$Vin := 400V$

$Vo := 12V$

$Vfd := 0.9V$

$Bm := 0.2T$

$Ae := 100mm^2$

$Dmax := 48\%$

$Fsw := 100KHz$

$$Ton := \frac{Dmax}{Fsw}$$

$Ton = 4.8\mu s$

$$Np := \frac{Vin \cdot Ton}{Bm \cdot Ae}$$

$Np = 96$

$$Ns := Np \cdot \frac{(Vo - Vfd)}{(Vin)}$$

$Ns = 2.664$ Round up to 3