



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



STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL

I - 72

OTTAWA September 6, 1972

BROWN-BOVERI TYPE "TMBRp 770 D10" CURRENT TRANSFORMERS

Primary Current	2000 amperes
Secondary Current	5-5-5-5-5 amperes
Accuracy Rating at 60 Hz	0.3B0.1, B0.2, B0.5, B0.9, B1.0, B1.8, B2.0*
Frequency	60 Hz
R.F. (rating factor)	1.25
Number of Secondaries	5
Identification of Secondaries	"V", "W", "X", "Y", "Z"
Metering Secondary*	"V" (5th core)
Nominal Voltage Class	735 kv
BIL (basic impulse level)	2100 kv

- * The 0.3B2.0 accuracy rating applies to the "V" secondary only, and this is the only winding approved for revenue metering.

Description of Type Designation

T Transformer
M Measuring
B Rubber membrane type
R Ring winding
p core index (type and size of core)
770 Highest system voltage in kv
D10 Capacitive tapping (see description)

~ **STROMWANDLER** **TRANSE D'INTENSITÉ** **CURRENT TRANSF.**

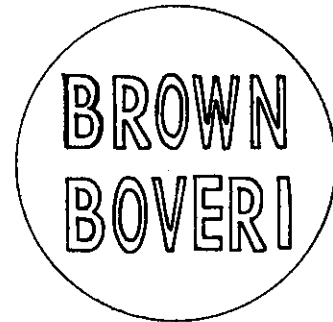
1970 B 289765...773 Typ TMBR p 770 D 10

U 770/970/50 kv I therm. 60 kA

f 60 Hz I dyn. 150

I	1...4	5		A
P	2000-5-5-5-5	2000-5		VA
CI	10 L 800	0.3 B 2.0		

BIL 2100 kV onde complète



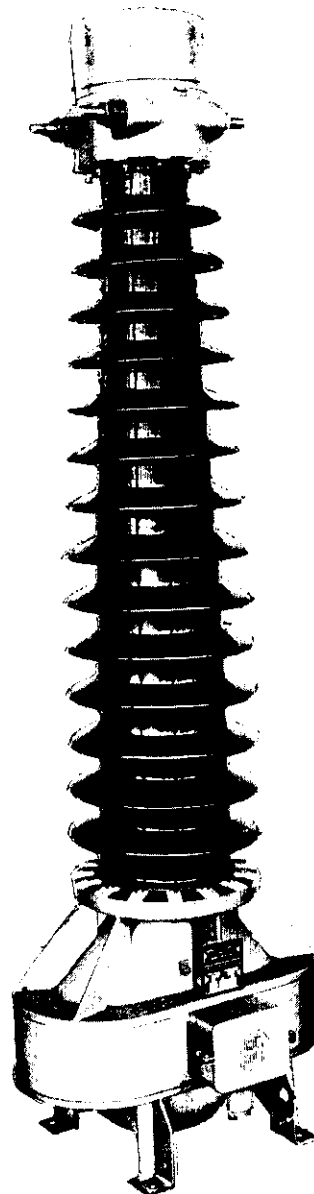
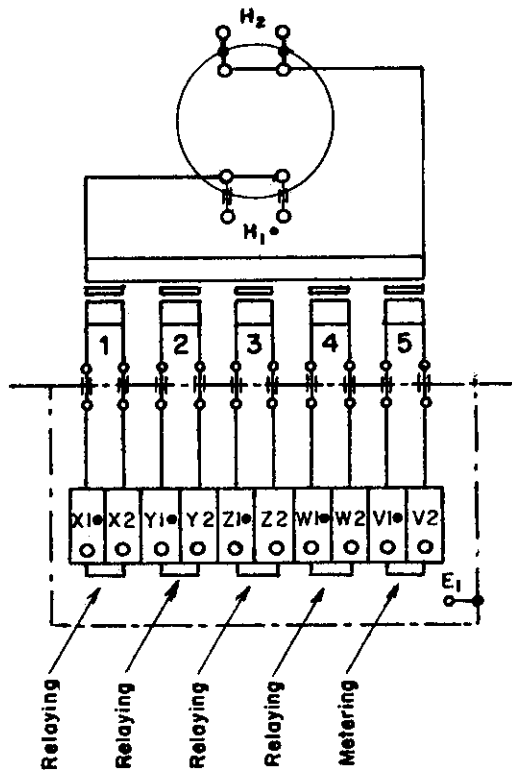
KAPAZITIVER SPANNUNGSSTELLER **DIVISEUR DE TENSION DE CAPACITIF** **CAPACITIVE VOLTAGE DIVIDER**

1970 B 289765 A...773A U_1 735000/ $\sqrt{3}$ V

mit B 289792...797 U_2 ca 25000/ $\sqrt{3}$ V

avec with

- 1.) Therm Nennprimär - Dauerstrom
Continuous thermal primary current rating
Courant primaire maximal en régime continu
2500 Amp.
- 2.) Prüfspannung gegen Erde
Test voltage against station ground
Tension d'essai contre terre



DESCRIPTION

The main current transformer consists of a terminal cap, the insulator, the active part and the tank.

On the transformer cap or head are the primary high voltage terminals. Two are marked "H1" to designate polarity and the entrance of the current to the transformer and the other two are marked "H2" to designate the return of the current to the line and are not insulated from the head.

An expansion bellows inside the cap seals the oil filling the transformers and takes care of expansion. Attached to the top of the bellows is a pointer which indicates the oil level through a gauge glass.

The insulator is made of brown glazed ceramic material clamped to the tank with a gasket between to assure an oil-tight joint.

The active part is composed of a primary and secondary windings, the latter wound around an iron core. The primary is a concentrated ring-shaped winding in which the five iron cores pass to form a cross.

Secondary windings are wound around each core, and the ends of the windings are brought through bushings to terminals in a terminal block. The terminals associated with each of the five secondary windings are identified as V1, V2; W1, W2; X1, X2; Y1, Y2 and Z1, Z2.

In all cases, the terminal with the suffix "1" has the same polarity as the primary terminal "H1".

The tank houses the primary ring winding part and the annular core and coil assemblies.

Transformers with "D10" in the type designation are provided with a capacitor tapping and coupling unit for supplying a capacitor voltage transformer.

Information as to the output voltage from the capacitor tapping may appear on the nameplate and the schematic for the capacitor voltage transformer may appear in the literature.

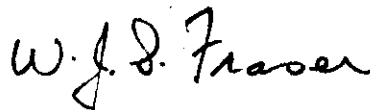
It should be noted that this approval notice does not cover the capacitor voltage tapping or the capacitor voltage transformer, consequently, transformers of identical type and rating to that covered by this Notice but without "D10" in the type designation may be considered to be covered.

The schematic on page 2 of this notice shows the five secondary windings and their corresponding terminals.

Only the "V" winding is approved for metering, and the other four windings because they are also on separate cores must be short-circuited if they are not used.

Approval granted to:

Brown-Boveri (Canada) Ltd.,
Pointe Clarie 730, Quebec.



(for) J.S.T. Swanson, P. Eng.,
Chief, Standards Laboratory,
Standards Branch.

W.J.S. Fraser,
Chief, Electricity and Gas Division,
Standards Branch.

Ref: SL-100-913
1145-57/B8-913