CANADA

DEPARTMENT OF TRADE AND COMMERCE

STANDARDS BRANCH

S-EA.608

OTTAWA, January 27, 1964.

TYPE APPROVAL

HONEYWELL "ELECTRONIK 18" STRIP CHART RECORDING POTENTIOMETER

The apparatus specified and illustrated herein has been duly approved by the Standards Branch under the provisions of the Electricity Inspection Act, Chapter 94, R.S. 1952, and may be admitted to verification in Canada.

Apparatus Approved: "Electronik 18" Strip Chart Recording Potentiometer, manufactured by Minneapolis-Honeywell Regulator Company, Minneapolis 8, Minnesota, U.S.A., and distributed in Canada by Honeywell Controls Limited, Toronto 17, Ontario.

Rating of Apparatus:

# Millivolt Input	Ranges from 0-10 mv to 0-100 mv. D.C.
Record	Single Pen. Continuous line
Current standardization	Continuous automatic (zener diode)
Chart	6-inch calibrated width
Scale	6-inch calibrated width
° Pen speeds	4½ and 12-seconds nominal
Basic chart speeds	1, 2, 6, 10, 30 and 60 inches per hour
Power Supply	115 volts 60 cycles
Maximum External Resistance	10000 ohms

*The kilowatts, megawatts or other power function which the millivolts represent shall be shown on the nameplate or scale.

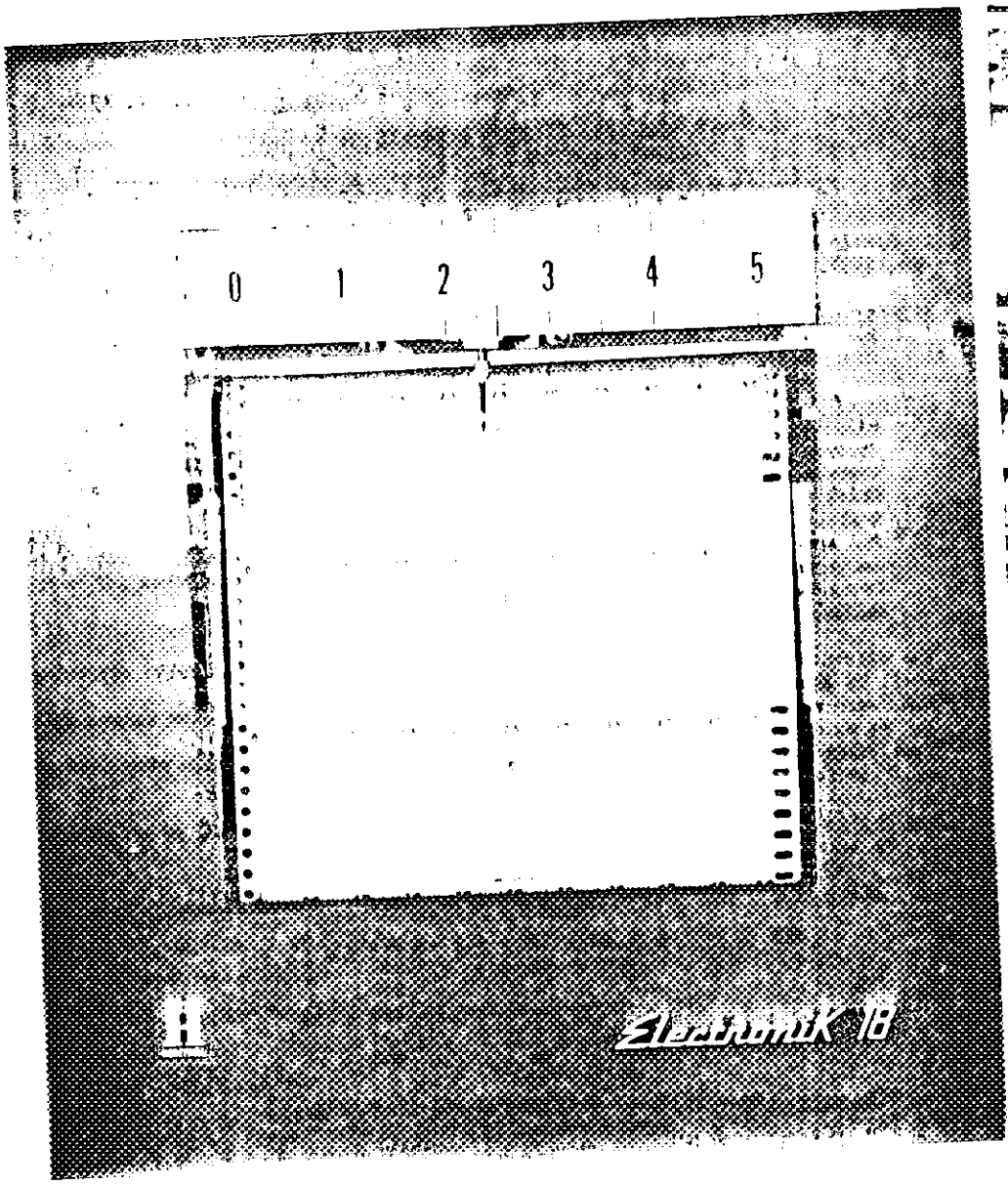
#L.H. zero or zero up to half scale is approved. In the latter case ranges will be -5 to +5 mv up to -50 to +50 mv.

is taken for the pen to travel the full length of the scale with step load change al to full scale.

Type Designation: Made up of the following groups of numbers, all of which are covered by this approval:-

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
18	3	018	3 2	6	01	30 31 32	000	001 002 006 010 030 060	07	SK1732

(Example: Type 183018-3-6-01-30-000-001-07-SK1732)


0 1 2 3 4 5

(1) Electronik 18
Strip Chart
Non Control
(4) Pen Speed, 3 (4-½ sec); 2 (12 sec)
(5) Frequency 6- 60 cycles
(6) Number of records: 01 single
(7) 30 (D.C. mv standards); 31 (D.C. mv upscale burnout);
32 (D.C. mv downscale burnout)
(8) Non Control
(9) Chart speed: 001 (1 inch/hr basic); 002 (2 inch/hr basic) 006 (6 inch/hr basic); 010 (10 inch/hr basic); 030 (30 inch/hr basic); 060 (60 inch/hr basic). All may be supplied with change gears to give ½ and 2 times basic chart speed except 001 which cannot be used with change gears giving ½ times basic.
(10) Recording Means: 07 remote reservoir capillary pen.
(11) SK1732 denotes that provision is made for sealing the adjustments with a looking wire and seal.

Description: The Electronik "18" is a continuous balance potentiometer type strip chart recorder.

The measuring circuit is a modification of the standard null balance potentiometer circuit.

Internally, the recorder is divided into two units, a circuit unit and a display unit, connected together by a flexible cable.

The Circuit Unit is mounted inside the case at the rear with all the components including the range resistors on a panel provided with terminals at the back to which external connections may be made.

Covering the circuit unit but not connected to it is a metal shield. A separate lead from the shield is brought to a terminal at the back of the panel marked "shield" where a metal strip connects it to one or the other of the millivolt input leads.

The Display Unit includes the chart, chart drive motor, servo-motor, slide wire, inking mechanism and adjustments. The adjustments are accessible from the front and may be sealed with a wire. The entire unit is mounted on a slide which may be withdrawn from the cabinet.

The ink to the pen is fed through a length of coiled plastic tubing erminating in a plastic ink reservoir.

Another terminal at the back of the circuit unit panel is identified with a decal marked "gnd". This terminal is to be connected to a solid ground independent of the ground in one of the supply leads.

As the length of the scale, the calibrated width of the chart and the pen travel are almost exactly equal, instruments may be encountered where the pen is prevented mechanically from completely returning to zero, in which case the zero test may be dispensed with.

Instruments used for billing purposes will have the nameplate marked with the specification number "SK1732" which denotes that provision is provided for sealing the adjustments and are not to be verified unless this number appears.

This instrument is approved for use unsealed and is to be used only in locations where dust and moisture are at a minimum.

When verifying, it is essential that the values marked on the chart and scale conform to the primary units measured, and that the nameplate be marked showing the full scale value in kilowatts, etc., and the corresponding value in millivolts.

(for) E.F. Power, Chief,
Electricity and Gas Division,
Standards Branch.

R. W. Maclean,
Director,
Standards Branch.

Ref: A985