



Department of consumer and corporate affairs / Ministère de la consommation et des corporations



STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL

T-52

OTTAWA March 2, 1970.

USINES BALTEAU TYPES "UEV(1)", "UEX(1)" and "UEZ(1)"
VOLTAGE TRANSFORMERS

<u>Rated Insulation Class</u>	<u>Primary Voltage</u>	<u>Type</u>	<u>Ratio</u>
69kv Grd Y	40,250	UEV70,UEX70	350/600:1
115kv Grd Y	69,000	UEV110,UEX110,UEZ110	600/1000:1
138kv Grd Y	80,500	UEV138,UEX138,UEZ138	700/1200:1
161kv Grd Y	92,000	UEV150,UEX150,UEZ150	800/1400:1
230kv Grd Y	138,000	UEV220,UEX220,UEZ220	1200/2000:1
Secondary Voltage ^⑤	115 volts and $115/\sqrt{3}$ ^② volts on each secondary		
Number of Secondaries ^③	2 identical, both tapped		
Accuracy Rating at 60 hz ^④			
UEV220	0.3WXY, 0.6Z, 1.2ZZ, 1.2Z/1.2Z ^⑥		
UEV70,UEV110,UEV138,UEV150	0.3WXYZ, 1.2ZZ, 1.2Z/1.2Z ^⑥		
UEX,UEZ all types	0.3WXYZ, ZZ, 0.3Z/0.3Z ^⑥		
Frequency	60hz		
Secondary Terminals ^④	X1,X2,X3,Y1,Y2,Y3		
Style	Post type, outdoor, oil filled, hermetically sealed		

- (1) The suffix denotes the rated insulation Class.
- (2) The higher ratios produce $115/\sqrt{3}$ volts.
- (3) The two secondaries are wound on the same core.
- (4) The complete accuracy rating as given appears on the nameplate.
- (5) 115 secondary volts is obtained from X1-X3 and Y1-Y3. $115/\sqrt{3}$ secondary volts is obtained from X2-X3 and Y2-Y3.
- (6) With both secondaries loaded simultaneously.

Description

The types UEV, UEX and UEZ differ in physical appearance mainly in the size of the porcelain insulator.

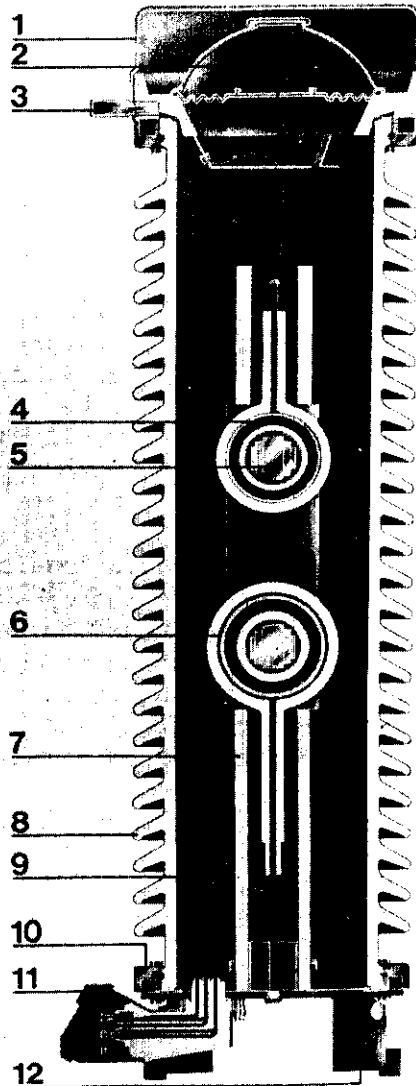
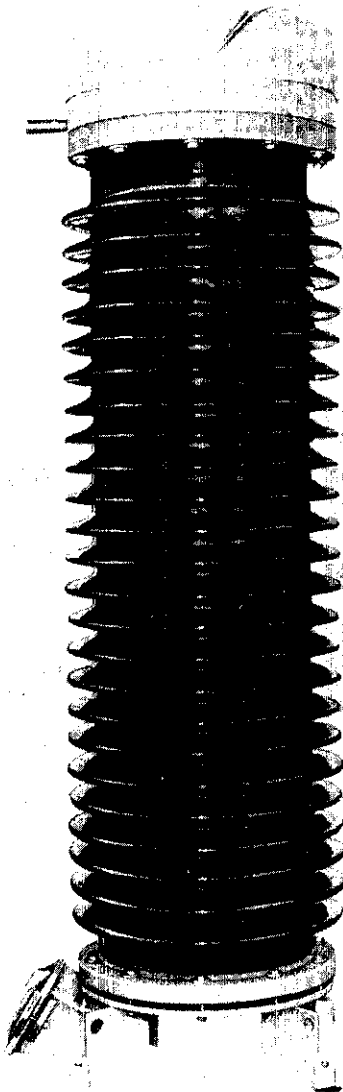
USINES BALTEAU TYPES "UEV(12)", "UEX(1)" and "UEX(1)" VOLTAGE TRANSFORMERS

hermetic

Balteau

Voltage transformers.

1. Aluminium hood.
2. Diaphragm allowing thermal expansion of oil.
3. Primary terminal in bronze.
4. Primary winding in cascade connection — compensation windings.
5. Core at half-primary voltage.
6. Secondary winding(s).
7. Core insulating rods.
8. Long creepage distance porcelain.
9. Hot galvanised steel base.
10. Porcelain clamping device.
11. Aluminium moulded terminal box with secondary terminals in epoxy resin casting.
12. Fixing legs and lifting holes.



The primary winding is divided into a number of coils that are connected in cascade and the secondary windings are fitted on the last coil only. This cascade construction calls upon each coil to withstand only a proportion of the voltage.

The rectangular core on which the coils are mounted is connected to the mid-point of the primary winding and is thus raised to a potential midway between that of the high voltage and ground.

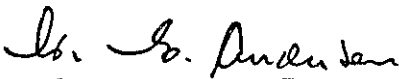
Transformers UEV and UEX220 have 2 rectangular cores each of them with 2 coils connected in cascade. The top core is at $3/4$ potential from ground and the bottom core is at quarter potential from ground.

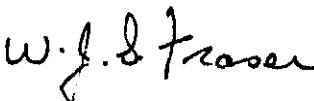
The core is supported by four Epoxy resin insulating pillars which insulate it from the metal base.

The connections to the secondary windings are brought to a terminal block with metal cover at the base of the transformer, and are marked as to the winding to which they are connected. This terminal block is provided with a metal cover.

Approval granted to:

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