, and prewired arresters
- · Site-ready configuration available

### **RELAYS & CONTROLS**

## **Southern States CONTROL CABINETS**





#### **DIMENSIONS**

FIGURE	2411 / 751	651RA	651R2
	Control Cabinet	Control Cabinet	Control Cabinet
Α	29.9"	33.5"	35.8"
	(760 mm)	(850 mm)	(910 mm)
В	17.7"	19.7"	19.7"
	(450 mm)	(500 mm)	(500 mm)
С	25.6"	29.1"	31.5"
	(650 mm)	(740 mm)	(800 mm)
D	31.9"	35.4"	37.8"
	(810 mm)	(900 mm)	(960 mm)
Е	10"	11"	13.4"
	(250 mm)	(280 mm)	(340 mm)
F	1"	1"	1"
	(25 mm)	(25 mm)	(25 mm)

### **RELAY & CONTROL OPTIONS**

## **SEL-751 4 & 8-BUTTON**

- Most economical solution for Southern States device from SEL
- 4-button 751 is suggested for SCADA controlled switches or sectionalizers, both with fault indication
- 8-button 751 is suggested for ganged recloser controller utilizing IEEE/ANSI U or C curves for protections, or sectionalizers where 3-shot, 2-shot, and switch mode are desired pre-configured selections and 4-voltage inputs are available





#### **SEL-651R**

- Full-functioned and featured triple-single recloser controller from SEL
- Provides phase independent operation of recloser and supports the full line of protection curves and all 6-voltage inputs

Available with standard SEL 32-pin and 42-pin cabinet pinout

#### SEL-651RA

- Full-functioned and featured ganged recloser controller from SEL
- Recommended ganged recloser controller, supporting the full line of protection curves and all
   6-voltage inputs





#### **SEL-351RS**

- Full-functioned single-phase recloser controller from SEL
- Provided with 19-10 pin control cable for connection to industry-standard 351RS pinout

### **BECKWITH M-7679**

- Full-functioned and featured triplesingle recloser controller
- Provides phase-independent operation of recloser and supports the full line of protection curves and all 6-voltage inputs
- Economic price point makes this relay a good solution for ganged recloser controller as well





Siemens SIPROTEC available

# Note: 10-Year Manufacturer Warranty on all Relays

- Support high-impendance fault detection.
- Easily integrate into SCADA or distribution automation systems.
- Automated throw over scheme is available as an add-on service.

Other customer-specified relays are available upon request.

## **Ganged Horizontal Reclosers**

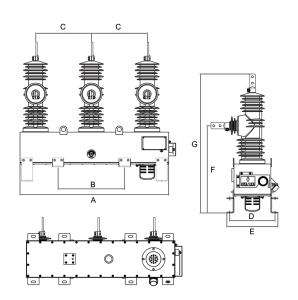


FIGURE	15.5 kV	27 kV	38 kV
А	41.34" (1050 mm)	41.34" (1050 mm)	42.9" (1090 mm)
В	18.5" (470 mm)	18.5" (470 mm)	18.5" (470 mm)
С	15.5" (394 mm)	15.5" (394 mm)	15.5" (394 mm)
D	12.6" (320 mm)	13.8" (350 mm)	14.2" (360 mm)
Е	14.17" (360 mm)	15.4" (390 mm)	15.75" (400 mm)
F	25.1" (638 mm)	27.23" (692 mm)	31.5" (800 mm)
G	39.5" (1003 mm)	43.17" (1096.5 mm)	48.7" (1237 mm)

(Available with SEL 42-pin Cabinet)

## 90° Ganged Horizontal Reclosers

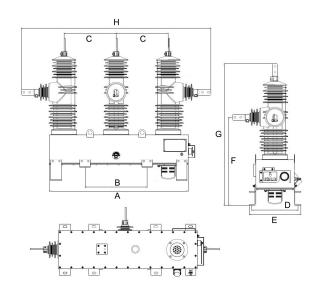


FIGURE	15.5 kV	27 kV
Α	41.34" (1050 mm)	41.34" (1050 mm)
В	18.5" (470 mm)	18.5" (470 mm)
С	15.5" (394 mm)	15.5" (394 mm)
D	12.6" (320 mm)	13.8" (350 mm)
Е	14.17" (360 mm)	15.4" (390 mm)
F	25.1" (638 mm)	27.2" (691 mm)
G	39.5" (1003 mm)	43.2" (1097 mm)
Н	54" (1374 mm)	56.5" (1436 mm)

## **Ganged 90° Vertical Reclosers**

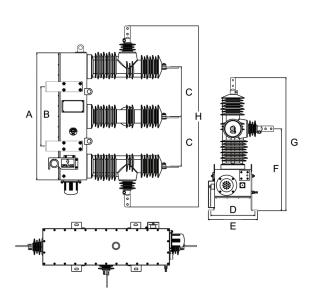


FIGURE	15.5 kV	27 kV
Α	39.69" (1008 mm)	39.69" (1008 mm)
В	18.5" (470 mm)	18.5" (470 mm)
С	15.5" (394 mm)	15.5" (394 mm)
D	12.6" (320 mm)	13.8" (350 mm)
Е	14.17" (360 mm)	15.4" (390 mm)
F	23.46" (596 mm)	25.6" (650 mm)
G	37.84" (961 mm)	41.5" (1054 mm)
Н	54" (1374 mm)	56.5" (1436 mm)

## **Single-Handle, Triple-Single Reclosers**

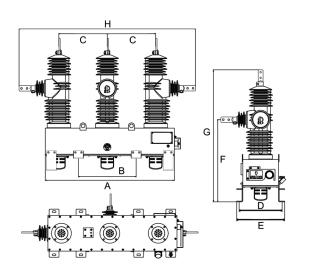


FIGURE	15.5 kV	27 kV
А	41.34" (1050 mm)	41.34" (1050 mm)
В	18.5" (470 mm)	18.5" (470 mm)
С	15.5" (394 mm)	15.5" (394 mm)
D	12.6" (320 mm)	13.8" (350 mm)
Е	14.17" (360 mm)	15.4" (390 mm)
F	25.1" (638 mm)	27.3" (693 mm)
G	39.5" (1003 mm)	43.6" (1108 mm)

## Single-Handle, Triple-Single 90° Reclosers

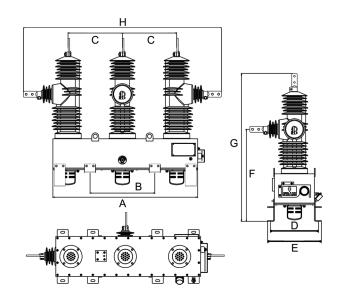


FIGURE	15.5 kV	27 kV
Α	41.34" (1050 mm)	41.34" (1050 mm)
В	18.5" (470 mm)	18.5" (470 mm)
С	15.5" (394 mm)	15.5" (394 mm)
D	12.6" (320 mm)	13.8" (350 mm)
Е	14.17" (360 mm)	15.4" (390 mm)
F	25.1" (638 mm)	27.3" (692.5 mm)
G	39.5" (1003 mm)	43.6" (1108 mm)
Н	54" (1374 mm)	56.5" (1436 mm)

## **Triple-Handle, Triple-Single Reclosers**

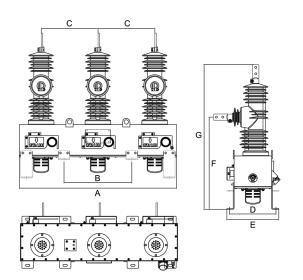


FIGURE	15.5 kV	27 kV
А	42.9" (1090 mm)	42.9" (1090 mm)
В	18.5" (470 mm)	18.5" (470 mm)
С	15.5" (394 mm)	15.5" (394 mm)
D	12.6" (320 mm)	13.8" (350 mm)
Е	14.17" (360 mm)	15.4" (390 mm)
F	25.1" (638 mm)	27.23" (692 mm)
G	39.5" (1003 mm)	43.6" (1108 mm)

(Available with SEL 32/42-pin Cabinet)

## **Triple-Handle, Triple-Single 90° Reclosers**

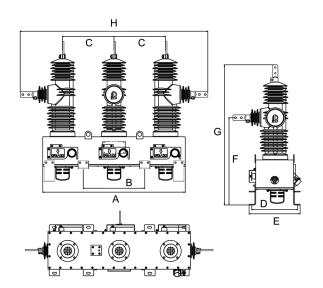


FIGURE	15.5 kV	27 kV
Α	42.9" (1090 mm)	42.9" (1090 mm)
В	18.5" (470 mm)	18.5" (470 mm)
С	15.5" (394 mm)	15.5" (394 mm)
D	12.6" (320 mm)	13.8" (350 mm)
Е	14.17" (360 mm)	15.4" (390 mm)
F	25.14" (638.5 mm)	27.3" (692.5)
G	39.5" (1003 mm)	43.6" (1108 mm)
Н	54" (1374 mm)	56.5" (1436 mm)

## Single-Phase & Triple-Tank, Triple-Single Reclosers

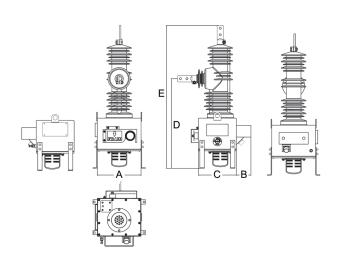


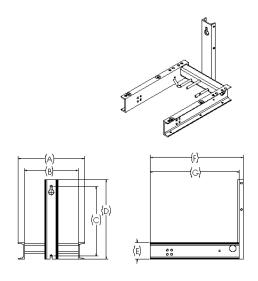
FIGURE	15.5 kV	27 kV
А	11.8" (300 mm)	11.8" (300 mm)
В	4" (100 mm)	4" (100 mm)
С	10.25" (260 mm)	11.4" (290 mm)
D	24.13" (613 mm)	26.7" (677 mm)
Е	38.48" (977.5 mm)	43" (1092 mm)

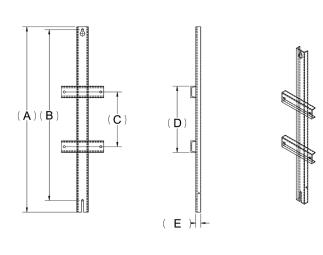
(Available with SEL 32/42-pin & 351RS Cabinet)

### SINGLE-TANK MOUNTING

### HORIZONTAL-MOUNTING BRACKET

### VERTICAL-MOUNTING BRACKET

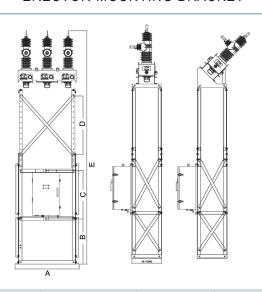




DESIGN	Α	В	С	D	Е	F	G
HORZ - 15 kV & 27 kV	20.03" (509 mm)	16.25" (413 mm)	21" (533")	24" (610 mm)	5.00" (127 mm)	28.22" (717 mm)	26.50" (673 mm)
HORZ - 38 kV	21.42" (544 mm)	16.30" (414 mm)	21.21" (539" mm)	24.00" (610 mm)	4.92" (125 mm)	31.20" (792 mm)	28.47" (723 mm)
VERT - 15 kV & 27 kV	64" (1625 mm)	59" (1500 mm)	18.5" (470 mm)	22.5" (570 mm)	2" (50 mm)	N/A	N/A

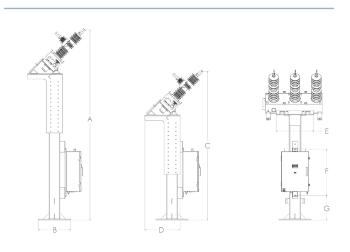
### **SUBSTATION MOUNTS**

#### **ERECTOR-MOUNTING BRACKET**



#### PEDESTAL-MOUNTING BRACKET

Ganged or T/S Available



DESIGN	Α	В	С	D	Е	F	G
ERECTOR	47.17" (1109 mm)	25.36" (644.1 mm)	35.80" (909.3 mm)	43.30" (1100 mm)	164.27" (4173 mm)	N/A	N/A
PEDESTAL	138.13" (3508.55 mm)	23.43" (595 mm)	108.13" (2746.55 mm)	25.63" (651 mm)	27.17" (690 mm)	33.66" (855 mm)	17.97" (456.5 mm)

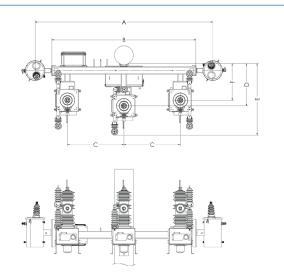
\*Measurement shown is for SEL 651R & 651RA cabinets - For SEL 751 cabinet, "C" measurement is 29.9" (760 mm)

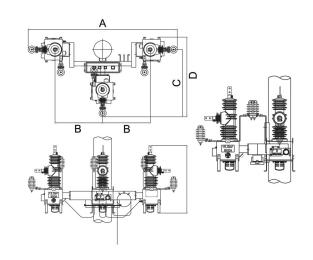
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### TRIPLE-TANK & SINGLE-PHASE MOUNTING

### STANDARD MOUNT (with PT Bracket Extension)

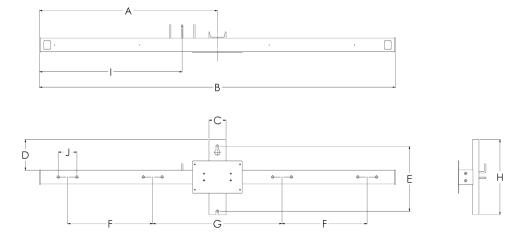
#### **CLUSTER-MOUNT**





DESIGN	Α	В	С	D	Е	F
STANDARD MOUNT 15 kV & 27 kV	94.4" (2397 mm)	76.5" (1942 mm)	30.0" (762 mm)	22.5" (572 mm)	38.0" (964 mm)	19.5" (496 mm)
CLUSTER-MOUNT 15 kV & 27 kV	90.6" (2300 mm)	29.9" (758 mm)	39.5" (1003 mm)	49.5" (1250 mm)	N/A	N/A

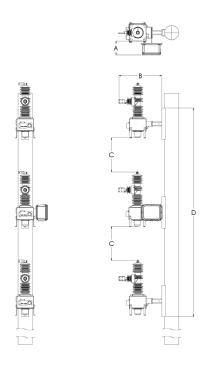
### 8' and 10' CROSSARM



DES	SIGN	Α	В	С	D	E	F	G	Н	I	J
	8'	52.25" (1327.12 mm)	104.50" (2654.30 mm)	5.00" (127 mm)	8.86" (225 mm)	19.02" (483 mm)	25" (635 mm)	37.97" (964.41 mm)	22.01" (559 mm)	41.9" (1065 mm)	5.5" (140 mm)
	10'	60" (1524 mm)	120" (3048 mm)	5.00" (125 mm)	8.86" (225 mm)	19.02" (483 mm)	37" (939.8 mm)	29.5" (749.4 mm)	22.01" (559 mm)	49.7" (1261 mm)	5.5" (140 mm)

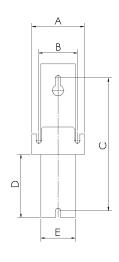
### TRIPLE-TANK & SINGLE-PHASE MOUNTING

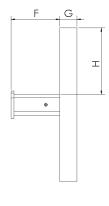
### **VERTICAL MOUNT**



DESIGN	Α	В	С	D
15 kV	41.9"	5.5"	24"	140"
Vertical Mount	(1065 mm)	(140 mm)	(610 mm)	(3557 mm)
27 kV	9.7"	29.9"	24"	146.3"
Vertical Mount	(246 mm)	(760 mm)	(610 mm)	(3716 mm)

### SINGLE-PHASE MOUNT





Α	7.5" (190 mm)
В	5.5" (140 mm)
С	19.0" (483 mm)
D	9.0" (230 mm)
Е	4.9" (230 mm)
F	6.9" (176 mm)
G	2.5" (63 mm)
Н	9.5" (241 mm)
I	7.5" (190 mm)
J	6.9" (176 mm)



## **Southern States** Recloser Facility



## Powering Reliable Power Solutions

The Southern States Recloser Facility is dedicated to delivering high-performance reclosers and innovative energy solutions. Built on decades of expertise, our team provides customized products and services that ensure uninterrupted power delivery and operational efficiency.

### Why Choose Us?

- Trusted partner of leading utility companies
- Dedicated customer support every step of the way
- · Fast turnaround times and reliable service

### **Contact Our Team Today!**

Our experts are here to help you find the right solutions.



SouthernStatesLLC.com

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Southern States Distribution Automation Division remains committed to delivering innovative, customer-focused solutions that enhance the reliability, efficiency, and resiliency of distribution systems. Our recloser product line, developed for Utilities by Utilities, addresses critical industry challenges by reducing outages, minimizing maintenance costs, and ensuring seamless integration with automation and SCADA systems. With advanced features, flexible configurations, and industry-leading durability, our reclosers provide utilities with the tools needed to optimize grid performance.

By prioritizing innovation and customer feedback, Southern States continues to position itself to become a leader in the distribution protection and automation industry.



24/7 emergency support line: (770) 946-4565

### SouthernStatesLLC.com

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