

Power Factor Correction Capacitor

The formula to calculate power factor correction on neon sign transformers is;

$$C = \frac{\text{Corrected kVA} \times 10^9}{2(\pi)fe^2}$$

C = required capacitance in microfarads

f = frequency of applied voltage

e = applied voltage

CORRECTED kVA is determined by dividing the corrected power factor output of the neon sign xfrmr (Volt-Amps below) by 1000

Corrected Power Factor Secondary Rating		
kV	mA	Volt-Amps
15	120	900
15	60	450
15	30	250
12	120	775
12	60	400
12	30	200
9	120	600
9	60	300
9	30	150
7.5	120	500
7.5	60	250
7.5	30	125
6	60	200
6	30	100

The power factor correction capacitor is placed in parallel to the primary of the neon sign transformer.