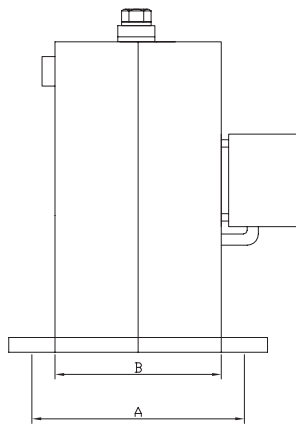
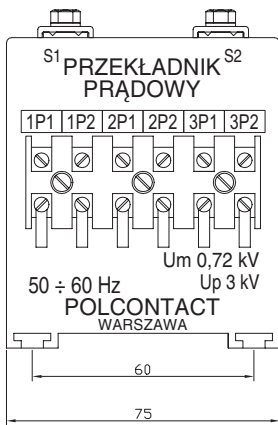


# ESA 1

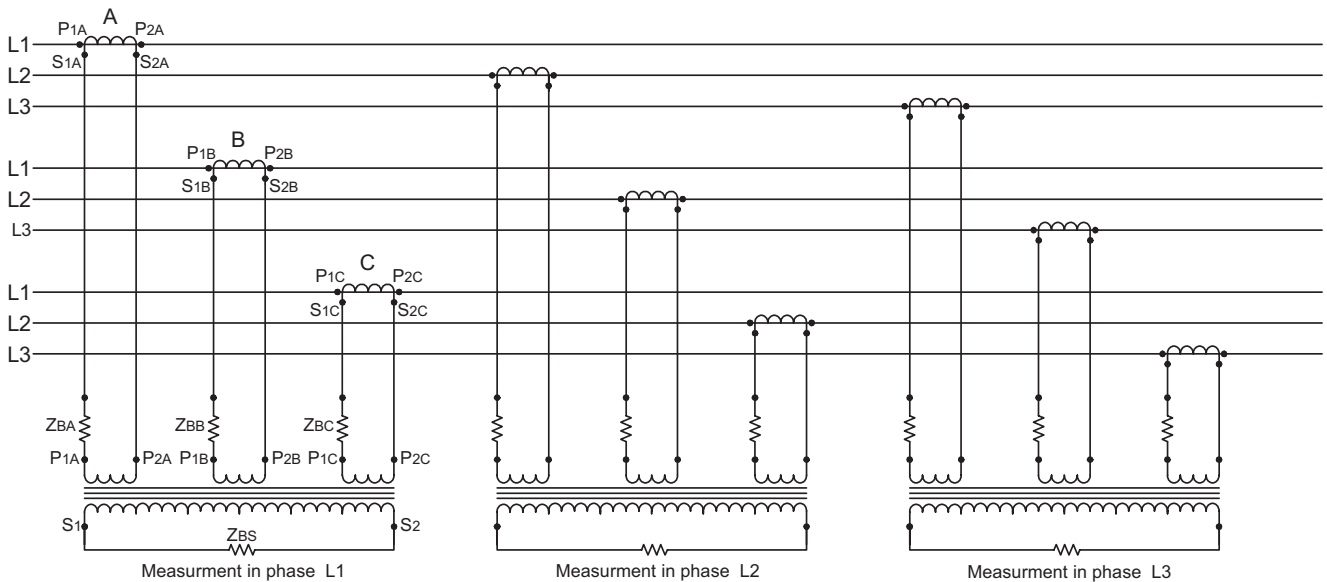
Low voltage adding current transformer type ESA 1

Adding current transformer has at least two primary winding and one secondary winding. Usually the number of secondary winding - no more than six.

Primary winding of adding current transformer are connect with secondary circuit of current transformer of the same phase.



A = 60 mm; B = 45 mm  
A = 80 mm; B = 80 mm



Current transformer "A", "B" and "C" has the same current ratio.

Example of adding and results of adding transformer

Current transformer "A", "B" and "C" has the same current ratio - 100A/5A

No	Primary current			Results of adding current transformer
	"A"	"B"	"C"	
I	$I_{1A} = 100 \text{ A}$	$I_{1B} = 100 \text{ A}$	$I_{1C} = 100 \text{ A}$	$I_{2S} = 5 \text{ A}$
II	$I_{1A} = 50 \text{ A}$	$I_{1B} = 25 \text{ A}$	$I_{1C} = 75 \text{ A}$	$I_{2S} = 2,5 \text{ A}$
III	$*I_{1A} \approx 0 \text{ A}$	$*I_{1B} = 25 \text{ A}$	$*I_{1C} = 50 \text{ A}$	$I_{2S} = 1,25 \text{ A}$

\* - If there is no current float in the primary circuit or the circuit is disconnected, the secondary circuit of current transformer must be absolutely disconnected from adding current transformer.

For safety work the secondary circuit of disconnected current transformer must be shorted! Adding current transformer work properly according to accuracy class and rated power, if there is no phase shift between current of current transformers.

Max voltage - 0.72 kV.

Test voltage - 3 kV.

$Z_{B(A, B, C)}$  - impedance of burden of secondary current transformer

$Z_{BS}$  - impedance of burden of secondary current adding current transformer

Number of primary winding	Current ratio	Dimension b	Power of secondary circuit; class	Own power	Dimension b	Power of secondary circuit; class	Own power
2	$5 + 5/5 \text{ A}$	45 mm	5 VA; class 0,5	4 VA	65 mm	10 VA; class 0,5	6 VA
3	$5 + 5 + 5/5 \text{ A}$		10 VA; class 1			20 VA; class 1	

Parameters of adding current transformers type ESA 1.

Other number of primary circuit in adding current transformer available on request.

Number of primary winding	Current ratio	Power of secondary circuit; class	Dimension b	Own power	Power of secondary circuit; class	Dimension b	Own power
2	$5 + 5/5 \text{ A}$	5 VA; class 0,5	45 mm	4 VA	10 VA; class 0,5	65 mm	6 VA
3	$5 + 5 + 5/5 \text{ A}$	10 VA; class 1			20 VA; class 1		