



Load Controls Incorporated

53 Technology Park Rd. Sturbridge, MA. 01566
Phone 508-347-2606 Fax 508-347-2064

Range of the UPC using C.T.'s

Example 460 VAC and 150:5 CT's

For scaling purposes a POWER FACTOR of 1 is used :

$$\text{Full Scale K.W.} = 460 \times 150 \times 1.732 = 120 \text{ K.W.}$$

UPC Scale :

$$5\text{A(C.T. Secondary)} \times 460\text{V} \times 1.732 = 3,984 \text{ watts} - \frac{3,984}{746} = 5.3 \text{ H.P.}$$

Adjust 5.3 KOhms across TP-1 and TP-2 (UPC is scaled in terms of H.P.)

4-20 MA and 0-10V are now scaled 0 to 120 K.W.

Note:

The UPC is measuring 0-5A for each phase x Volts for each phase which is proportional to the 0-150A of each phase x Volts for each phase.

