

TYPES VW, VWV AND VWV38X RECLOSERS

EQUIPMENT SPECIFICATIONS: Types VW, VWV and VWV38X Reclosers

Automatic Circuit Reclosers with series trip, vacuum interruption and oil insulation.

STANDARDS

The reclosers covered by this specification shall be manufactured and tested in accordance with ANSI C37.60.

RATINGS

	<u>VW</u>	<u>VWV</u>	<u>VWV38X</u>
Maximum Design Voltage, kV	15.5	27.0	38.0
Nominal Operating Voltage, kV	2.4-14.4	24.9	34.5
Basic Insulation Level (BIL), kV	110	125	150
60 Hertz Withstand Voltage, kV			
Dry, One Minute	50	60	70
Wet, Ten Seconds	45	50	60
Continuous Current Rating, Amps	560	560	560
Interrupting Rating, Symmetric Amps	12000	12000	12000

DUTY CYCLE

<u>TYPE</u>	<u>PERCENT OF INTERRUPTING RATING</u>	<u>NUMBER OF UNIT OPERATIONS</u>	<u>MAXIMUM CIRCUIT X/R VALUE</u>
VW, VWV & VWV38X	15-20	88	4
	45-55	112	8
	90-100	32	15

RECLOSER FEATURES

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.

The closing solenoid coil shall be connected internally phase-to-phase on the source side of the recloser through a suitable contactor.

Bushings shall be of wet process porcelain, terminals shall be of the universal clamp type and shall accommodate number 1/0 through 500 MCM conductor.

Bushing creepage distance shall be (11 5/8" for type VW, 26 1/2" for type VVV and VVV38X).

Current interruption shall occur in sealed vacuum interrupters, one interrupter per pole.

A three-stage auxiliary switch shall be provided.

The recloser interrupting time shall be 0.045 seconds maximum.

The recloser shall be shipped filled with oil to the proper level. A dipstick shall be provided for checking oil level, a low oil level sight gauge shall be provided.

The recloser shall be shipped mounted on a substation type frame, complete with a tank lifting windlass.

The mounting frame shall have a grounding pad which will accommodate two No. 2/0 to 250 MCM conductors.

Manually closing and opening shall be accomplished by means of a manual operating handle located under a sleet hood external to the recloser. This handle located under a sleet hood external to the recloser. This handle shall also provide indication of recloser lockout.

A contact position indicator shall be provided, located under the recloser sleet hood.

One operation to lockout (non-reclosing) shall be accomplished by means of an external handle located under the sleet hood.

An operations counter shall be provided to count recloser operations, located under the sleet hood.

Overcurrent detection shall be provided by a set of three series trip coils, one per phase.

Time delay on tripping shall be provided by a set of three time delay units, one per phase.

The number of fast phase trip operations shall be selectable by means of a Sequence Selector internally located in the recloser. Selections shall be 0 - 1 - 2 - 3 - 4 number of fast trip operations.

The number of operations to lockout shall be selectable from 2 to 4 operations by means of an operations selector internally located in the recloser.

ron5/14/97