CURRENT TRANSFORMERS
12-38 kV



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INTRODUCTION

APPLICATION

These transformers are used to isolate measuring and protection equipment from high voltage, and to transform measured currents to a level suitable for such equipment.

They are designed for installation in switchgear with voltage ratings up to 38 kV. They provide power to ammeters, meter current circuits, protection relays, and other devices.

The transformers can operate continuously at currents up to 20% above their rated value while still maintaining their specified accuracy class.

DESCRIPTION

Basic insulation in these transformers is epoxy resin. Magnetic core consists of quality, cold rolled, oriented magnetic steel sheet. Secondary terminals have been covered with transparent plastic cover which can be sealed.

Transformers can be made with 1, 2, 3 or more magnetic cores and as many separated secondary windings.

The primary winding can be made in two sections, allowing the transformer to be primarily switchable. The marking 2x100A means that the transformer can be used at the rated primary currents of 100 A and 200 A.

HANDLING AND MAINTENANCE

Regular maintenance is not required for these transformers.

Periodically, check that all terminals are securely fastened and clean the transformer if it has become soiled.

Ensure that the transformer is never operated with open secondary terminals, as dangerously high voltage may develop at these points, and serious damage to the insulation could occur.

In the event of any faults or failures within the installation, the transformers should be inspected to verify that they remain in proper working order.

INSTALLATION

The transformer can be mounted in any position. It is secured to the mounting surface via a base plate using appropriate screws. All connections on the primary and secondary sides must be clean and firmly tightened to prevent overheating. One terminal of each secondary winding must be grounded (typically terminal 'k' or 's1'). Ensure that the total load of the connected measuring or protective devices, combined with losses in the connecting cables, does not exceed the transformer's rated load.

If the total load of the devices connected to a measuring current transformer (including cable losses) is significantly lower than the rated load, additional resistance must be inserted into the transformer's secondary circuit to ensure proper operation. If any of the secondary windings are left unloaded during operation, their terminals must be short-circuited.

Primary switchable transformers feature a connection diagram. The switch is performed by simply repositioning the connected plates on the high-voltage terminals while the transformer is de-energized. Reconfiguration can also be carried out on the secondary side; in this case, the connection diagram indicates which secondary-side terminals should be used to select the appropriate transformation ratio—again, while the transformer is de-energized.

When mounting the transformer, take care not to reverse the primary or secondary connections. The current input on the primary winding is marked K or P1, and the output L or P2, while on the secondary winding the input is marked k or S1, and the output l or S2.

If the external dynamic forces of the primary feed lines are large (greater than 3.75 kN), support insulators must be installed near the power transformer. Transformers must be properly earthed at the designated point.

BURDEN INFLUENCE TO THE INSTRUMENT SAFETY FACTOR AND ACCURACY LIMIT FACTOR FOR CURRENT TRANSFORMERS

The standard values for the instrument safety factor and accuracy limit factor provided by the manufacturer refer to the rated power (rated burden) of the current transformer cores. If the rated burden is not connected to the secondary of the current transformer, the safety factor (or accuracy limit factor) will change according to the following formula:

$$F_{st} = F_s \cdot \frac{P_n + P_i}{P_t + P_i}$$

F_{st} – Instrument safety factor at operating burden (P_t)

F_s – Instrument safety factor at rated burden (P_n)

P_n – rated core power

P_t – core power at operating burden and rated current

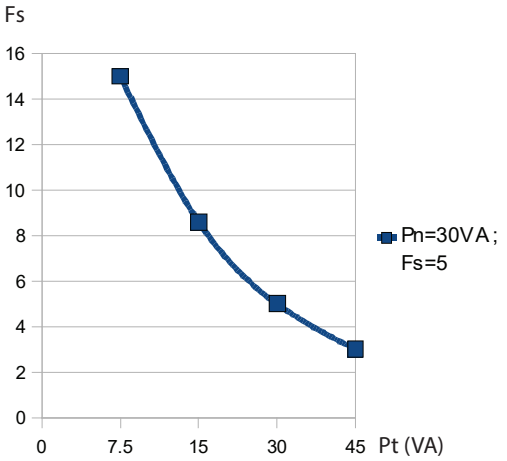
P_i – core's own consumption (0,05 P_n to 0,2 P_n)

This formula does not apply to so-called "linear" cores. The diagram below illustrates the relationship between the safety factor and the burden connected to a 30VA core, for a safety factor of $F_s = 5$.

Connecting a burden with a power rating lower than the core's rated power results in a higher safety factor; therefore, care must be taken to protect the measuring instrument due to the increased secondary current.

For the accuracy limit factor, the same functional dependence on the burden applies as for the safety factor.

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PROPER SELECTION OF MEASUREMENT TRANSFORMERS

For three-phase measurement, 3 current transformers and 3 voltage transformers are required, rated for the voltage level of the network where the measurement is being performed. It is essential that the transformation ratio and power rating of the instrument transformers be determined as accurately as possible to ensure the highest possible measurement precision.

The primary current of current transformers is the line current, which is calculated based on the power rating of the power transformer upstream of the installation and rounded up to the nearest standard value. Since the power transformer itself is not always loaded to its rated capacity, it is necessary to determine the rated primary current of the current transformers as accurately as possible, using the following formula:

$$I(A) = \frac{Sn(kVA)}{\sqrt{3}\ Un(kV)}$$

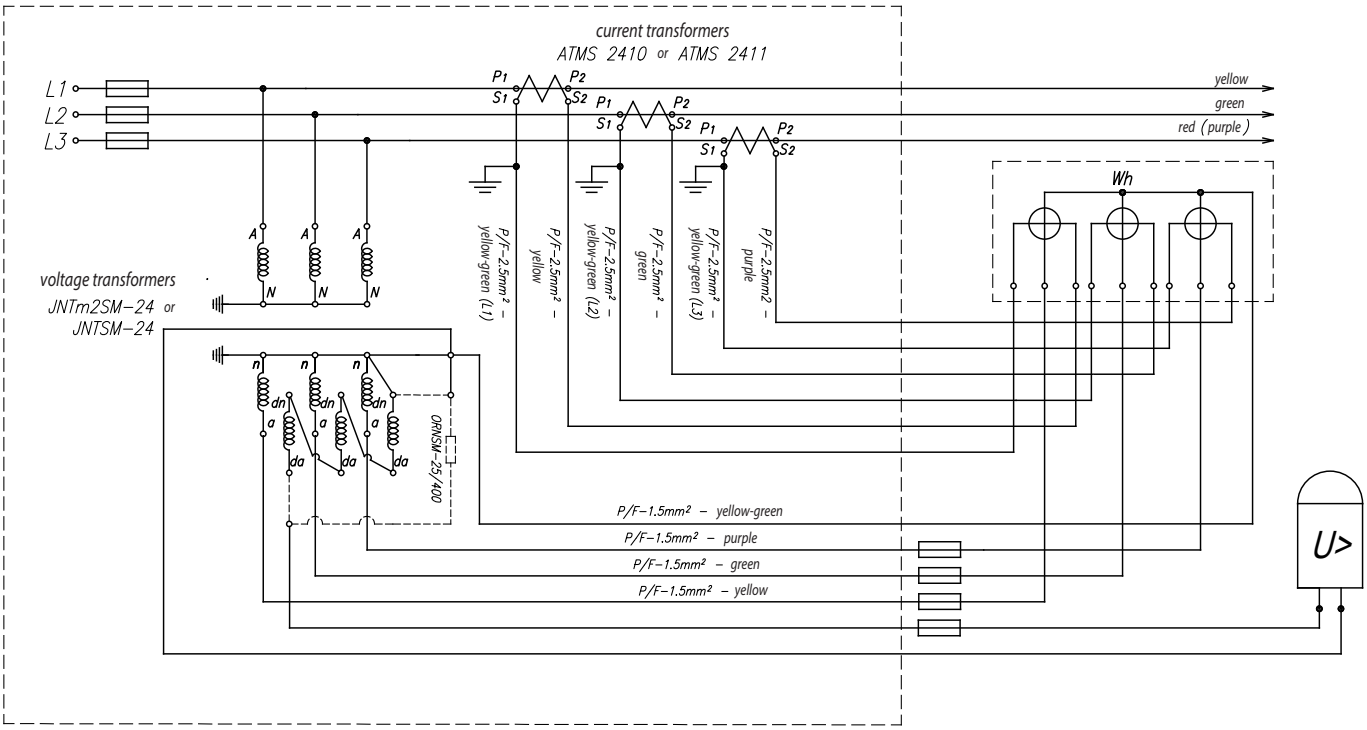
The rated primary currents I1n are 5, 7.5, 10, 12.5, 15, 20, 25, 30, 40, 50, 60, and 75 A, or their integer decimal multiples. The secondary current of current instrument transformers can be 5 A or 1 A.

The rated power of each secondary winding of a current instrument transformer must account for the consumption of all measuring or protection devices connected to the secondary terminals of that winding, plus the Joule power losses in the conductors themselves, as specified in the table below:

Consumer	Power consumption of the system (W/m)
Cu conductor 1m 2,5mm² at 5A	0.18
Cu conductor 1m 4mm² at 5A	0.11
Cu conductor 1m 1,5mm² at 1A	0.012
Cu conductor 1m 2,5mm² at 1A	0.007
Cu conductor 1m 4mm² at 1A	0.0044

The standard power ratings of the secondary windings of current measuring transformers are 2.5, 5, 10, 15 and 30 VA. The connection diagram for current and voltage transformers for three-phase measurement is shown below.

Note: A resistor is included in the tertiary winding circuit—in cases where the network has an isolated neutral point—to protect the voltage transformers against ferroresonance.



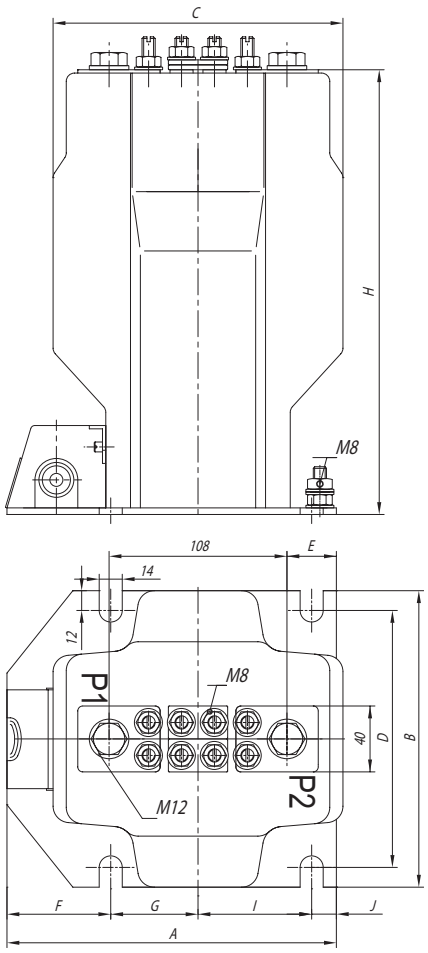
Three-system measurement scheme for 10 kV and 20 kV voltage level networks

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STEM-N 1211, 2411, 3811



STEM-N 2411



SINGLE-CORE CURRENT TRANSFORMERS FOR INDOOR MOUNTING **STEM-N***

Type of transformer	Dimension (mm)										Mass (kg)
	A	B	C	D	E	F	G	H	I	J	
STEM-N 1211	216	158	162	134	27	72	63	220	66	15	~11
STEM-N 2411	200	180	176	156	30	63	53	270	69	15	~15
STEM-N 3811	215	184	198	160	45	54	62	390	82	17	~18

TECHNICAL DATA	STEM-N 1211 (STEM-N 1210)	STEM-N 2411 (STEM-N 2410)	STEM-N 3811 (STEM-N 3810)
Rated primary voltage (kV)	10	20	35
Highest voltage for equipment (eff.) (kV)	12	24	38
Rated power-frequency withstand voltage, 1 min. (kV)	28	50	70
Rated impulse withstand voltage 1.2/50 μs (kV)	75	125	170
Rated frequency (Hz)	50/60		
Rated primary current (A)	5 to 600 or 2x5 to 2x600		
Rated secondary current (A)	5 (or 1)		
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P		
Rated thermal current 1 sec.	$I_{th} = (100\text{-}500)I_n$		
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$		
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$		
Number of cores	1		
Rated core power (VA)	5; 7,5; 10; 15; 30		
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30		
Temperature class of insulation	E/B		
Possibility of sealing	On primary and secondary side		
Type of basic insulation	Epoxy resin		
Valid standards	IEC 61869-1; IEC 61869-2		

NOTE:

STEM-N 1211, STEM-N 2411, STEM-N 3811 – single-core transformer, primarily-switchable; STEM-N 1210, STEM-N 2410, STEM-N 3810 – single-core transformer, primarily non-switchable.

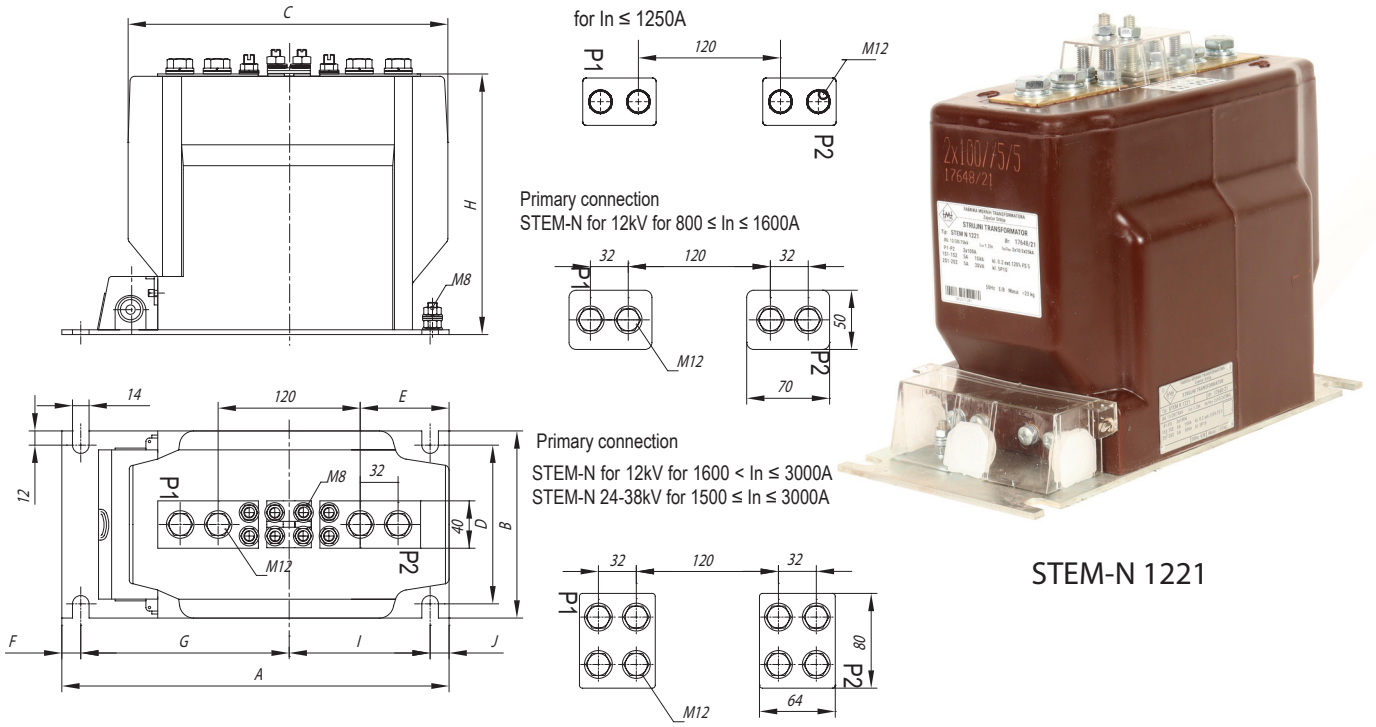
We manufacture these transformers as a standard series for a thermal current of 100In, but they can also be produced for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and instrument safety factor (accuracy limit factor).

The primary regulation cover is supplied on special request.

The right to make changes is reserved.

STEM-N 12*, 24*, 38*



STEM-N 1221

MULTI-CORE CURRENT TRANSFORMERS FOR INDOOR MOUNTING **STEM-N***

Type of transformer	Dimension (mm)										Mass (kg)
	A	B	C	D	E	F	G	H	I	J	
STEM-N 12*	327	158	270	134	75	16	176	220	119	16	~23
STEM-N 24*	339	178	294	154	87,5	17	175	265	130	17	~27
STEM-N 38*	305	184	300	162	91	21,5	133	390	133	17,5	~36
STEM-N 38*sa	305	184	300	162	91	21,5	133	360	133	17,5	~33

TECHNICAL DATA	STEM-N 12*	STEM-N 24*	STEM-N 38*(sa)
Rated primary voltage (kV)	10	20	35
Highest voltage for equipment (eff.) (kV)	12	24	38
Rated power-frequency withstand voltage, 1 min. (kV)	28	50	70
Rated impulse withstand voltage 1.2/50 μs (kV)	75	125	170
Rated frequency (Hz)	50/60		
Rated primary current (A)	5 to 3000 or 2x5 to 2x600		
Rated secondary current (A)	5 (or 1)		
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P		
Rated thermal current 1 sec.	$I_{th} = (100\text{-}1000)I_n$		
Rated dynamic current	$I_{dyn} = 2,5\ I_{th}$		
Rated continuous thermal current	$I_{cth} = 1,2\ I_n$		
Number of cores	1-4		
Rated core power (VA)	5; 7,5; 10; 15; 30		
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30		
Temperature class of insulation	E/B		
Possibility of sealing	On primary and on secondary side		
Type of basic insulation	Epoxy resin		
Valid standards	IEC 61869-1; IEC 61869-2		

NOTE:

STEM-N 1221 (STEM-N 1231), STEM-N 2421 (STEM-N 2431), and STEM-N 3821 (STEM-N 3831) - transformers with two (three) cores, primarily switchable;
STEM-N 1220 (STEM-N 1230), STEM-N 2420 (STEM-N 2430), and STEM-N 3820 (STEM-N 3830) - transformers with two (three) cores primarily non-switchable.

Change of transformation ratio can be done on the primary or secondary side. If it is on the secondary side, the suffix "sp" is added to the designation:
STEM-N 1220sp is a two-core transformer with a switchable secondary side.

The STEM-N 3821sa model shares the same characteristics as the STEM-N 3821 but is 30 mm shorter in height (360 mm compared to 390 mm for the STEM-N 3821). It is suitable for installation in power substation cells with limited space for instrument transformers.

We manufacture these transformers as a standard series featuring two cores: a metering core (15 VA, class 0.5 FS5) and a protection core (30 VA, class 5P10). We can also produce them for higher thermal currents (up to 500In or more), and with 1, 3, or 4 cores, depending on the transformation ratio, accuracy class, and core power.

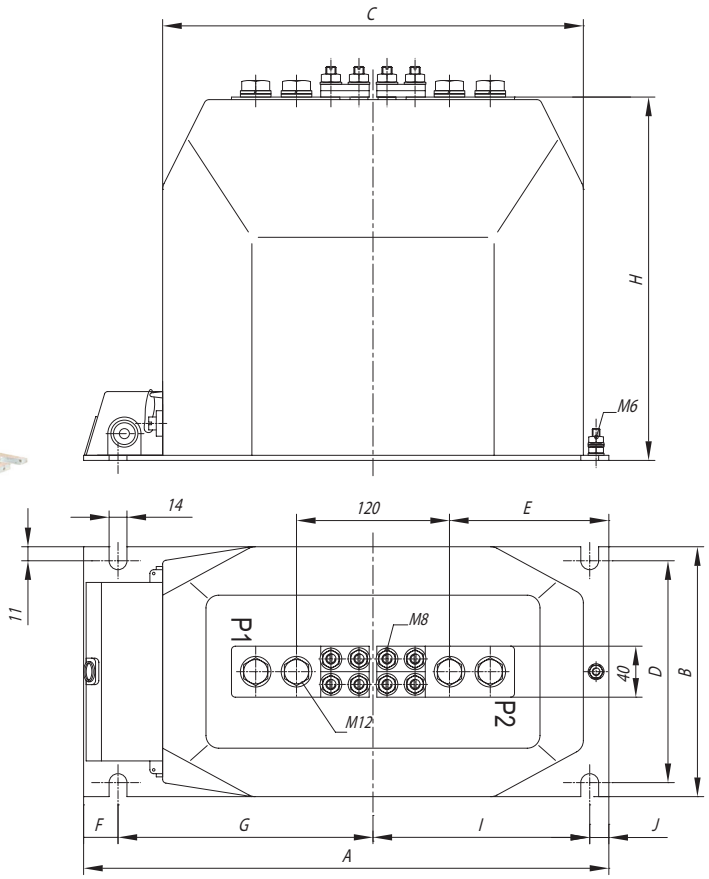
When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and instrument safety factor (or accuracy limit factor) for each core. The primary regulation cover is supplied on special request. The right to make changes is reserved.

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STEM-NS 24*(12*), 38*, 38*L



STEM-NS 2430



MULTI-CORE CURRENT TRANSFORMERS FOR INDOOR MOUNTING **STEM-NS ***

Type of transformer	Dimension (mm)										Mass (kg)
	A	B	C	D	E	F	G	H	I	J	
STEM-NS 24(12)*	412	196	330	174	125	27	200	285	175	15	~42
STEM-NS 38*	412	196	330	174	125	27	200	390	175	15	~48
STEM-NS 38*L	385	220	350	190	115	27	160	390	160	15	~58

TECHNICAL DATA	STEM-NS 24*(STEM-NS 12*)	STEM-NS 38*L
Rated primary voltage (kV)	20(10)	35
Highest voltage for equipment (eff.) (kV)	24(12)	38
Rated power-frequency withstand voltage, 1 min. (kV)	50(28)	70
Rated impulse withstand voltage 1.2/50 μs (kV)	125(75)	170
Rated frequency (Hz)	50/60	
Rated primary current (A)	5 to 3000 or 2x5 to 2x1250	
Rated secondary current (A)	5 (or 1)	
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P	
Rated thermal current 1 sec.	$I_{th} = (100\text{-}1000)I_n$	
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$	
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$	
Number of cores	1-4	
Rated core power (VA)	5; 7,5; 10; 15; 30	
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30	
Temperature class of insulation	E/B	
Possibility of sealing	On primary and secondary side	
Type of basic insulation	Epoxy resin	
Valid standards	IEC 61869-1; IEC 61869-2	

NOTE:

STEM-NS 1221 (STEM-NS 1231), STEM-NS 2421 (STEM-NS 2431), STEM-NS 3821 (STEM-NS 3831) – transformer with two (three) cores, primarily switchable;
STEM-NS 1220 (STEM-NS 1230), STEM-NS 2420 (STEM-NS 2430), STEM-NS 3820 (STEM- NS 3830) – transformer with two (three) cores, primarily non-switchable.

Change of transformation ratio can also be done on the secondary side and in that case, the suffix 'sp' is added at the end of the denotation:
STEM-NS 3820Lsp – transformer with two cores, secondarily switchable.

These transformers can also be manufactured for higher thermal currents and with 1, 3, or 4 cores, depending on the transformation ratio, accuracy class, and core power ratings.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (or accuracy limit factor) for each core.

The primary regulation cover is supplied on special request.

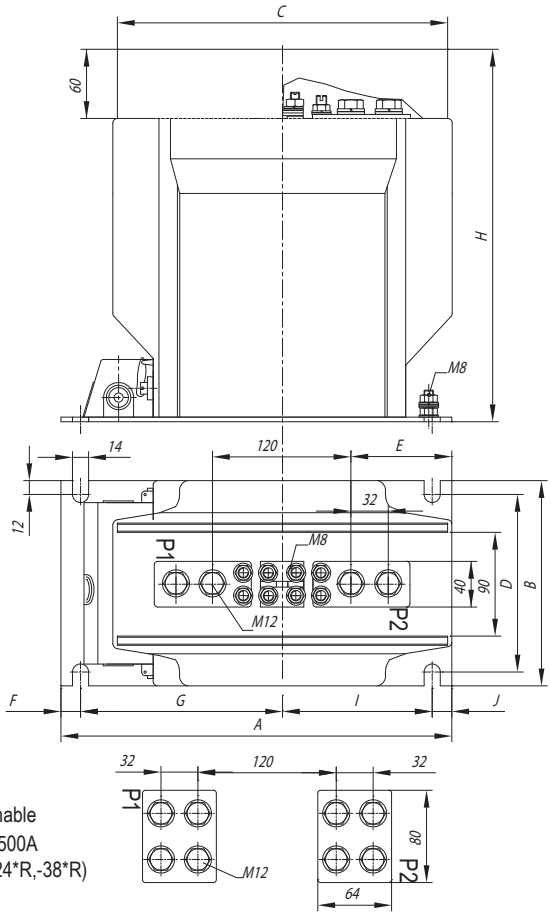
The right to make changes is reserved.

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STEM-N 24*R, 38*R



STEM N 24*R



Primarily non-switchable
For 1600A ≤ In ≤ 2500A
(valid for STEM-N 24*R,-38*R)

MULTI-CORE CURRENT TRANSFORMERS FOR INDOOR MOUNTING **STEM-N 24*R STEM-N 38*R**

Type of transformer	Dimension (mm)										Mass (kg)
	A	B	C	D	E	F	G	H	I	J	
STEM-N 24*R	339	178	286	154	87	17	175	323	130	17	~29
STEM-N 38*R	305	184	292	162	90,5	21,5	133	448	133	17,5	~37

TECHNICAL DATA	STEM-N 24*R	STEM N-38*R
Rated primary voltage (kV)	20	35
Highest voltage for equipment (eff.) (kV)	24	38
Rated power-frequency withstand voltage, 1 min. (kV)	50	70
Rated impulse withstand voltage 1.2/50 μs (kV)	125	170
Rated frequency (Hz)	50/60	
Rated primary current (A)	5 to 3000 or 2x5 to 2x600	
Rated secondary current (A)	5 (or 1)	
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P	
Rated thermal current 1 sec.	$I_{th} = (100\text{-}1000)I_n$	
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$	
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$	
Number of cores	1-4	
Rated core power (VA)	5; 7,5; 10; 15; 30	
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30	
Temperature class of insulation	E/B	
Possibility of sealing	On primary and secondary side	
Type of basic insulation	Epoxy resin	
Valid standards	IEC 61869-1; IEC 61869-2	

NOTE:

STEM-N 2421R (STEM-N 2431R) and STEM-N 3821R (STEM-N 3831R) - transformers with two (or three) cores and a switchable primary side;

STEM-N 2420R (STEM-N 2430R) and STEM-N 3820R (STEM-N 3830R) - transformers with two (or three) cores and a non-switchable primary side.

Change of transformation ratio can also be done on the secondary side and in that case, the suffix 'sp' is added at the end of the denotation: STEM-N 3820Rsp denotes a two-core transformer with a switchable secondary side.

These transformers are designed for installation in power substation cells with limited spacing; they feature an extended creepage distance, achieved through epoxy-resin-cast ribs (barriers) located near the primary terminals.

As a standard production offering, these units are manufactured with a thermal current rating of 100In and two cores: a metering core (15 VA, class 0.5FS5) and a protection core (30 VA, class 5P10).

We can also manufacture them for higher thermal currents and with 1, 3, or 4 cores, depending on the transformation ratio, accuracy class, and core power.

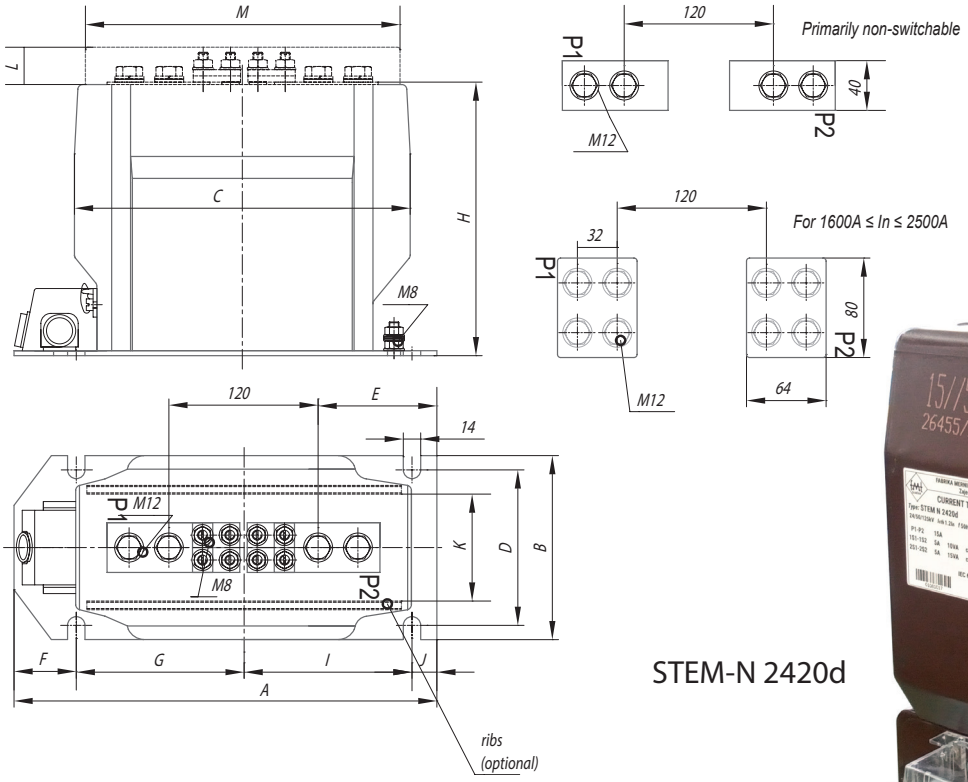
When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (or accuracy limit factor) for each core.

The primary regulation cover is supplied on special request.

The right to make changes is reserved.

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STEM-N 12*d(R), 24*d(R)





STEM-N 2420d

MULTI-CORE CURRENT TRANSFORMERS FOR INDOOR MOUNTING **STEM-N*d(R)**

Type of transformer	Dimension (mm)													Mass (kg)
	A	B	C	D	E	F	G	H	I	J	K	L	M	
STEM-N 12*d(R)	320	148	270	125	96	50	133	220	135	20	86	30	253	~19
STEM-N 24*d(R)	343	178	310	150	101	43	140	280	140	20	90	60	280	~33

TECHNICAL DATA	STEM-N 12*d(R)	STEM -N 24*d(R)
Rated primary voltage (kV)	10	20
Highest voltage for equipment (eff.) (kV)	12	24
Rated power-frequency withstand voltage, 1 min. (kV)	28	50
Rated impulse withstand voltage 1.2/50 μs (kV)	75	125
Rated frequency (Hz)	50/60	
Rated primary current (A)	5 to 3000 or 2x5 to 2x600	
Rated secondary current (A)	5 (or 1)	
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P	
Rated thermal current 1 sec.	I_{th} = (100-1000)I_n	
Rated dynamic current	I_{dyn} = 2,5 I_{th}	
Rated continuous thermal current	I_{cth} = 1,2 I_n	
Number of cores	1-4	
Rated core power (VA)	5; 7,5; 10; 15; 30	
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30	
Temperature class of insulation	E/B	
Possibility of sealing	On primary and secondary side	
Type of basic insulation	Epoxy resin	
Valid standards	IEC 61869-1; IEC 61869-2; DIN 42600-8	

NOTE:

These models for 12 kV and 24 kV are designed in accordance with the DIN 42600-8 standard. Upon request, they can be equipped with ribs (barriers), indicated by an additional 'dR' at the end of the designation.
Examples of designations: STEM-N 1221dR – 12 kV transformer, with two cores and ribs (barriers), primarily-switchable; STEM-N 2420d – 24 kV two-core transformer, primarily non-switchable.

Change of transformation ratio can also be done on the secondary side and in that case, the transformer is marked with 'sp' at the end of the denotation:
STEM-N 1220dsp – two cores, secondarily switchable.

We manufacture these transformers as a standard series with a thermal current rating of 100In and two cores: a measuring core (15 VA, class 0.5 FS5) and a protection core (30 VA, class 5P10). We can also manufacture them for higher thermal currents and with 1, 3, or 4 cores, depending on the transformation ratio, accuracy class, and core power ratings.

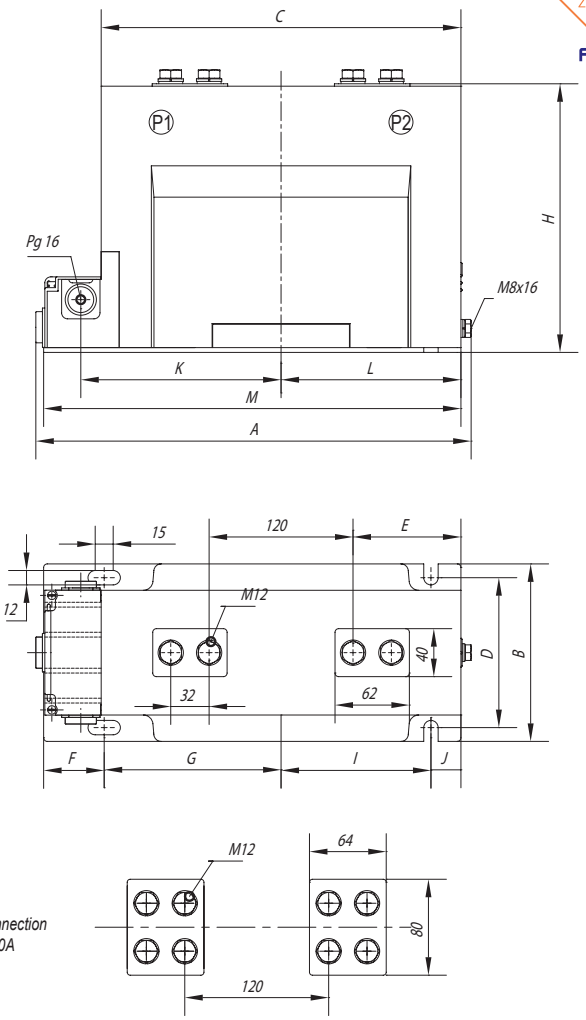
When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (or accuracy limit factor) for each core. The primary regulation cover is supplied on special request. The right to make changes is reserved.

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STEM 12*d, 24*d



STEM 1220d



Primary connection
for In ≥ 2500A

MULTI-CORE CURRENT TRANSFORMERS FOR INDOOR MOUNTING STEM 12*d, 24*d

Type of transformer	Dimension (mm)													Mass (kg)
	A	B	C	D	E	F	G	H	I	J	K	L	M	
STEM 12*d	363	148	300	125	90	505	1475	224	155	25	167	150	348	~23
STEM 24*d	388	178	320	150	105	73	135	283	140	25	177	165	373	~33

TECHNICAL DATA	STEM 12*d	STEM 24*d
Rated primary voltage (kV)	10	20
Highest voltage for equipment (eff.) (kV)	12	24
Rated power-frequency withstand voltage, 1 min. (kV)	28	50
Rated impulse withstand voltage 1.2/50 μs (kV)	75	125
Rated frequency (Hz)	50/60	
Rated primary current (A)	5 to 3000 or 2x5 to 2x600	
Rated secondary current (A)	5 (or 1)	
Rated accuracy class	0,2; 0,5; 0,5S; 0,2S; 1; 3; 5P; 10P	
Rated thermal current 1 sec.	$I_{th} = (100\text{-}1000)I_n$	
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$	
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$	
Number of cores	2 (1, 3 or 4)	
Rated core power (VA)	5; 7,5; 10; 15; 30	
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30	
Temperature class of insulation	E/B	
Possibility of sealing	On primary and on secondary side	
Type of basic insulation	Epoxy resin	
Valid standards	IEC 61869-1; IEC 61869-2; DIN 42600	

NOTE:

These models for 12 kV and 24 kV are designed according to the DIN 42600-8 standard and are primarily non-switchable. Example of denotation: STEM-1220d – 12 kV transformer with two cores.
STEM-2430d – 24 kV transformer with 3 cores.

Change of transformation ratio can be done on the secondary side and in that case denotation 'sp' is added at the end of denotation:
STEM 1220dsp - two-core transformer, secondarily switchable.

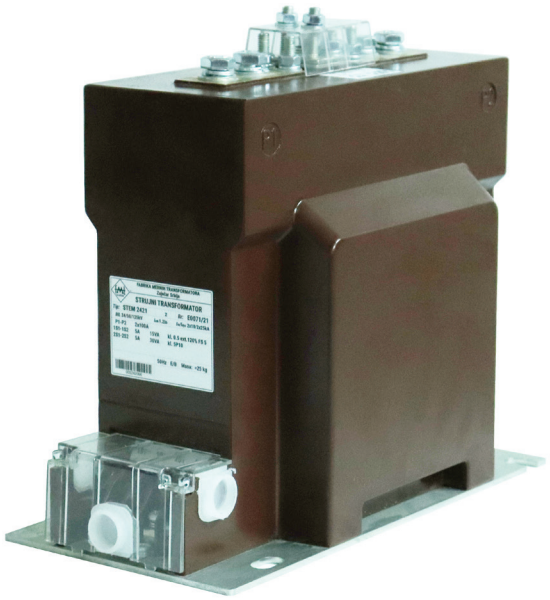
As a standard production offering, these transformers are manufactured with a thermal current rating of 100In and two cores: a metering core (15 VA, class 0.5 FS5) and a protection core (30 VA, class 5P10). We can also manufacture them for higher thermal currents (up to 500In or more) and with 1, 3, or 4 cores, depending on the transformation ratio, accuracy class, and core power.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (or accuracy limit factor) for each core. The primary regulation cover is supplied on special request.

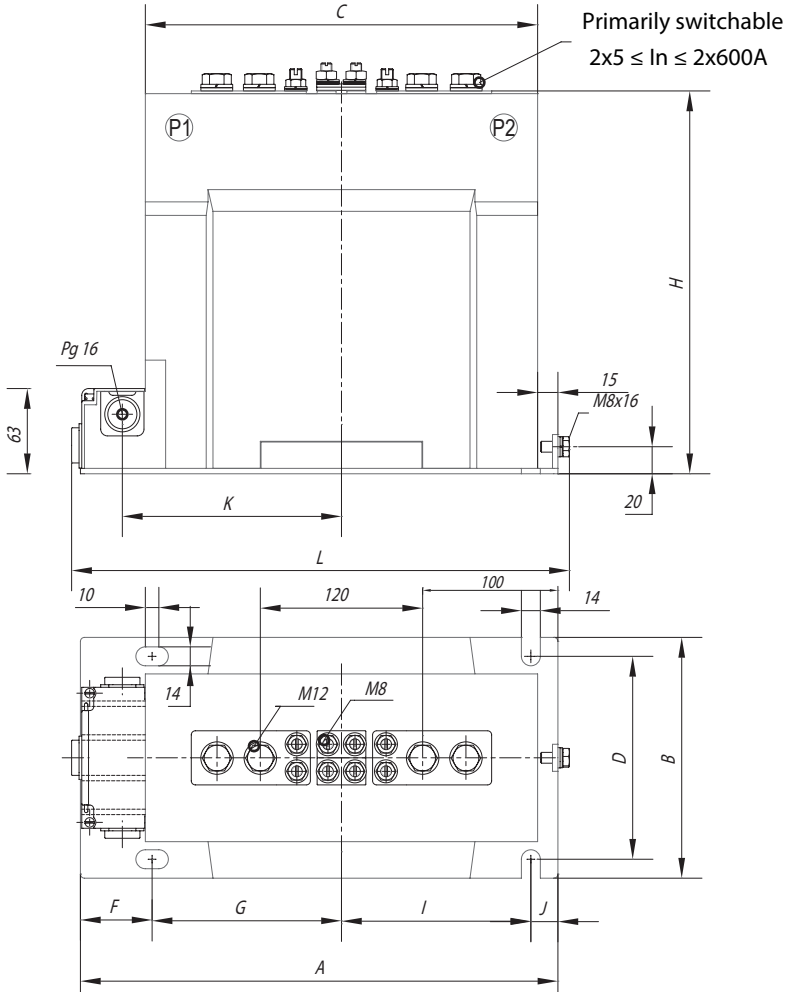
The right to make changes is reserved.

CONTENTS

STEM 12*z, 24*z



STEM 2421z



MULTI-CORE CURRENT TRANSFORMERS FOR INDOOR MOUNTING **STEM *z**

Type of transformer	Dimension (mm)												Mass (kg)
	A	B	C	D	E	F	G	H	I	J	K	L	
STEM 12*z	333	148	270	125	90	48	135	222	135	15	152	348	~18
STEM 24*z	353	178	290	150	100	53	140	283	140	20	162	368	~27

TECHNICAL DATA	STEM 12*z	STEM 24*z
Rated primary voltage (kV)	10	20
Highest voltage for equipment (eff.) (kV)	12	24
Rated power-frequency withstand voltage, 1 min. (kV)	28	50
Rated impulse withstand voltage 1.2/50 μs (kV)	75	125
Rated frequency (Hz)	50/60	
Rated primary current (A)	5 to 3000 or 2x5 to 2x600	
Rated secondary current (A)	5 (or 1)	
Rated accuracy class	0,2; 0,5; 0,5S; 0,2S; 1; 3; 5P; 10P	
Rated thermal current 1 sec.	$I_{th} = (100\text{-}1000)I_n$	
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$	
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$	
Number of cores	2 (1, 3 or 4)	
Rated core power (VA)	5; 7,5; 10; 15; 30	
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30	
Temperature class of insulation	E/B	
Possibility of sealing	On primary and on secondary side	
Type of basic insulation	Epoxy resin	
Valid standards	IEC 61869-1; IEC 61869-2	

NOTE:

STEM 1221z (STEM 1231z), STEM 2421z (STEM 2431z) – transformer with two (three) cores, primarily switchable; STEM 1220z (STEM 1230z), STEM 2420z (STEM 2430z) – transformer with two (three) cores, primarily non-swtichable. Change of transformation ratio can be done also on the secondary side and in that case, ''sp'' is added at the end of denotation: STEM 1220zsp – transformer with two cores, secondarily switchable.

We manufacture these transformers as a standard series with a thermal current of 100In and 2 cores: a measuring core (15 VA, class 0.5FS5) and a protection core (30 VA, class 5P10). We can also manufacture them with different accuracy classes, rated powers, and higher thermal currents (up to 500In or more), as well as with 1, 3, or 4 cores, depending on the transformation ratio, accuracy class, and core power.

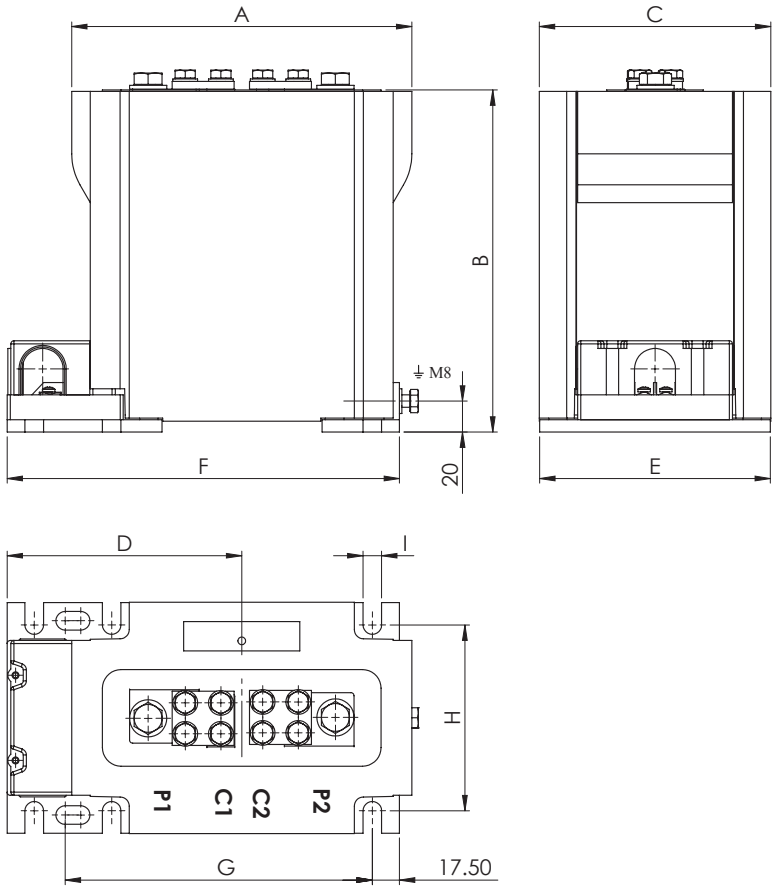
When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (or accuracy limit factor) for each core. The primary regulation cover is supplied on special request. The right to make changes is reserved.

CONTENTS

AS 12/150*



AS 12/150-b1



CURRENT TRANSFORMERS FOR INDOOR MOUNTING, SUPPORTING BLOCK-TYPE **AS 12/150***

Type of transformer	Dimension (mm)									Mass (kg)
	A	B	C	D	E	F	G	H	I	
AS 12/150-b0	191	220	149	133	149	225	170	120	12	~16
AS 12/150-b1	219	220	149	152	149	253	198	120	12	~19
AS 12/150-b2	299	220	149	183	149	334	280	120	12	~22
AS 12/150-b3	299	220	149	183	149	334	280	120	12	~25
AS 12/150-b4	419	220	149	302	149	445	400	120	12	~28

TECHNICAL DATA	AS12/150-b0	AS12/150-b1	AS12/150-b2	AS12/150-b3	AS12/150-b4
Rated primary voltage (kV)	10				
Highest voltage for equipment (eff.) (kV)	12				
Rated power-frequency withstand voltage, 1 min. (kV)	28 (42)				
Rated impulse withstand voltage 1.2/50 μs (kV)	75				
Rated secondary power-frequency withstand voltage 50 Hz, 1 min. (kV)	3				
Rated frequency (Hz)	50/60				
Rated primary current (A)	5 to 2500 or 2x5 to 2x600				
Rated secondary current (A)	5 (or 1)				
Rated accuracy class	0,1; 0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P				
Rated thermal current, 1 sec.	$I_{th} = (100\text{-}500)I_n$				
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th;}$ max. 120 kA				
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$				
Number of cores	1 to 6				
Rated core power (VA)	1,25 do 45				
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30				
Temperature class of insulation	E				
Type of basic insulation	Epoxy resin				
Valid standards	IEC 61869-1; IEC 61869-2 (ГОСТ 7746)				

NOTE:

We manufacture these transformers as a standard product with a thermal current rating of 100In; however, they can also be produced for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core.

Upon request, the transformers can also be manufactured with barriers (ribs).

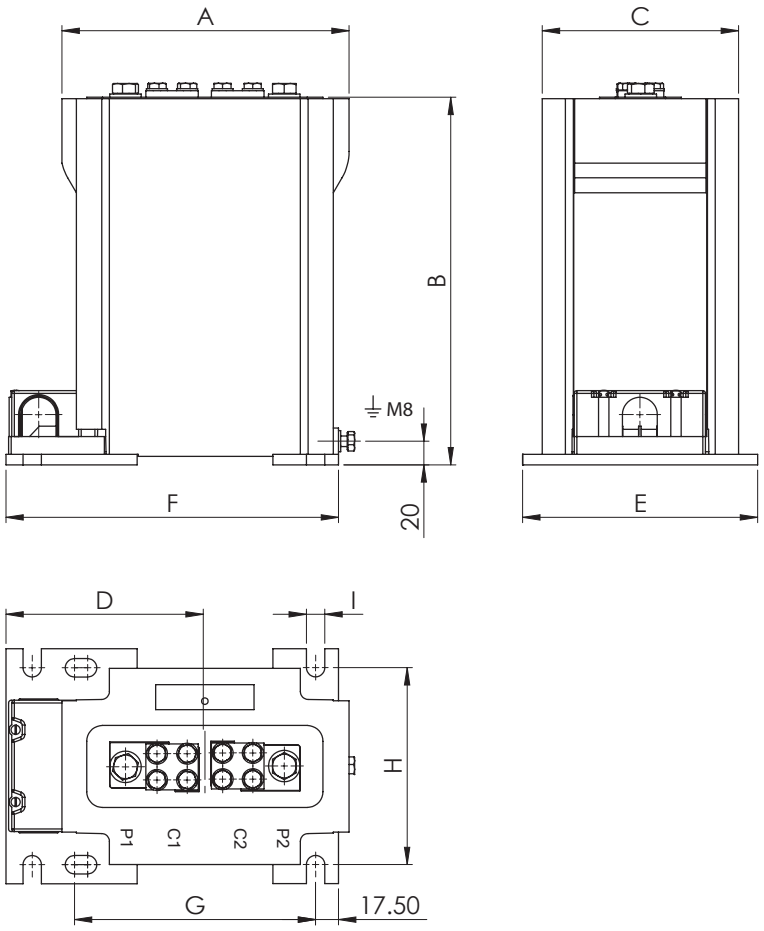
The right to make changes is reserved.

CONTENTS

AS 24/180*



AS 24/180-b3



CURRENT TRANSFORMERS FOR INDOOR MOUNTING, SUPPORTING BLOCK-TYPE **AS 24/180***

Type of transformer	Dimension (mm)									Mass (kg)
	A	B	C	D	E	F	G	H	I	
AS 24/180-b1	191	280	149	133	179	225	160	150	14	~18
AS 24/180-d1	191	280	179	133	179	225	160	150	14	~22
AS 24/180-b2	219	280	149	152	179	253	185	150	14	~26
AS 24/180-b3	299	280	149	183	179	334	265	150	14	~30
AS 24/180-b4	316	280	149	195	179	350	280	150	14	~34
AS 24/180-d4	316	280	179	195	179	350	280	150	14	~38

NOTE: We manufacture these transformers as a standard product with a thermal current rating of 100In; however, they can also be produced for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.
When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core. Upon request, the transformers can also be manufactured with barriers (ribs).
The right to make changes is reserved.

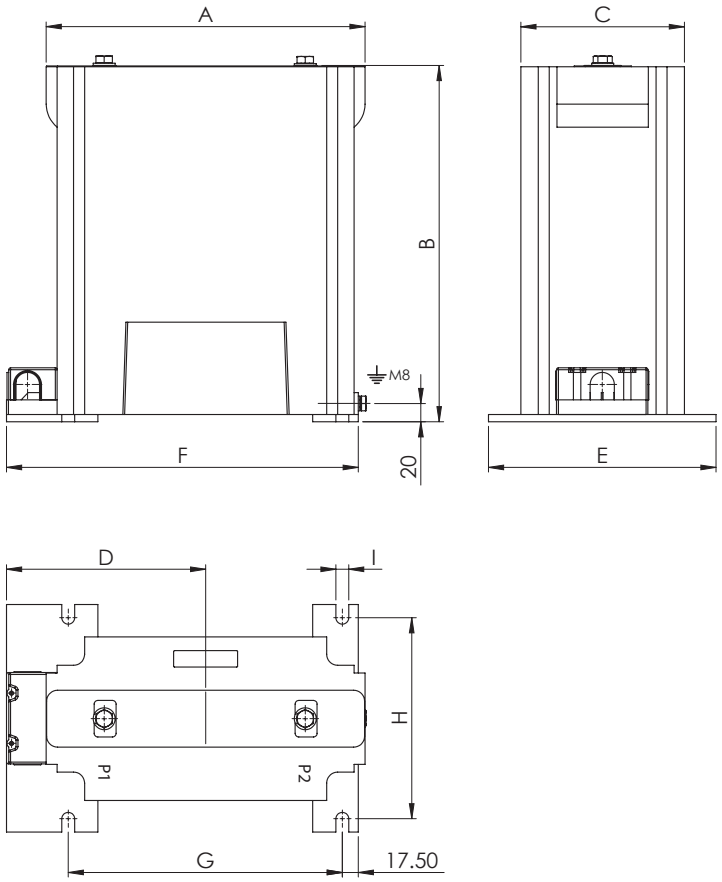
TECHNICAL DATA	AS24/180-b1	AS24/180-d1	AS24/180-b2	AS24/180-b3	AS24/180-b4	AS24/180-d4
Rated primary voltage (kV)	20					
Highest voltage for equipment (eff.) (kV)	24					
Rated power-frequency withstand voltage, 1 min. (kV)	50 (65)					
Rated impulse withstand voltage 1.2/50 μs (kV)	125					
Rated secondary power-frequency withstand voltage 50 Hz, 1 min. (kV)	3					
Rated frequency (Hz)	50/60					
Rated primary current (A)	5 do 2000 ili 2x5 do 2x600					
Rated secondary current (A)	5 (or 1)					
Rated accuracy class	0,1; 0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P					
Rated thermal current, 1 sec.	$I_{th} = (100\text{-}500)I_n$					
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th;}$ max. 120 kA					
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$					
Number of co$_{res}$	1 to 6					
Rated core power (VA)	1,25 to 45					
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30					
Temperature class of insulation	E					
Type of basic insulation	Epoxy resin					
Valid standards	IEC 61869-1; IEC 61869-2 (ГОСТ 7746)					

CONTENTS

AN 36/250*



AN 36/250-d2



CURRENT TRANSFORMER FOR INDOOR MOUNTING, SUPPORTING BLOCK-TYPE **AN 36/250***

Type of transformer	Dimension (mm)									Mass (kg)
	A	B	C	D	E	F	G	H	I	
AN 36/250-d1	191	390	179	133	249	225	140	225	14	~32
AN 36/250-d2	349	390	179	215	249	385	300	225	14	~38
AN 36/250-f2	349	390	224	215	249	385	300	225	14	~44

TECHNICAL DATA	AN36/250-d1	AN36/250-d2	AN36/250-f2
Rated primary voltage (kV)	35		
Highest voltage for equipment (eff.) (kV)	36 (42)		
Rated power-frequency withstand voltage, 1 min. (kV)	70 (95)		
Rated impulse withstand voltage 1.2/50 μs (kV)	170 (190)		
Rated secondary power-frequency withstand voltage 50 Hz, 1 min. (kV)	3		
Rated frequency (Hz)	50/60		
Rated primary current (A)	5 to 1250 or 2x5 to 2x600		
Rated secondary current (A)	5 (or 1)		
Rated accuracy class	0,1; 0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P		
Rated thermal current, 1 sec.	$I_{th} = (100\text{-}500)I_n$		
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th;}$ max. 120 kA		
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$		
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30		
Number of cores	1 to 6		
Rated core power (VA)	1,25 to 45		
Temperature class of insulation	E		
Type of basic insulation	Epoxy resin		
Valid standards	IEC 61869-1; IEC 61869-2 (ГОСТ 7746)		

NOTE:

We manufacture these transformers as a standard product with a thermal current rating of 100In; however, they can also be produced for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core.

Upon request, the transformers can also be manufactured with barriers (ribs).

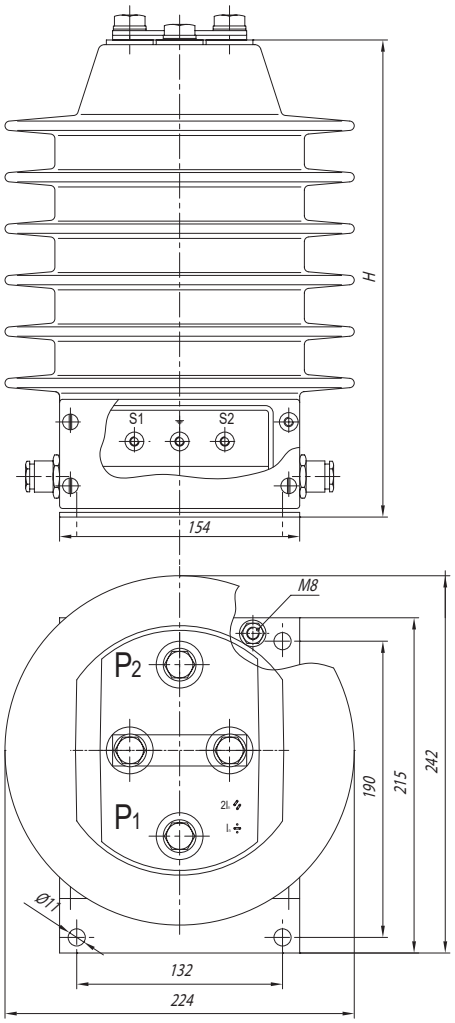
The right to make changes is reserved.

CONTENTS

ATMS 2411(1211), 3811



ATMS 2411



SINGLE-CORE CURRENT TRANSFORMERS FOR OUTDOOR MOUNTING, SUPPORTING-TYPE **ATMS 2411(1211), 3811**

Type of transformer	Dimension (mm)		Mass (kg)
	H	Broj rebara	
ATMS-2411(1211)	306	6	~15
ATMS-3811	405	9	~19

TECHNICAL DATA	ATMS-1211 (ATMS-1210) ATMS-2411 (ATMS-2410)	ATMS-3811 (ATMS-3810)
Rated primary voltage (kV)	20(10)	35
Highest voltage for equipment (eff.) (kV)	24(12)	38
Rated power-frequency withstand voltage, 1 min. (kV)	50(28)	70
Rated impulse withstand voltage 1.2/50 μs (kV)	125(75)	170
Creeping distance (mm)	570	860
Type of mounting	Outdoor	
Rated frequency (Hz)	50/60	
Rated primary current (A)	5 to 500 or 2x5 to 2x75	
Rated secondary current (A)	5 (or 1)	
Rated accuracy class	0,5	
Rated thermal current 1 sec.	$I_{th} = (100\text{-}500)I_n$	
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$	
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$	
Number of cores	1	
Rated core power (VA)	5; 7,5; 10	
Security factor / Accuracy limit factor	5; 10/5; 10; 15; 20; 30	
Temperature class of insulation	E/B	
Type of basic insulation	Cycloaliphatic resin	
Valid standards	IEC 61869-1; IEC 61869-2	

NOTE:

Denotation examples:
ATMS-1211, ATMS-2411, ATMS-3811 – transformer with single core, primarily switchable;

ATMS-1210, ATMS-2410, ATMS-3810 – transformer with single core, primarily non-switchable.

We manufacture these transformers as a standard product for thermal current 100In with a rating of 10VA cl.0,5.

They are also used for measuring in assemblies at pole-mounted transformer substations at voltage levels of 10 kV and 20 kV.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor).

The right to make changes is reserved.

CONTENTS

ATM 2411(1211), 2411h, 3811;



ATM 3811

SINGLE-CORE CURRENT TRANSFORMERS FOR OUTDOOR MOUNTING, SUPPORTING T-TYPE
ATM 2411(1211), 2411h, 3811

Designation examples:
ATM-2411 (ATM-1211), ATM-3811 – transformer with single core, primarily switchable;
ATM-2410 (ATM-1210), ATM-3810 – transformer with single core, primarily non-switchable;
ATM-2410(1210)sp, ATM-3810sp – transformer with single core, secondarily switchable.

We manufacture these transformers as a standard product for a 100In thermal current; however, we can also produce them for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.

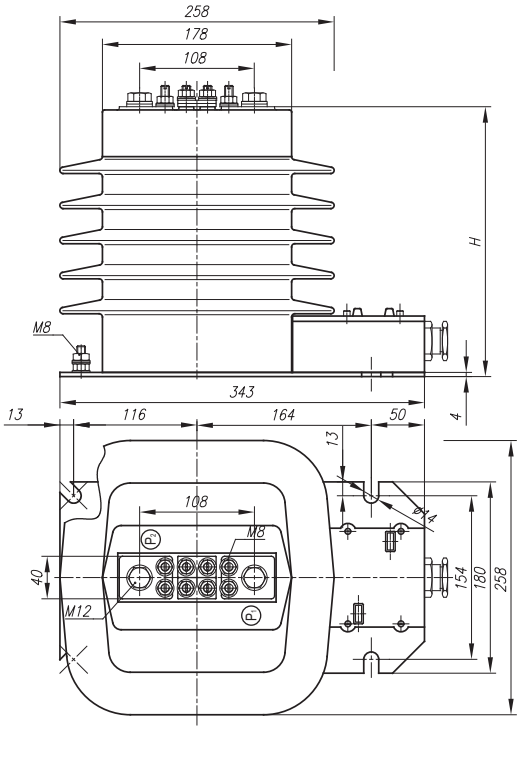
Switching to another current transformation ratio can be done on primary or on secondary side, with sealing of the terminals cover on the secondary side.

The ATM 2411h model is designed for more demanding conditions and has a creepage distance of ≥31mm/kV.

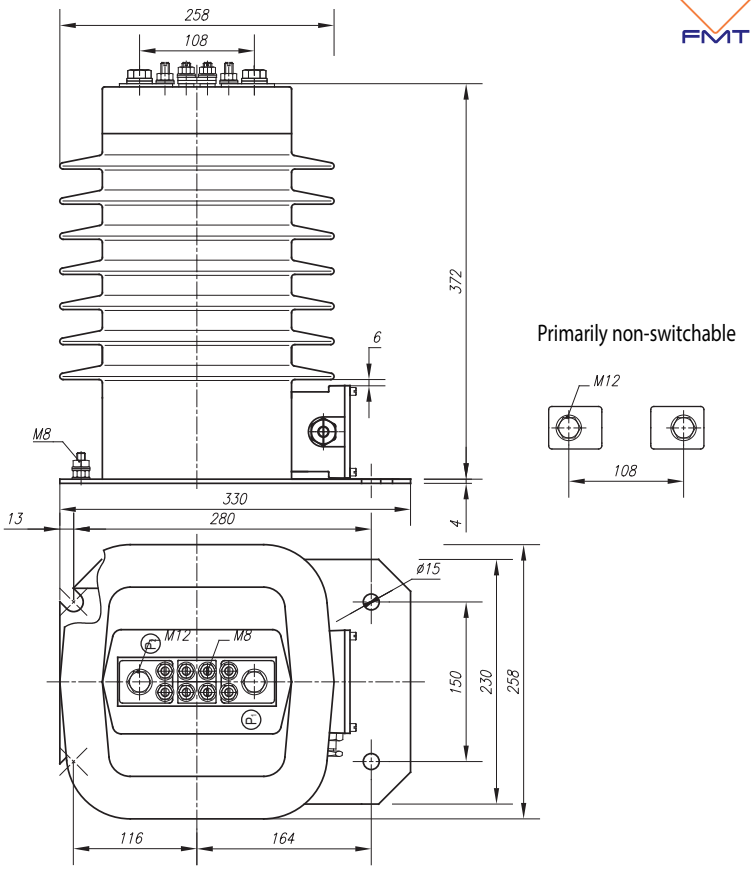
When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core.

The primary regulation cover is supplied on special request.

The right to make changes is reserved.



ATM 2411 (3811*)



ATM 2411h

Type of transformer	Dimension (mm)		Mass (kg)
	H	Number of ribs	
ATM-2411 (ATM-1211)	254	5	~23
ATM-2411h	372	7	~29
ATM-3811	376	8	~29

TECHNICAL DATA	ATM-2411(ATM-1211) ATM-2410(ATM-1210)	ATM-2411h (ATM-2410h)	ATM-3811 (ATM-3810)
Rated primary voltage (kV)	20(10)	20	35
Highest voltage for equipment (eff.) (kV)	24(12)	24	38
Rated power-frequency withstand voltage, 1 min. (kV)	50(28)	50	70
Rated impulse withstand voltage 1.2/50 μs (kV)	125(75)	125	170
Creeping distance (mm)	490	750	840
Type of mounting	Outdoor		
Rated frequency (Hz)	50/60		
Rated primary current (A)	5 to 1200 or 2x5 to 2x600		
Rated secondary current (A)	5 (or 1)		
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P		
Rated thermal current 1 sec.	$I_{th} = (100\text{-}500)I_n$		
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$		
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$		
Number of cores	1		
Rated core power (VA)	5; 7,5; 10; 15; 30		
Security factor / Accuracy limit factor	5; 10/5; 10; 15; 20; 30		
Temperature class of insulation	E/B		
Type of basic insulation	Cycloaliphatic resin		
Valid standards	IEC 61869-1; IEC 61869-2		

CONTENTS

ATM 24*(12*), 38*, 38*h



ATM 24*

MULTI-CORE CURRENT TRANSFORMERS FOR OUTDOOR MOUNTING, SUPPORTING-TYPE
ATM 24*(12*), 38*, 38*h

NOTE:

Denotation examples:
ATM-1221, ATM-2421, ATM-3821 – transformer with two cores, primarily switchable;
ATM-1220, ATM-2420, ATM-3820 – transformer with two cores, primarily non-switchable.

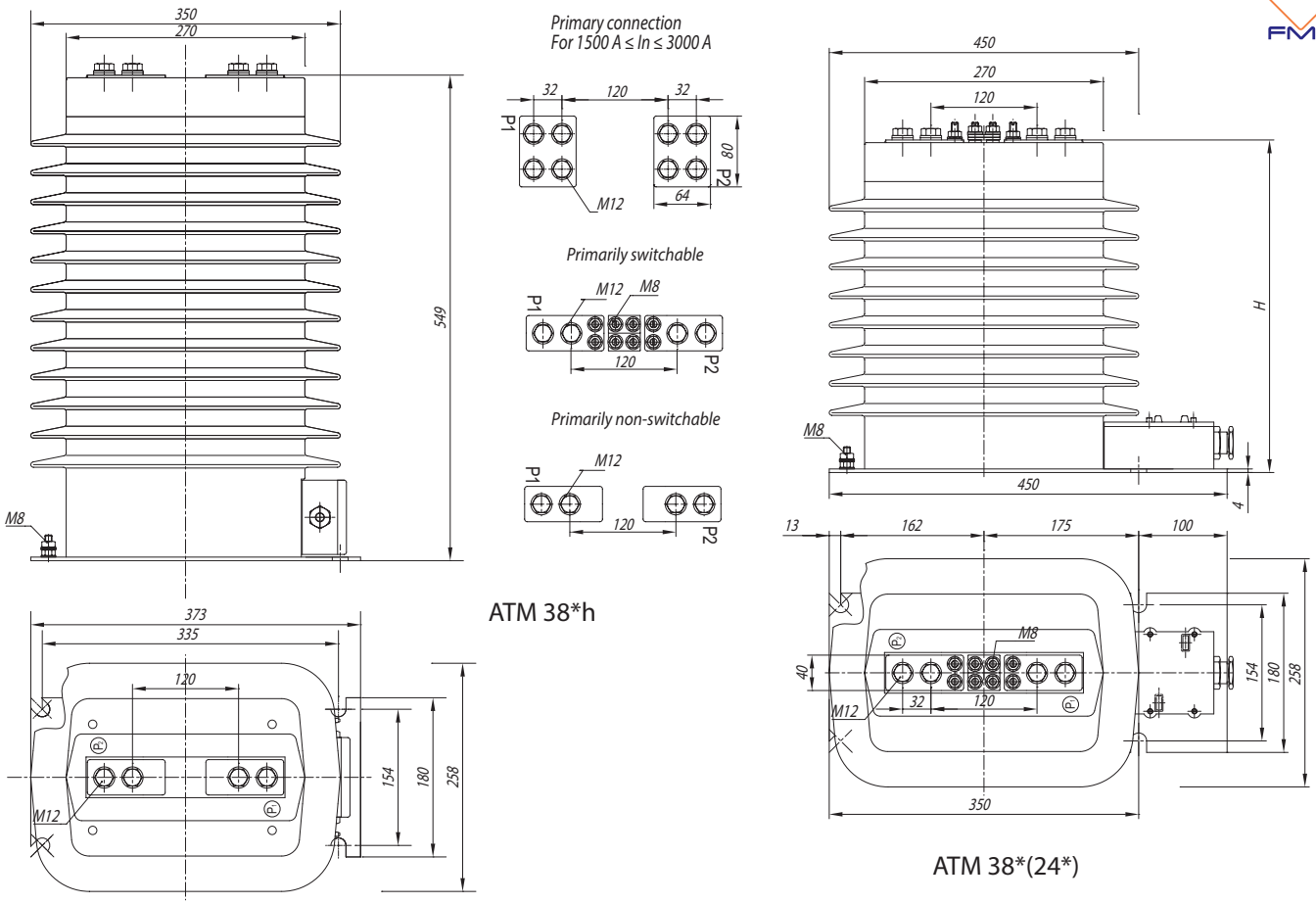
We manufacture these transformers as a standard product for a 100In thermal current; however, we can also produce them for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.

Switching to another current transformation ratio can be done on primary or on secondary side, with sealing of the terminals cover on the secondary side.

The ATM 2411h model is designed for more demanding conditions and has a creepage distance of ≥31mm/kV.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core.

The right to make changes is reserved.



Type of transformer	Dimension (mm)		Mass (kg)
	H	Number of ribs	
ATM-24*(12*)	254	5	~36
ATM-38*	376	8	~44
ATM-38*h	549	12	~54

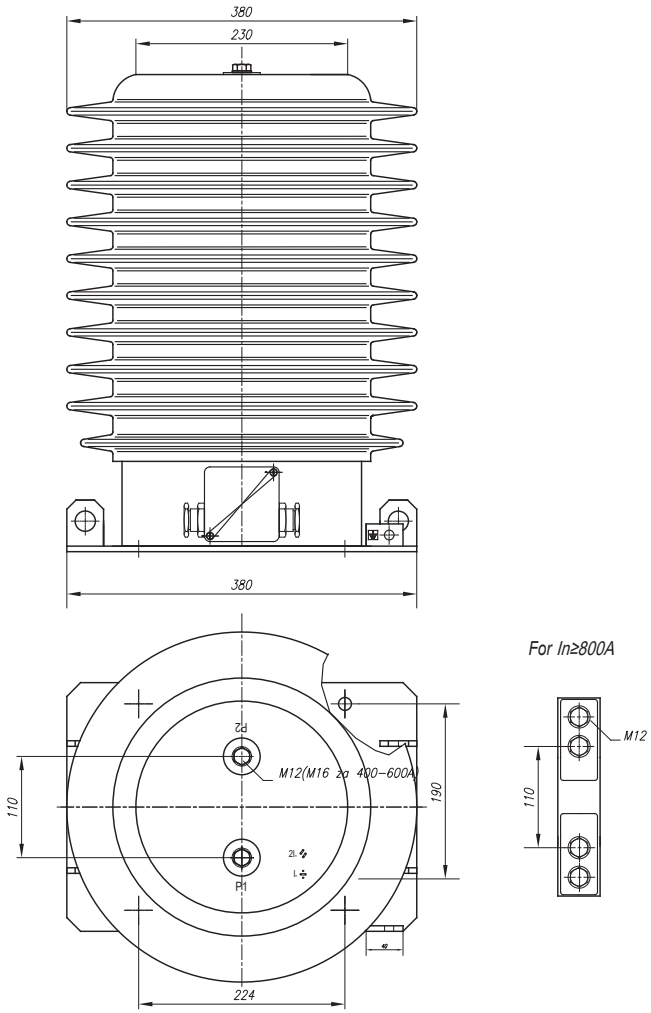
TECHNICAL DATA	ATM-24*(12*)	ATM-38*	ATM-38*h
Rated primary voltage (kV)	20(10)	35	35
Highest voltage for equipment (eff.) (kV)	24(12)	38	38 (40,5)
Rated power-frequency withstand voltage, 1 min. (kV)	50(28)	70	70 (95)
Rated impulse withstand voltage 1.2/50 μs (kV)	125(75)	170	170 (200)
Creeping distance (mm)	490	840	1296
Type of mounting	Outdoor		
Rated frequency (Hz)	50/60		
Rated primary current (A)	5 to 1200 or 2x5 to 2x600		
Rated secondary current (A)	5 (or 1)		
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P		
Rated thermal current 1 sec.	$I_{th} = (100\text{-}1000)I_n$		
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$		
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$		
Number of cores	1-4		
Rated core power (VA)	5; 7,5; 10; 15; 30		
Security factor / Accuracy limit factor	5; 10/5; 10; 15; 20; 30		
Temperature class of insulation	E/B		
Type of basic insulation	Cycloaliphatic resin		
Valid standards	IEC 61869-1; IEC 61869-2		

CONTENTS

STSM 38*, 38*L, 38*b



STSM 38*



MULTI-CORE CURRENT TRANSFORMERS FOR OUTDOOR MOUNTING, SUPPORTING-TYPE FOR RAILWAY
STSM 38*, 38*L, 38*b

NOTE:

Denotation examples:
STSM 3821L – transformer with two cores, primarily switchable;
STSM 3820 – transformer with two cores, primarily non-switchable.
STSM 3830b – transformer with three cores, primarily non-switchable.

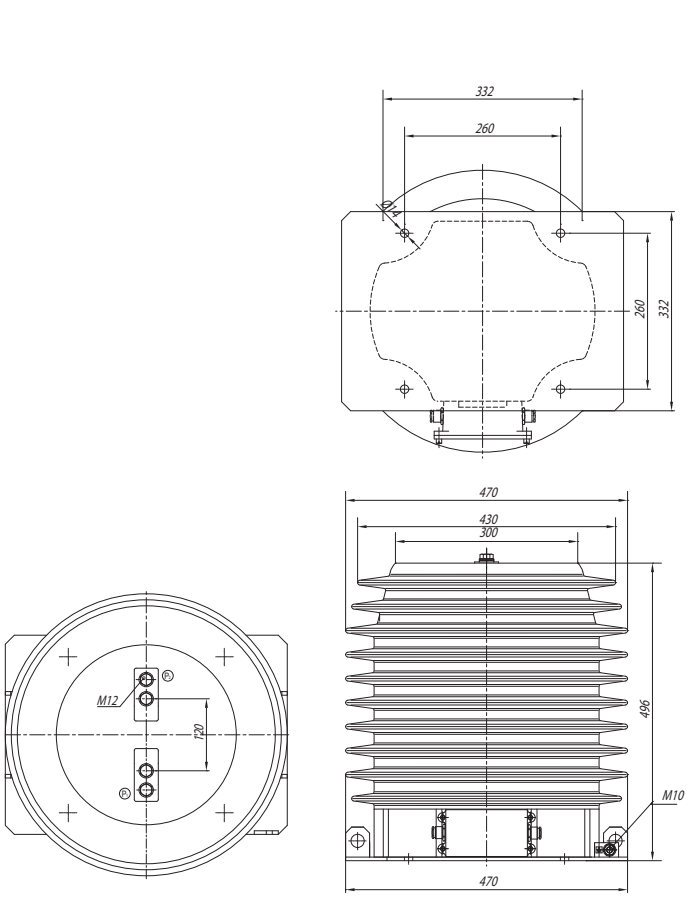
We manufacture these transformers as a standard product for a 100In thermal current; however, we can also produce them for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.

Switching to another current transformation ratio can be done on primary or on secondary side, with sealing of the terminals cover on the secondary side.

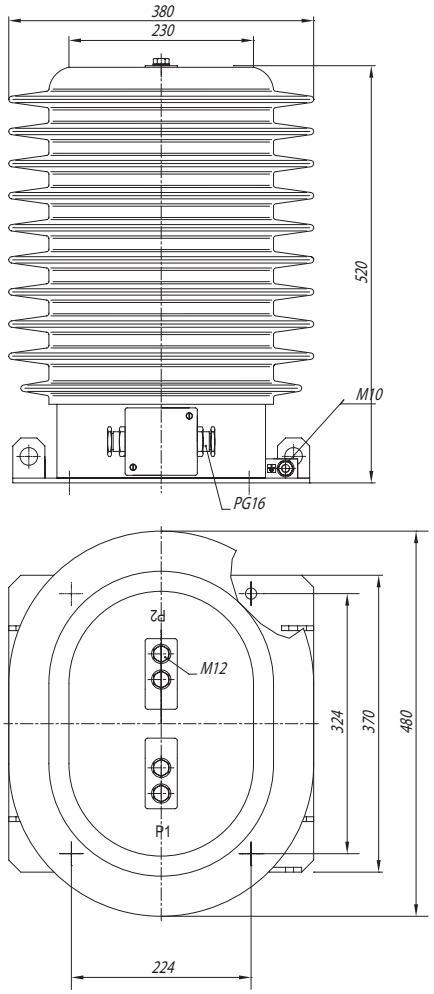
These models are intended for more demanding conditions (BIL 40.5/95/200 kV), because they have a creepage distance of ≥31mm/kV.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core.

The right to make changes is reserved.

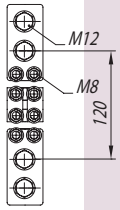


STSM 38*b



STSM 38*L

Primarily switchable



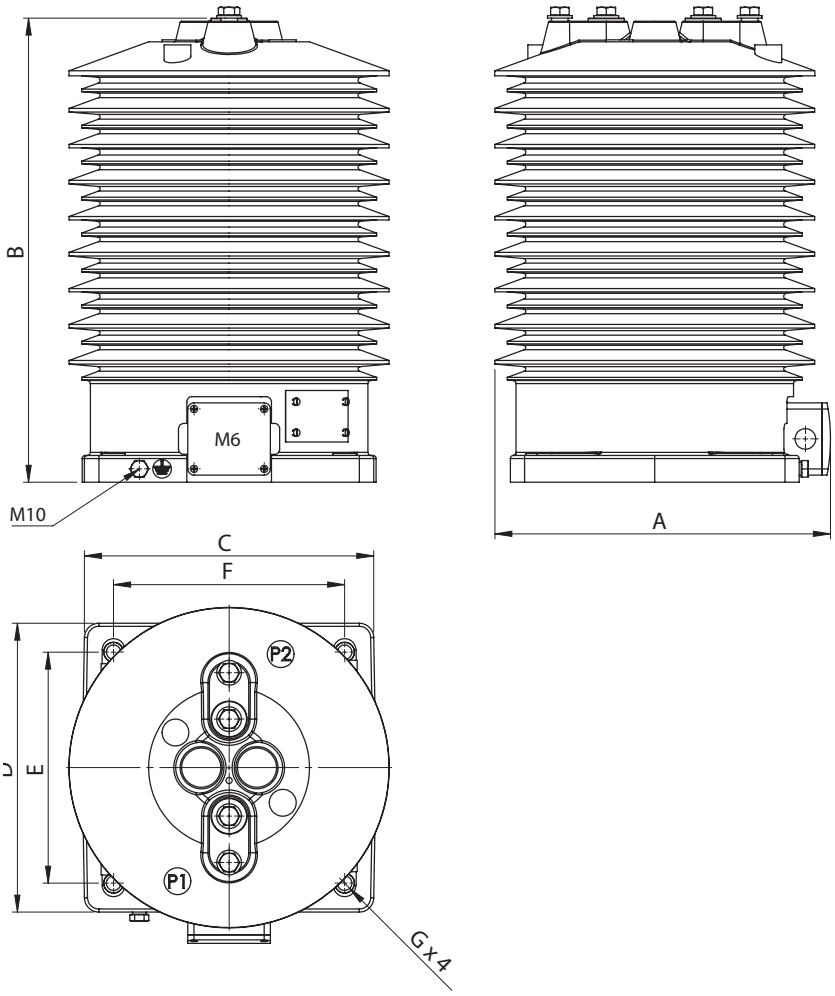
TECHNICAL DATA	STSM 38*	STSM 38*L	STSM 38*b
Rated primary voltage (kV)	35		
Highest voltage for equipment (eff.) (kV)	38 (40,5)		
Rated power-frequency withstand voltage, 1 min. (kV)	70 (95)		
Rated impulse withstand voltage 1.2/50 μs (kV)	170 (200)		
Creeping distance (mm)	1327	1327	1296
Mass (kg)	~78	~126	~146
Type of mounting	Outdoor		
Rated frequency (Hz)	50/60		
Rated primary current (A)	5 to 3000* or 2x5 to 2x600		
Rated secondary current (A)	5 (or 1)		
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P		
Rated thermal current 1 sec.	$I_{th} = (100\text{-}500)I_n$		
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$		
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$		
Number of cores	1-4		
Rated core power (VA)	5; 7,5; 10; 15; 30; 45*; 60*		
Security factor / Accuracy limit factor	5; 10/5; 10; 15; 20; 30		
Temperature class of insulation	E/B		
Type of basic insulation	Cycloaliphatic resin		
Valid standards	IEC 61869-1; IEC 61869-2		

CONTENTS

STSM*



STSM-38



MULTI-CORE CURRENT TRANSFORMERS FOR OUTDOOR MOUNTING, SUPPORTING-TYPE **STSM 12-42 kV**

Type of transformer	Dimension (mm)							Mass (kg)
	A	B	C	D	E	F	G	
STSM-12	315	372	280	276	224	224	Ø14	~30
STSM-24	315	452	280	276	224	224	Ø14	~48
STSM-38	315	520	280	276	224	224	Ø14	~65

NOTE: We manufacture these transformers as a standard product for a 100In thermal current; however, we can also produce them for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core. The right to make changes is reserved.

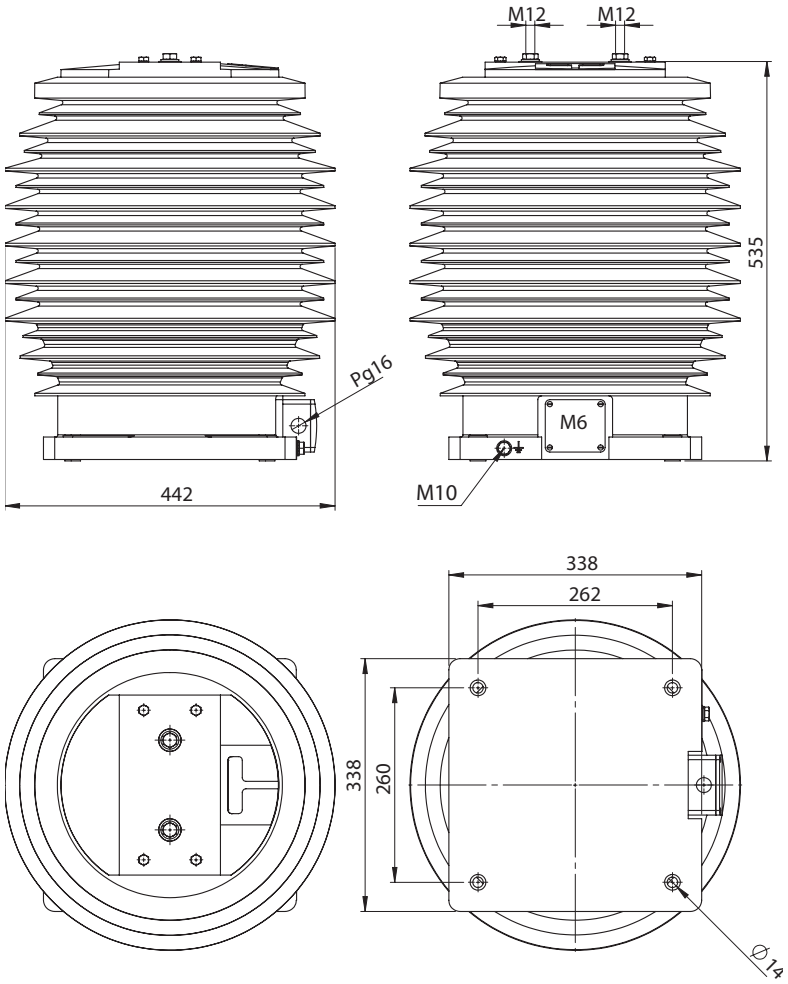
TECHNICAL DATA	STSM-12	STSM-24	STSM-38
Rated primary voltage (kV)	10	20	35
Highest voltage for equipment (eff.) (kV)	12	24	36 (42)
Rated power-frequency withstand voltage, 1 min. (kV)	28 (42)	50 (65)	70 (95)
Rated impulse withstand voltage 1.2/50 μs (kV)	75	125	170 (190)
Rated secondary power-frequency withstand voltage 50 Hz, 1 min. (kV)	3		
Rated frequency (Hz)	50/60		
Rated primary current (A)	5 to 1200 or 2x5 to 2x600		
Rated secondary current (A)	5 (or 1)		
Rated accuracy class	0.1; 0.2; 0.5; 0.2S; 0.5S; 1; 3; 5P; 10P		
Rated thermal current, 1 sec.	$I_{th} = (100\text{-}500)I_n$		
Rated dynamic current	$I_{dyn} = 2.5\ I_{th;}$ max. 120 kA ($I_{dyn} = 2.5\ I_{th;}$ max. 120 kA)		
Rated continuous thermal current	$I_{cth} = 1.2\ I_n$		
Number of cores	1 to 4		
Security factor / Accuracy limit factor	5; 10/5; 10; 15; 20; 30		
Rated core power (VA)	1.25 to 45		
Temperature class of insulation	F		
Type of basic insulation	Cycloaliphatic resin		
Valid standards	IEC 61869-1; IEC 61869-2 (ГОСТ 7746)		

CONTENTS

STSM-38 III



STSM-38 III



MULTI-CORE CURRENT TRANSFORMERS FOR OUTDOOR MOUNTING, SUPPORTING-TYPE FOR RAILWAY **STSM 38 III**

TECHNICAL DATA	STSM-38 III
Rated primary voltage (kV)	35
Highest voltage for equipment (eff.) (kV)	36 (42)
Rated power-frequency withstand voltage, 1 min. (kV)	70 (95)
Rated impulse withstand voltage 1.2/50 μs (kV)	170 (190)
Rated secondary power-frequency withstand voltage 50 Hz, 1 min. (kV)	3
Rated frequency (Hz)	50/60
Rated primary current (A)	5 to 1200 or 2x5 to 2x600
Rated secondary current (A)	5 (or 1)
Rated accuracy class	0,1; 0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P
Rated thermal current, 1 sec.	$I_{th} = (100\text{-}500)I_n$
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th;}$ max. 120 kA ($I_{dyn} = 2{,}53\ I_{th;}$ max. 120 kA)
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$
Number of cores	1 to 4
Rated core power (VA)	1,25 to 45
Security factor / Accuracy limit factor	5; 10/5; 10; 15; 20; 30
Mass (kg)	~90
Temperature class of insulation	F
Type of basic insulation	Cycloaliphatic resin
Valid standards	IEC 61869-1; IEC 61869-2 (ГОСТ 7746)

NOTE:

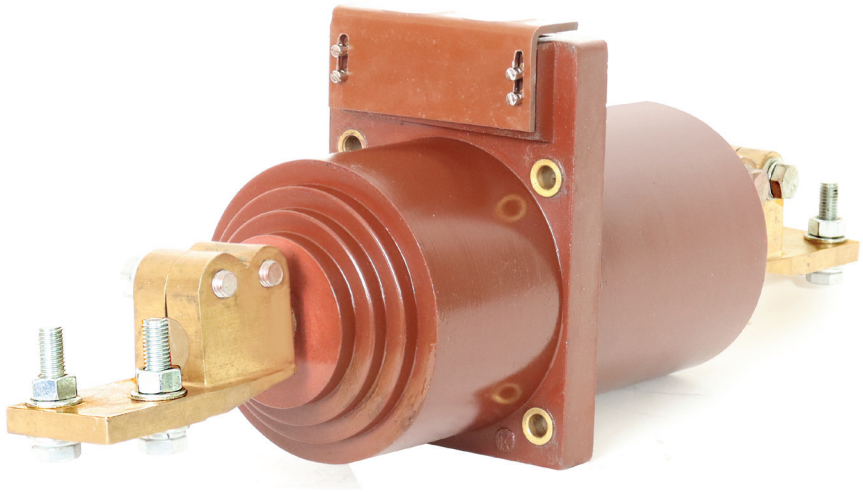
We manufacture these transformers as a standard product for a 100In thermal current; however, we can also produce them for higher thermal currents (up to 500In or more), depending on the transformation ratio, accuracy class, and core power.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core.

The right to make changes is reserved

CONTENTS

STPN 12*, 24*, 38*



STPN 1220

CURRENT TRANSFORMER FOR INDOOR MOUNTING, BUSHING TYPE **STPN 12*, 24*, 38***

TECHNICAL DATA	STPN-12*	STPN-24*	STPN-38*
Rated primary voltage (kV)	10	20	35
Highest voltage for equipment (eff.) (kV)	12	24	38
Rated power-frequency withstand voltage, 1 min. (kV)	28	50	70
Rated impulse withstand voltage 1.2/50 μs (kV)	75	125	170
Rated frequency (Hz)	50/60		
Rated primary current (A)	50 to 4000		
Rated secondary current (A)	5 (or 1)		
Rated accuracy class	0,2; 0,5; 1; 3; 5P; 10P		
Rated thermal current 1 sec.	$I_{th} = (100\text{-}500)I_n$		
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$		
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$		
Number of cores	1; 2; 3 or 4		
Rated core power (VA)	10; 15; 30		
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30		
Temperature class of insulation	E/B		
Type of basic insulation	Epoxy resin		
Mass (kg)	~24	~38	~48
Valid standards	IEC 61869-1; IEC 61869-2		

NOTE:

Examples of denotation '*':
STPN 1210 – 10kV transformer, with single core,
STPN 2420 –20kV transformer, with two cores.
STPN 3820 –35kV transformer, with two cores.
This type of transformer is primarily non-switchable.

We manufacture these transformers as a standard product for short-time thermal current of 100In.

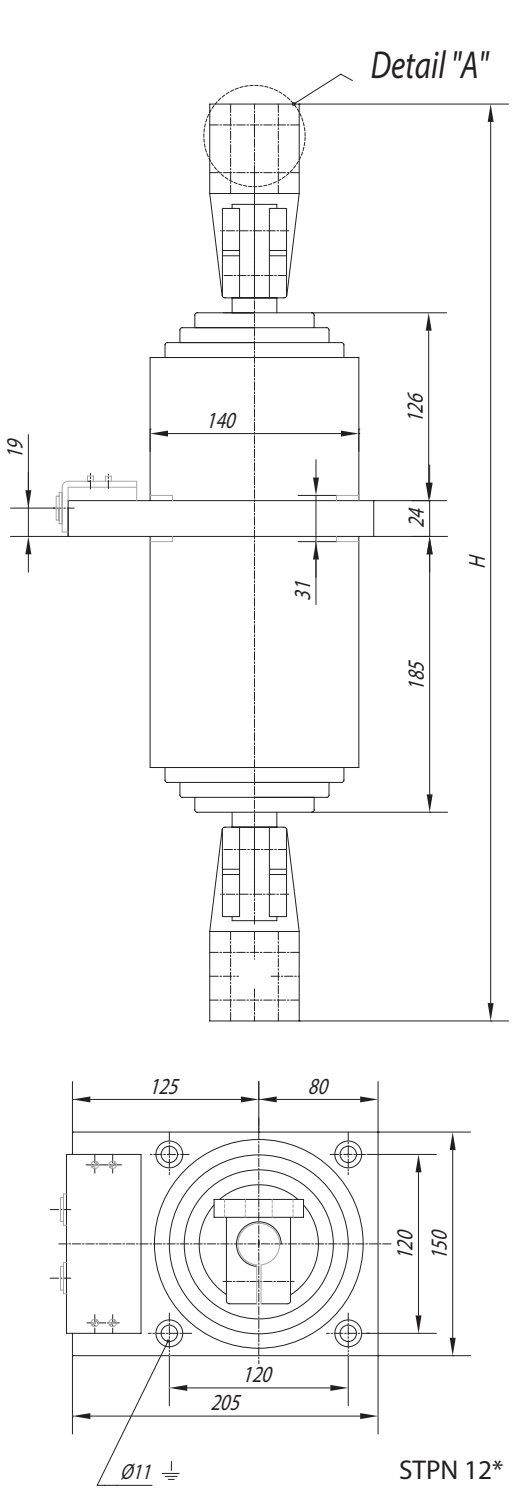
They have a measuring core of 15VA; cl.0.5FS5; and a protective core of 30VA cl.5P10.

We can also make them for higher thermal currents depending on the transformation ratio, accuracy class and core power.

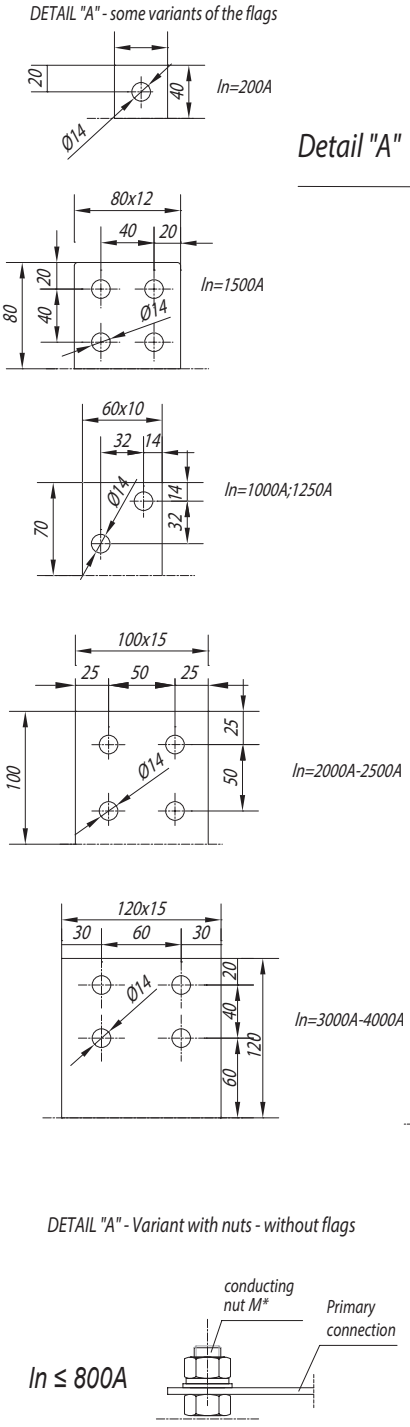
When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core.

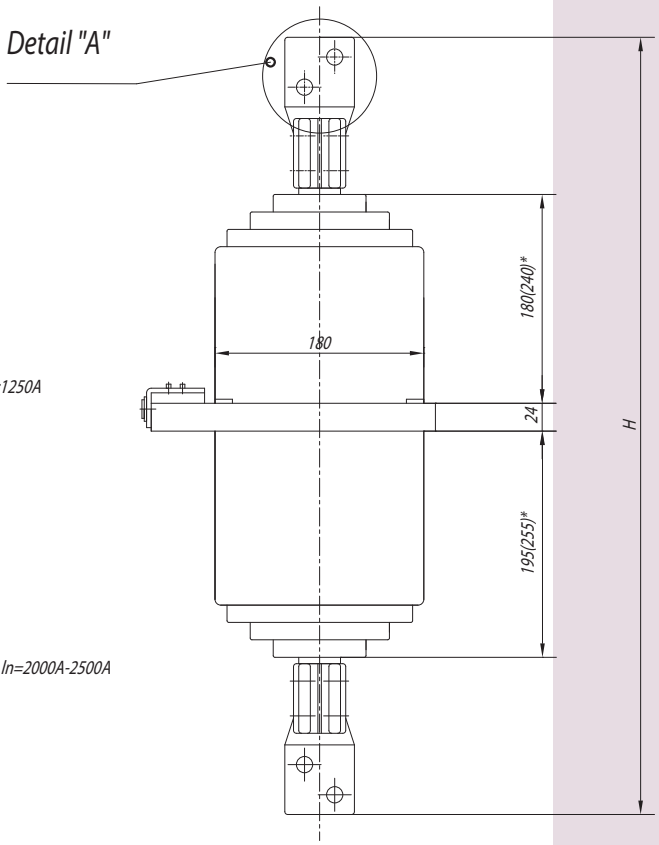
The right to make changes is reserved.

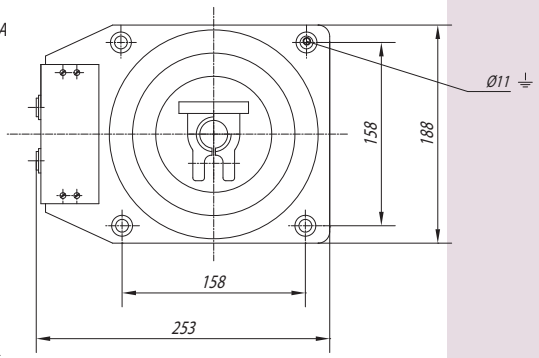
CONTENTS



STPN 12*







STPN 24 (38*)

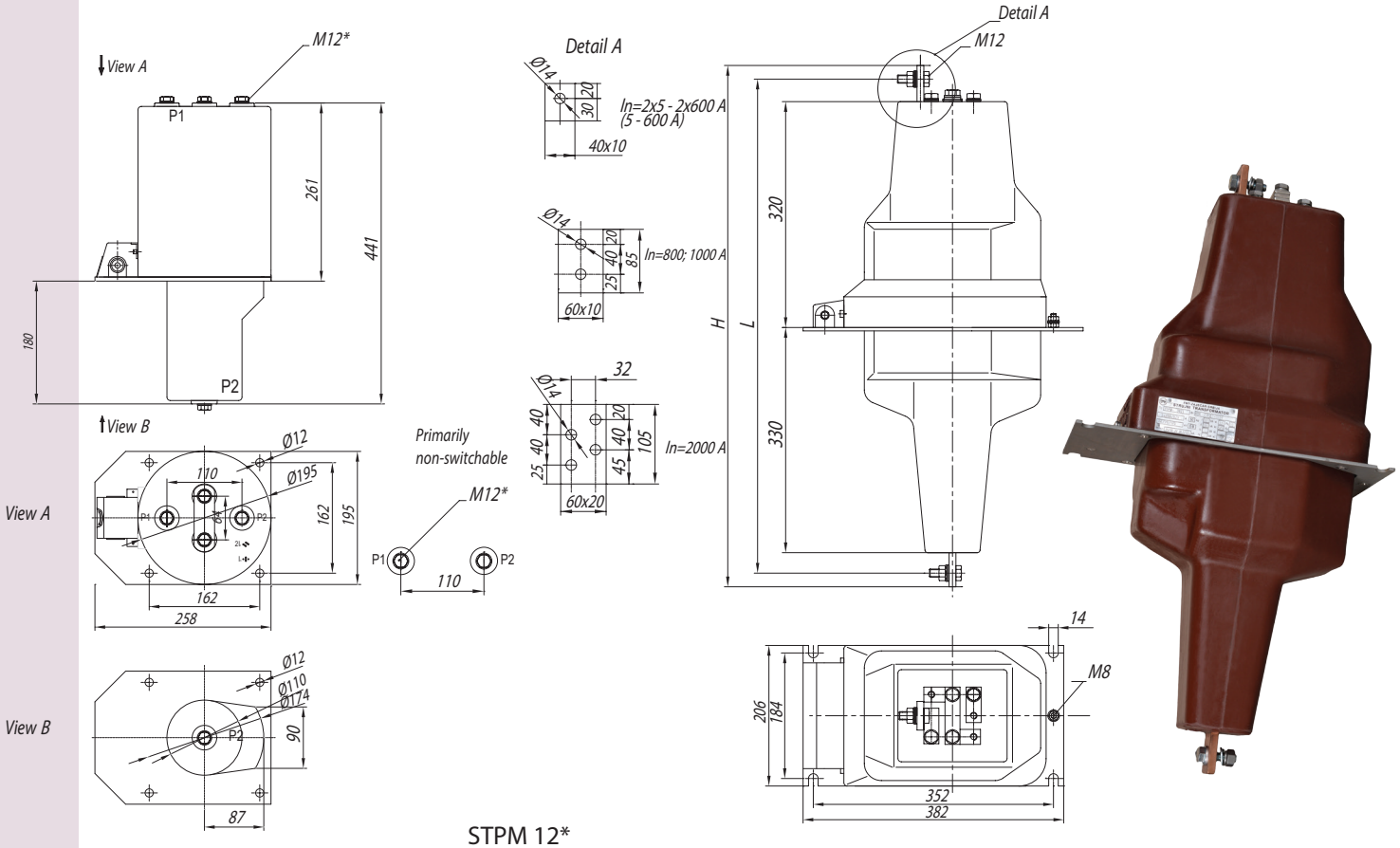
I_1 (A)	Thread of the flag	Primary conductor Cu (mm)	Lenght of the primary conductor (mm)			Total lenght together with the flags H (mm)		
			12kV	24kV	38kV	12kV	24kV	38kV
200-300	M16	Ø16	400	465	585	490	545	665
400-500	M20	Ø20	460	525	645	600	665	785
600-800	M24	Ø24	460	525	645	600	665	785
1000-1250	M30	Ø30	460	525	645	600	665	785
1500	M36	Ø36	480	545	665	660	725	845
2000	M40	Ø40	500	565	685	726	791	911
2500	M42	Ø42	500	565	685	726	791	911
3000-4000	M48	Ø48	500	565	685	760	825	945

Length of the primary conductor, as well as the dimension H, depend on the dimension of the flag, i.e. value of the primary current.

For primary currents up to 800 A it is possible to establish the connection with appropriate nuts without the flags.

CONTENTS

STPM 12*, 38*



CURRENT TRANSFORMER FOR INDOOR MOUNTING, BUSHING TYPE **STPM 12*, 38***

TECHNICAL DATA	STPM-12*	STPM-38*
Rated primary voltage (kV)	10	35
Highest voltage for equipment (eff.) (kV)	12	38
Rated power-frequency withstand voltage, 1 min. (kV)	28	70
Rated impulse withstand voltage 1.2/50 μs (kV)	75	170
Rated frequency (Hz)	50/60	
Rated primary current (A)	5 to 600 or 2x5 to 2x300	
Rated secondary current (A)	5 (or 1)	
Rated accuracy class	0,2; 0,5; 0,2S; 0,5S; 1; 3; 5P; 10P	
Rated thermal current 1 sec.	$I_{th} = (100\text{-}500)I_n$	
Rated dynamic current	$I_{dyn} = 2{,}5\ I_{th}$	
Rated continuous thermal current	$I_{cth} = 1{,}2\ I_n$	
Number of cores	1	1, 2, 3 or 4
Rated core power (VA)	5; 7,5; 10; 15; 30	
Security factor / Accuracy limit factor	5; 10 / 5; 10; 15; 20; 30	
Temperature class of insulation	E/B	
Possibility of sealing	On secondary side	
Type of basic insulation	Epoxy resin	
Mass (kg)	~23	~46
Valid standards	IEC 61869-1; IEC 61869-2	

Dimension of the transformer STPM 38:*

I1 (A)	Dimension (mm)	
	H	L
2x5 – 2x600 5 – 600	756	716
800 – 1000	830	790
2000-3000	870	830

NOTE:

Denotation examples:
STPM-1211, STPM-3821, STPM-3831 – transformer with one, two, or three cores; primarily switchable;
STPM-1210, STPM-3810, STPM-3820, STPM-3830 – transformer with one, two or three cores; primarily non-switchable.

We manufacture these transformers as a standard product for short-time thermal current of 100In.
STPM 12* - standardly with single measuring core of 15VA cl.0,5FS5. STPM 38* - standardly with two cores: measuring core of 15VA cl.0,5FS5, and protective core of 30VA cl.5P10.
We can manufacture them for higher thermal currents (up to 500In) and with 1, 3 or 4 cores, depending on the transformation ratio, rated power and accuracy class.

When ordering, please be sure to specify the transformation ratio, rated power, accuracy class, and the instrument safety factor (accuracy limit factor) for each core. The right to make changes is reserved

CONTENTS

FMT - Factory of measuring transformers d.o.o.
Zajecar 19000, Strazilovska 57, Serbia

Central phones: +381 19 3413 122; +381 19 3413 222; +381 19 3413 111
General manager: +381 19 31 5555 1
Sales: +381 19 31 5555 5; +381 19 31 5555 6;
+381 19 31 5555 8; +381 19 3413 111
komercijala@fmt.rs
Supply: +381 19 31 5555 7
Development: +381 19 31 5555 3
Finance: +381 19 31 5555 2
www.fmt.rs • office@fmt.rs

1969

ZAJEČAR

FMT

MINEL FEPO d.o.o.
Zeleznicka 3
23101 Zrenjanin, Serbia
tel: +381 23 544 902
tel: +381 23 545 529
office@minelfepo.com