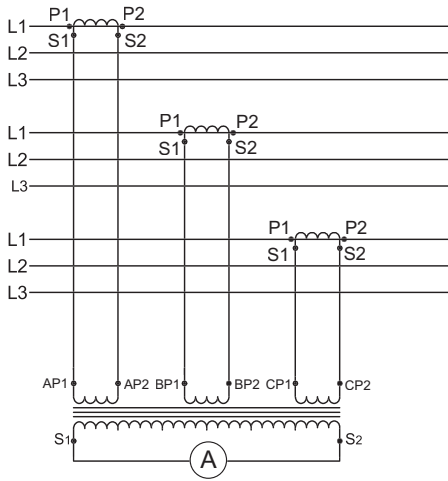


LU01 - SUMMATION CURRENT TRANSFORMERS



SUMMATION CURRENT TRANSFORMER are designed to summarize several synchronous alternating currents of equal phase relation with any angle of phase difference. They are used to add secondary currents of several main c.t.'s in order to measure with the CT only.



Current measurement in phase L1

AN EXAMPLE OF POWER SELECTION FOR MAIN TRANSFORMERS WITH DIFFERENT TRANSMISSIONS

Main Transformer ratio:

$$\begin{array}{r} 500/5A \\ 400/5A \\ \hline 300/5A \\ \hline \text{Total current} = 1200/5A \end{array}$$

Burden - 1 Ammeter

Required Active performance of the Current Transformer:

Ammeter	1.5 VA
Measurement Conductor Loss	1.5 VA
Consumption in Summation CT	4.0 VA
Total VA	7.0 VA

The individual main transformer must provide it's VA share from this 7.0 VA.

1. Main transformer 500/ 5A (500/ 1200) x 7 = 2.92 VA + additional losses ≈ 3.75 VA*
2. Main transformer 400/ 5A (400/ 1200) x 7 = 2.33 VA + additional losses ≈ 2.5 VA*
3. Main transformer 300/ 5A (300/ 1200) x 7 = 1.75 VA + additional losses ≈ 2.5 VA*

* The VA values of the main transformer are to be rounded up to the corresponding values in our chart.

Note: If using unequal main c.t.'s than ration of lowest primary main c.t. current to the highest one should not exceed 1:8.

FEATURES:

- Available current transformers versions with 2 to 8 primary windings.
- Nickel plated secondary terminals with +/- screws.
- Multiple mounting methods, including wall mounting, DIN rail 35mm.
- Terminal protection IP10.

GENERAL SPECIFICATION

Applicable standard:	IEC 61869-1/2
Case:	self-extinguishing plastic
Connection:	Two connection on each side. M4 screws with self lifting clamp strap.
Insulation class:	E (max 120°C)
Maximum system voltage:	0.72 kV
Operating frequency:	50/60 Hz
Test voltage:	3 kV, 50 Hz, 1 min
Rated primary rating:	(2...8) x 5A
Rated secondary output:	5A
Rated burden:	5; 10; 15; 20; 25 VA
Accuracy class:	0.5; 1
Ambient temperature:	-25°C ... +40°C
Storage temperature:	-50°C ... +80°C
Thermal short circuit current (I_{th}):	60 x I _n
Dynamic short circuit current (I_{dyn}):	2,5 x I _{th}
Instrument security factor (FS):	5, 10

FEATURES:

720 V

Class
0.5
1

OUTPUTS:

5 A

LU01 - SUMMATION CURRENT TRANSFORMERS



	LU01 (75)
Depth	70 mm
Width	75 mm
Inputs	2 x 5A...4 x 5A
Secondary current	5 A
Accuracy class	0,5; 1

INPUTS:

2 x 5A
...
4 x 5A

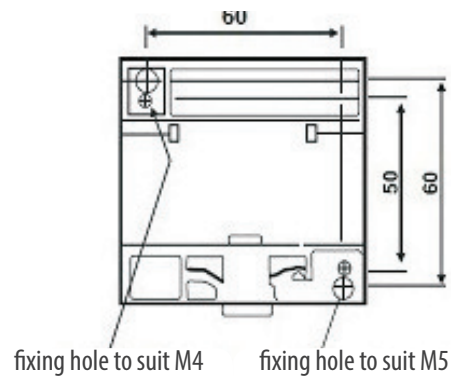
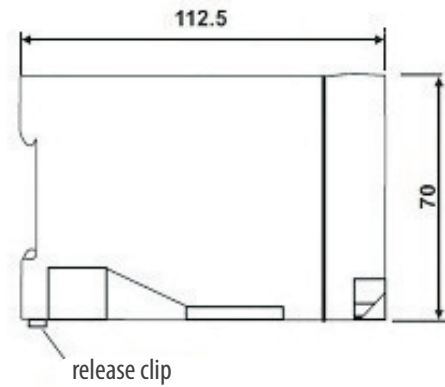
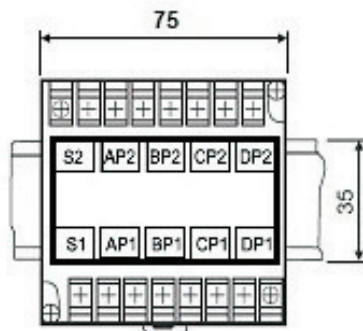
OUTPUTS:

5 A

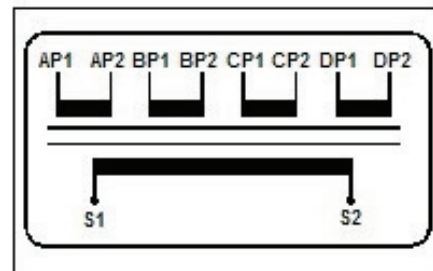


DIMENSIONS

LU01 (75)



Transformer type	LU01 (75)	
	0.5	1
Accuracy class	0.5	1
Inputs	Transformer burden	
2 x 5A	5 VA	5 VA
	10 VA	10 VA
	15 VA	15 VA
	-	20 VA
3 x 5A	-	25 VA
	5 VA	5 VA
	10 VA	10 VA
	15 VA	15 VA
4 x 5A	-	20 VA
	-	25 VA
	5 VA	5 VA
	10 VA	10 VA
4 x 5A	15 VA	15 VA
	-	20 VA
	-	25 VA
	-	25 VA



terminal description

ORDER

Required data: transformer type/ inputs/ power/ accuracy class
Order example: LU01 (75), 2x5A, 5VA, d. 1

LU01- SUMMATION CURRENT TRANSFORMERS

	LU01 (150)
Depth	70 mm
Width	150 mm
Inputs	5 x 5A...8 x 5A
Secondary current	1 A, 5 A
Accuracy class	0,5; 1

INPUTS:

5 x 5A
...
8 x 5A

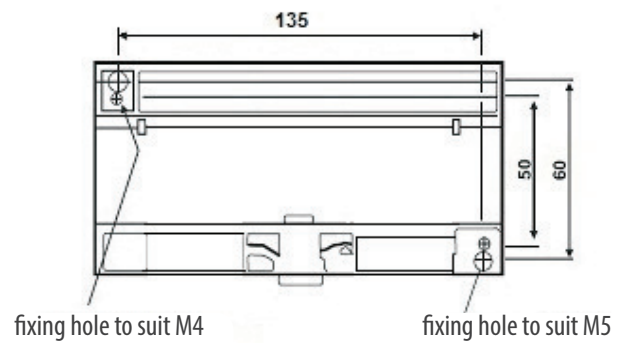
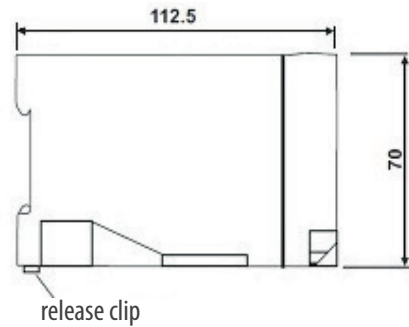
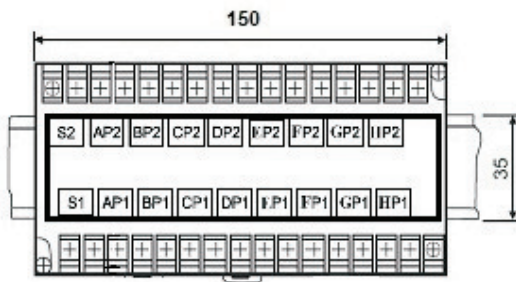
OUTPUTS:

5 A



DIMENSIONS

LU01 (150)



Transformer type	LU01 (150)	
Accuracy class	0.5	1
Inputs	Transformer burden	
	5 VA	5 VA
5 x 5A	10 VA	10 VA
	15 VA	15 VA
	-	20 VA
	-	25 VA
	-	25 VA
6 x 5A	5 VA	5 VA
	10 VA	10 VA
	15 VA	15 VA
	-	20 VA
	-	25 VA
7 x 5A	5 VA	5 VA
	10 VA	10 VA
	15 VA	15 VA
	-	20 VA
	-	25 VA
8 x 5A	5 VA	5 VA
	10 VA	10 VA
	15 VA	15 VA
	-	20 VA
	-	25 VA



terminal description

ORDER

Required data: transformer type/ inputs/ power/ accuracy class

Order example: LU01 (150), 5x5A, 15VA, cl. 0.5