

## TYPE VWVE-38X RECLOSERS

### **EQUIPMENT SPECIFICATIONS:** Type VWVE-38X

Automatic Circuit Recloser with vacuum interruption and oil insulation.

### **STANDARDS**

The recloser covered by this specification shall be manufactured and tested in accordance with applicable ANSI, IEEE and NEMA Standards.

### **QUALITY**

The manufacturing facility shall be independently certified to meet ISO 9001 Standards.

### **RATINGS**

Ratings as a minimum shall be as follows:

Maximum Design Voltage, kV	38.0
Nominal Operating Voltage, kV	34.5
Impulse withstand, 1.2 x 50 microsecond surge (BIL), Crest kV	150
Low frequency withstand voltage	
Dry, One Minute, kV	70
Wet, Ten Seconds, kV	60

Radio influence voltage measured at 1.0 MHZ, 23 kV, shall not exceed 650 microvolts.

Frequency, Hz	50/60
Continuous current, amperes	560
Interrupting current, symmetrical amps	12,000
Cable charging current, amps	40
Magnetizing interrupting current, amps	19.6

General purpose breaker capacitor switching rating at 38 kV shall be 250 amps RMS, isolated bank, limited to solidly grounded bank applications only.

### **DUTY CYCLE**

<u>PERCENT OF INTERRUPTING RATING</u>	<u>NUMBER OF UNIT OPERATIONS</u>	<u>MAXIMUM CIRCUIT X/R VALUE</u>
15-20	88	4
45-55	112	8
90-100	<u>32</u>	15
total:	232	

## **MECHANICAL LIFE**

Minimum of 2500 operations

## **OVERLOAD CAPABILITY (after level-off at rated continuous current)**

<u>Continuous Current Rating, Amps</u>	<u>Maximum Hours At:</u>	
	<u>125% of Continuous Current Rating</u>	<u>150% of Continuous Current Rating</u>
560	4	2

## **WEIGHTS AND DIMENSIONS**

<u>Width, in.</u>	<u>Height, in.</u>	<u>Length, in.</u>	<u>Total Weight With Oil, lb</u>	<u>Oil, gal.</u>
21 1/4	47 3/8	46 3/8	990	61

## **CLEARANCES AND CREEPAGE (in.)**

<u>Creepage</u>	<u>Arcing Distance</u>	
	<u>Source to Load</u>	<u>Phase to Phase</u>
26 1/2	12	12 1/4

## **RECLOSER FEATURES**

The overcurrent sensing, recloser sequencing and tripping shall be electronically controlled.

The recloser shall be mechanically and electrically trip free.

All three poles of the recloser shall be operated simultaneously by a solenoid-controlled spring operating mechanism.

The solenoid shall provide energy for closing the main contacts and for storing energy in the opening spring for a tripping operation.

Current interruption shall occur in vacuum interrupters, providing long contact life.

Each vacuum interrupter shall be serialized.

Available closing voltages shall be phase to phase operating voltage ( $\pm 15\%$ ), 48 VDC, 125 VDC, 250 VDC, 120 VAC, 240 VAC.

The recloser interrupting time shall be 0.045 seconds maximum.

The recloser shall be of single tank construction with ground connector to accommodate No. 8 SOL through 2/0 STR conductor.

External stainless steel hardware shall be provided as standard.

An O-ring shall be used in a groove in the head casting to provide controlled compression.

The recloser shall be shipped with oil filled to the proper level. A vented dipstick shall be provided for checking oil level.

The bushings shall be of wet process porcelain. Bushing terminals shall be universal clamp type to accommodate 1/0 through 500 MCM conductors.

Sensing bushing current transformers, 1000:1 ratio, for use with a control, shall be mounted internally in the recloser on bushings 1,3,5.

A lever shall be provided for manually tripping the recloser.

### **OPTIONAL ACCESSORIES**

The following shall be available as optional accessories:

1. External mounted MRBCT's - 600:5 or 1200:5
2. Oil level sight gage
3. Three stage auxiliary switch
4. Flat pad bushing terminals
5. Substation or pole mounting frames
6. 800 amp continuous current capability

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