



Metering CT's V/s Protective CT's

Metering CT's are guaranteed to work accurately from 5% to 120% of the rated current.

On the other hand, the Protective CT's are guaranteed to work beyond the rated Current.

e.g. A 5 VA 5P **10** CT has following meaning.

5 VA = Rated (Max.) Burden.

5P = 5% Protective Class (P= Protective)

10 = Up to 10 times the rated Current.

i.e. Such a CT is guaranteed to remain linear (Error within 5%) up to 10 times the rated Current.

If the CT was rated as 5P **5**, it would have meant that the linearity was guaranteed up to 5 times the rated Current.

The numbers **5 & 10** used above are called A.L.F. (Accuracy Limit Factor). The ALF value is decided mainly from the possible (expected) value of Maximum Fault Current that is likely to flow in the circuit in case of a Short Circuit.

Your Customer (ABB) is perfectly right in saying that a "Protective" CT be used for Protective function. (That is the way CT's for overload Protection are specified in Power Systems).

However, a metering (Measuring Class) CT might be able to fulfill requirements of the protection function too, in a given circuit.

If you are using measuring CT's for feedback protection, please let us know your actual Burden on the CT (which will consist of the Circuit Burden (e.g. 0.2 Ohms) + the leads Burden (e.g. 1.5+1.5 metres of 2.5 sq. mm. Wire).

We will test the CT accordingly and inform you the "Protective" Rating for the "Metering" CT you might be presently using.

The Test is an indirect test specified in IS-2705 (Part 3).