

CAPACITOR VOLTAGE TRANSFORMER POWER LOSSES

1. CAPACITOR SECTIONS

A. CVT Types OTCF...SR, OTCF...SI and OTCF...SM

Nominal System Voltage (kV)	Capacitance (pF)	Losses (Watts)
69	12500	5
115	7500	8
138	6250	10
161	5250	11
230	3750	16
345	2630	26
500	1750	36

B. CVT Types OTCF...IM

Nominal System Voltage (kV)	Capacitance (pF)	Losses (Watts)
69	17500	7
115	10400	11
138	8600	14
161	6900	15
245	5000	21
362	3450	34
500	2300	48

C. CVT Types OTCF...ER and OTCF...EM

Nominal System Voltage (kV)	Capacitance (pF)	Losses (Watts)
69	37500	15
115	22500	25
138	18800	35
161	16200	35
230	11300	50
345	8100	80
500	5400	112
765	4000	194

2. ELECTROMAGNETIC CIRCUIT

The losses generated by both the relay (R) and metering (M) electromagnetic designs are 80 watts.

Total losses for a particular CVT are calculated by adding the capacitance section loss for the appropriate capacitor section design and the electromagnetic unit losses.

3. HEATERS

With the Ritz oil filled base design there is no need for a permanently connected heater. The heat generated by the internal power losses provide sufficient condensation elimination. Therefore the additional losses generated by heaters in an air insulated base design are effectively eliminated.