Key Solution

Quize # 3   Serial #   Name: I.D.#

A 10 kVA, 4800/240 V, transformer has an equivalent impedance referred to the primary side as $Z_{eq1} = 120 + j300\Omega$. If the secondary side of the transformer supplies a resistive load the rated current at 230 V, the primary voltage teraminal will be

a) $V_1 = 4890\angle 7.3^0 V$

b) $V_1 = 5089\angle 7.1^0 V$

c) $V_1 = 4905\angle 7.6^0 V$

d) $V_1 = 245\angle 7.6^0 V$