

INSTALLATION GUIDANCE

AM-12 installation guidance



AM-24 installation guidance





AM-40 installation guidance



Remark: the dimensions denote the minimal distances.

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Transzvill Instrument Transformer Manufacturing and Marketing closed Co. Ltd.

 Postal address:
 Tel/Fax: +36-1-340-9500;

 1385 Budapest, Pf. 852;
 E-mail: kereskedelem@transzvill.hu

 Tel.: +36-1-450-1254, +36-1-450-1255;
 Web: wwwtranszvill.hu

AM-12a,b,c AM-24a,b,c AM-40a,b Synthetic resin insulated, indoor current transformer range for 12, 24, 40 kV highest voltage for equipmer

TYPE MARKING

The letters and numerals applied in type marking have the following meanings:

A	current transformer
Μ	synthetic resin insulated
Т	equipped with contact blades (optional) (e.g. for EIB "A" or "B" type circuitbreakers)
12, 24, 40	highest voltage for equipment
a, b, c	dimensional markings, depending on the accuracy class, output and the thermal current

GENERAL DESCRIPTION

The current transformers types AM are manufactured for 5-1250 A and 2x5-2x300 A rated current respectively. The current transformers comply with the specifications of MSZ EN 60044-1 and EN 60044-1 standards. It is also possible to produce according to other standards, differing from the afore-mentioned (e.g. knee point voltage planing, rated voltages other than the voltages included in the standards).

These types are manufactured in single, double, triple core synthetic resin insulated, support type design. The material of the primary and secondary windings is copper. The primary terminals are copper blocks located on the upper surface. which make possible a horizontal connection even in case of primary changeover design. The primary and secondary contacts are produced without protective coating. Upon agreement we deliver the current transformers with plated contacts, in finish suitable for use under the requested climatic conditions.

The secondary terminals are on the narrower side of the current transformer, - seen from the "P1" marked primary contact - covered by a sealable plastic cover. The connecting leads pass through openings, situated on the right and left sides of the cover. Independent of the a,b,c, dimensional markings the width of the Current transformers, within the same voltage level, is always the same.

The M8 earthing bolt and the rating plate are on the opposite side to the secondary terminals. When requested in the order, the primary terminals can be executed also with contact blades (Type AMT-24).

PACKING, DELIVERY

The current transformer is delivered in a finish suitable for use under normal climatic conditions, packed in corrugated paper box, but upon agreement also in packing fit for marine or aerial transport.

STORAGE

In case of a long-term storage, it is practical, to keep the current transformer indoor, in a covered, well ventilated room (storage temperature: + 5 °C, +40 °C).

INSTALLATION, PUTTING INTO OPERATION, OPERATION

Before installation the Current transformer has to be checked in order to discover on the surface, or on the terminals any possible damages occurred during the transportation or the storage. In case of any damages further investigation is necessary.

Generally the current transformer has to be mounted in upright position. The fastening to the supporting structure can be accomplished by the help of legs shaped on the bottom of the device. When fixing, it is adviceable to put under the legs a rubber or a rubbercork plate, in order to equalize the accidental unevennesses. Before connection, any contamination, occurred during the transportation and storage has to be removed, the terminals cleaned and smeared with contact vaseline.

The proper connection can be achieved paying attention to the markings on the primary (P1, P2 at primary changeover design C1, P2 and P1, C2) and on the secondary (1S1, 1S2, 2S1, 2S2, 3S1, 3S2) side. The operation is possible keeping the prescriptions of the relevant security-, labour- and property-protection directives. Any faults and breakdowns emerging in the customer's sphere of interest due to breaching, disobeying the aforementioned, exempt the manufacturer from the warranty and guarantee liabilities.

MAINTENANCE

The maintenance consists of works to be done according to the general rules for indoor instruments and discontinuing of the accidental irregularities. These are:

- periodical inspection of the contamination and cleaning, depending on the degree of impurity,
- inspection of the surfaces,
- tightening of the bolts of the primary and secondary connections,
- tightening of the fastening bolts.

STATE VERIFICATION

The secondary windings of the current transformers in classes 0.2 and 0.5 are manufactured in finish suitable for verification. The verification will be made only on special request, in this case it will be accomplished and documented by an official seal or an affixed verification stamp, by the State Office for Measurement.

DATA TO BE SUBMITTED WITH THE ORDER

- type (e.g. AM-12b),
- rated insulation level (e.g. 12/28/75 kV),
- accuracy class, output and instrument security factor or accuracy limit factor of the secondary windings.
- (e.g. class 0.5, 15 VA, Fs10 or 15 VA 10P5),
- quantity,
- requested term of delivery.



- rated primary and secondary currents (e.g. 200/5/5 A or in case of primary changeover function 2x100/5/5 A),



OTHER OR SPECIAL REQUIREMENTS:

- climatic zone of use other than normal,
- surface protection (plating) of primary terminals,
- fitted with primary contact blades (e.g. for EIB "A" or "B" type circuit breakers) (e.g. AMT-12b) language of the rating plate,
- packing,
- number of pieces and sort of the documentation to be attached.

WARRANTY PERIOD, GUARANTEE

The warranty period is 12 months and otherwise it can also be established upon the mutual agreement of the parties respectively.

AM-12 AM-24 AM-40 Туре Highest voltage for equipment 12 kV 24 kV 36 kV Rated frequency 50 Hz 5, 10, 15, 20, 25, 30, 40, 50, 60, 75, 100, 150, 200, 250, Rated primary currents (Ipn) 300, 400, 500, 600, 750, 1000, 1250 A Rated primary curents in case of primary changeover function 2x5, 2x10, 2x15, 2x20, 2x25, 2x30, 2x40, 2x50, 2x75, 2x100, 2x150, 2x200, 2x250, 2x300 A 5 A or 1 A Rated secondary current (Isn) Icth = 1,2 Ipn Rated continuous thermal current 100 x lpn Rated short time thermal current (Ith) 200 x lpn 400 x Ipn 600 x lpn (kA r.m.s, 1sec), max.50 kA r.m.s 1 sec. Idyn = 2,5 x Ith, be not higher than 125 kA peak Rated dynamic current Power frequency withstand voltage (r.m.s) 28 kV 50 kV 70 kV 75 kV 125 kV 170 kV Rated lightning impulse withstand voltage (peak) Accuracy class, output 0,2 or 0,5 5-45 VA 5-60 VA 1 5P, 10P 5-60 VA Instrument security factor (Fs) Fs5-Fs20 Accuracy limit factor (np) 5P5-5P20 and 10P5-10P20 respectively Number of cores 1, 2 and 3 cores, but in case of 400 x In and 600 x In triple core execution is not available. Class of insulation В Climatic zone of use According to agreement 18-30 kg 44-51 kg Mass (depending on the size) 32-39 kg Dimensions According to drawing

Remark: The afore-mentioned technical data (minimal and maximal values) can be interpreted exclusively in themselves. The possibilities of the mounting in the required type of equipment, or the implementation, are determined by the complex interpretation of the given technical data. The installation of the device in electrical network therefore needs a previous check up. For this reason, please contact us by means of any modes given in our technical publications.







Туре	b [mm]	c [mm]	d [mm]	Mass [kg]
AM-12a	196	277	222	18
AM-12b	276	357	302	24
AM-12c	356	437	382	30

TECHNICAL DATA











Current [A]	a [mm]
10-600	60
750	80
1000-1250	100
2x5-2x300	60

0



AM-24









10-600 A 750-1250 A 40 M12 9 Æ 65 8 Θ 22~ 20 4 20 2x5-2x300 A 9

Current [A]	a [mm]
10-600	60
750	80
1000-1250	100
2x5-2x300	60

Туре	b [mm]	c [mm]	d [mm]	Mass [kg]
AM-24a	188	275	220	22
AM-24b	268	355	300	32
AM-24c	348	435	380	39

20

AM-40







Туре	a [mm]	b [mm]	c [mm]	Mass [kg]
AM-40a	286	318	~ 360	44
AM-40b	366	398	~ 440	51



E.g.: at a current transformer of 2x100 A, the primary is at the first connection in 200 A, at the second connection is in 100 A position.



10-600 A

750-1250 A







2x5-2x300 A