



Device overview - summation current transformer, class 0.5

Type	Primary current in A	Secondary current in A	Power in VA	Transformation ratio
FCT-SUM-1	5+5	5	15	1:1
FCT-SUM-2	5+5+5	5	15	1:1:1
FCT-SUM-3	5+5+5+5	5	15	1:1:1:1

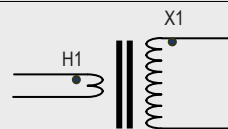
Summation current transformers enable a single electricity meter to monitor the total load across a number of supplies. Each supply is fitted with ordinary current transformers, and the secondary leads are then connected to a summation transformer. The secondary terminals of the summation transformer are then connected to the meter. The meter is thus presented with a signal which represents the total for all the circuits connected to the summation transformer. When summation transformers are used it is not possible to determine the individual contribution from each supply.

A separate summation transformer is required for each phase. For single-phase installations it is permissible to use one summation transformer so long as all the circuits are connected to the same phase..

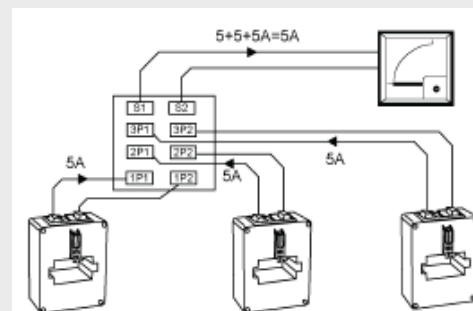
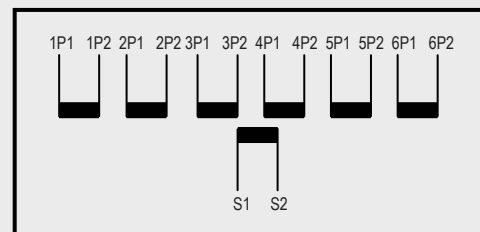
Summation transformers can be manufactured with between two and ten input circuits. It is not good practice to use a summation transformer with more inputs than the number of circuits to be metered. This is because unused circuits can introduce stray signals and can also reduce the dynamic range available to circuits that are connected. If an input to a summation transformer needs to be temporarily disconnected (during fault-finding, for example) the relevant P1 and P2 connections should be shorted together. All the input circuits must have the same ratio. The output from a summation CT with mismatched inputs (e.g. 200 + 300 + 250 : 5A) would be unpredictable and therefore unsuitable for metering.

## Technical features

SPECIFICATIONS	
Reference specification	EN/IEC 61869-1, 61869-2
Rated primary current I <sub>pr</sub> :	
Working frequency:	47...63Hz
Rated continuous thermal current I <sub>cth</sub> :	100% I <sub>pr</sub>
Rated short-time thermal current I <sub>th</sub> :	< 60I <sub>pr</sub>
Rated dynamic current I <sub>dyn</sub> :	2,5I <sub>th</sub>
Instrument security factor (FS):	≤ 5
Rated secondary current I <sub>sr</sub> :	5 - 1A
Max. power dissipation	≤ 19W
Allowed max cable or busbar temperature:	125°C
INSULATION REQUIREMENTS	
Type	Dry transformer, air insulation
Highest voltage for equipment U <sub>m</sub> :	0.72kV r.m.s.
Rated insulation level:	3kV r.m.s. 50Hz/1min
ENVIRONMENTAL CONDITIONS	
Nominal temperature range:	-25...50°C
Limit temperature range for storage:	-40...85°C
Relative humidity:	≤ 85%
Suitable for tropical climates	yes
CONNECTION	
Primary winding:	
Secondary winding:	tightening by nut M4
MECHANICAL FEATURES	
Housing material:	self extinguishing polycarbonate
Mounting:	screw type on bar
Weight:	



Current transformer polarity can be defined by permanent markings ( typically H 1 – X 1 ) or polarity dots.



NOTE: On request orders for types different from table are accepted. 1A Secondary available

