

The circuit separation blocks MST-U are intended for suppression of mutual influence of tested meters, what have connected the voltage bridges and for static meters with current shunts.

The MST-U block permits connection of electricity meters to the equipment without a necessity to disconnect voltage bridges between the voltage and current circuits of tested meters. For the static shunt-operated meters application of the separation unit is obligatory.

The MST-U block is used in fix or mobile stands for measurement of 1 to 20 meter units.

Measurement procedure with MST-U is realized in such a way, that one output is considered to be a reference one for a feed-back of reference standard in the test equipment.

The test equipment with MST-U block can be connected in such a way, that by a simple switching over all the meters, either with shunts or current transformers can be measured.



The block MST-U/20

Highlights

- The MST-U block is a passive separation transformer with identical balanced secondary windings.
- The secondary windings are realized in order to suppress voltage differences among them.
- The MST-U unit operates without external supply.
- Simple assembly for new and old types of test equipments.
- Design execution suppresses parasite mutual inductive linkage between individual secondary windings to maximum extend.

Technical data

Input voltage U_1	230 V \pm 20 % (110, 220 V \pm 20 %, optional)
Frequency range	45 ... 65 Hz
Maximal amplitude deviation among secondary voltages	0,1%
Maximal power/position	10 (17) VA
Maximal deviation U_{Ti}/U_1 (between secondary and primary windings)	1 %
Maximal phase deviation	0,03°
Insulation strength U_{Ti} / U_1 (between secondary and primary windings)	4 kV
Insulation strength among secondary windings	2,1 kV
Protection	against short circuit



Application of separation block MST-U

Available type

MST-U/20 for 20 measured electricity meters + 1 reference electricity meter (the same as the measured electricity meter. Only voltage is connected, no current is connected), with a power of 200 VA, dimensions 304 x 225 x 178 mm and weight 8 kg.

Connection diagram

