



When the currents in different feeders need to be metered with single meter or instrument, a summation transformer can be used. Summation current transformers are designed for summation of several synchronous A.C. currents in same phase belt.

The secondary circuits of the main C.T.s are to be connected to the corresponding marked primary terminals of the summation C.T. If the ratios of the main CTs are not equal, in order to obtain a correct vectorial sum, it is necessary to specify the ratio values of the individual main CTs.

In consumer installation, where there are more than one feeder, it is more economical to use summation metering and for this purpose, summation CT is required. 2 to 12 different currents of different feeders in the same phase can be summed. The standard primary & secondary currents are 5 or 1 amp.

Type Code	Primary Current (A)	Rated power (VA) max	
		Class 0,5	Class 1
STA-2	5+5/5	10	15
STA-3	5+5+5/5	10	15

Example:

$$\text{Main C.T.} : \frac{300\text{A}}{5} , \frac{100\text{A}}{1} , \frac{100\text{A}}{5}$$

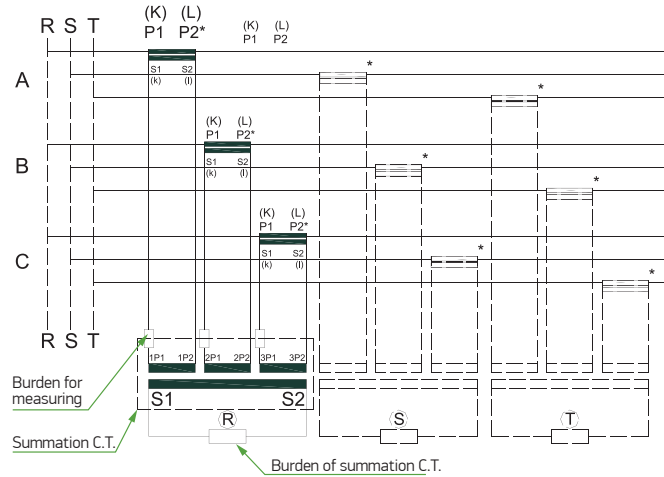
$$\text{Summation C.T.} : \frac{5+1+5}{5} \text{ A}$$

$$\text{Result C.T.} : \frac{300+100+100}{5} : 100 \text{ "Ratio"}$$

Connection diagram of summation current transformer:

(Type STA-3) One phase (R) of the three-phase A, B, C groups are shown in the picture

* Main current transformer



STA2 -STA3

