DEPARTMENT OF TRADE AND COMMERCE

STANDARDS BRANCH

CANADA

E-20

OTTAWA October 29, 1965

NOTICE OF APPROVAL

FOR

HONEYWELL "ELECTRONIK 18" STRIP CHART RECORDING POTENTIOMETER

TYPE "Y183 --- SK1825"

Apparatus:

*#	Millivolt Input	Ranges from 0-10 mv to 0-300mv dc
*#	Millivolt Output	Ranges from 0-10 mv to 0-300mv dc
	Record	Single pen, continuous line
	Chart	6 inch calibrated width
	Scale	6 inch calibrated width
	Standardization	Continuous automatic (zener diode)
o	Pen speeds	4½- and 12 seconds nominal
	Basic Chart Speeds	1, 2, 6, 10, 30 and 60 inches per hour
	Chart Speed Change Gear Ratios	½, 2/3, 1, 1-½, 2
	Power Supply	115 volts 60 cycles
ø	Max. External Resistance	2000 ohms downscale burnout protection 1000 ohms upscale burnout protection.

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

\# LH zero or zero up to half scale are approved. Where two or more recorders are used in a totalizing network, all instruments must have LH zero.

o Time taken for the pen to travel the full length of the scale with a step load change equal to full scale.

Change gears are available for these multiples and sub-multiples of the basic chart speeds. All are approved except the combination giving ½ inch per hour.

ø In a totalizing application, all instruments must have downscale burnout protection, and total series resistance intransmission circuit must not exceed 2000 ohms.

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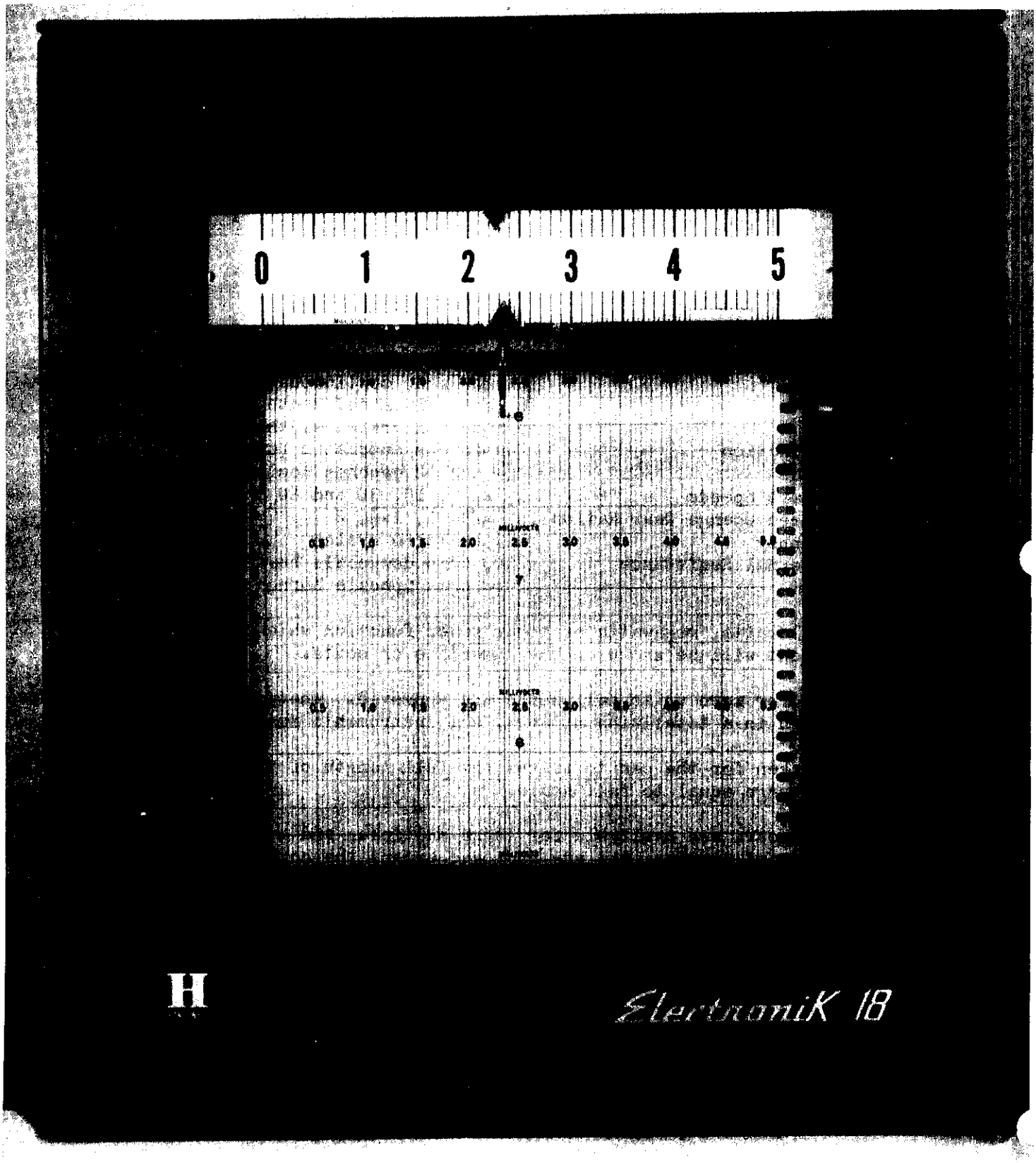

Type Designation made up as follows:

Spec.	Key Number (1st 8 Digits)						Table Variations							
	A	B	C	D	F	I	II	III	IV	VV	VI	VII		
Y	183	01	8	2 3	6	01	30 31 32	0	000	001 002 006 010 030 060	07	070	(901)	SK1825

Example: Y 18301836-01-32-0-000-002-07-SK1825

Y The "Y" preceding a Honeywell model number means that this instrument has one or more special features which are not listed in the standard model specifications. Where possible, the particular group of model number digits affected by the special feature is bracketed. Where this is not meaningful, the number (999) appears at the end of the model number.

A 183 Class 18 Strip Chart Recorder (3 digits)

B Design Style (2 digits) 01 Single Input (Recorder or Indicator)

C Control Type (1 digit) 8 Non-control

D Pen Speed at 60 cycles (1 digit) 2) 12 seconds, 3(4.5 seconds, 5) 1 second

F Frequency (1 digit), 5 - 50 cycles, 6 - 60 cycles

I Number of Records (2 digits), 01 single record

II Measuring circuit (2 digits), 30 dc mv standard, 31 dc mv upscale burnout, 32 dc mv downscale burnout

III Wiring Compensation (1 digit) 0 uncompensated (copper) wiring

IV Control Form (3 digits) 000 not applicable in billing application

V Chart Speed (3 digits), 001 (1 in/hr), 002 (2 in/hr), 006 (6 in/hr) 010 (10 in/hr), 030 (30 in/hr), 060 (60 in/hr)

VI Recording Means (2 digit) 07 Remote reservoir type capillary pen

VII Optional Variations (3 digits) 070 door lock, (901) one retransmitting slide wire, mv signal.

SK1825 Special provision for sealing and locking instrument case and for addition of auxiliary nameplate stating input and output ranges for instruments with retransmitting function.

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Description:

The Electronik "18" is a continuous balance potentiometer strip chart recorder. 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 the external connections are made.

Covering the circuit board but not connected to it is a metal shield with a separate lead 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 terminals.

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.

The display unit includes the chart, chart drive motor, servomotor, slide wire, inking mechanism and adjustments. These adjustments are accessible from the front.

The retransmitting slide wire, if the instrument is so equipped, will be found at the rear of the display unit, with the transmitting slide wire arm mounted on the same shaft as that used for the measuring slide wire arm. The transmitting slide wire is fed from a separate constant voltage unit and has separate span and zero adjustments. It is electrically isolated from the input circuit.

Instruments to be used in a billing application will have the specification number "SK1825" included in the type designation, denoting that (a) a door lock is provided to prevent unauthorized access to the case from the front and (b) two drilled screws at the back cover for sealing wires to prevent access to the interior of the case from the rear.

Only instruments bearing the specification number Sk1825 may be verified.

If an instrument is equipped with a retransmitting slide wire, denoted by (901), an auxiliary nameplate will be mounted behind the door glass, and will have marked on it the input and output ranges in millivolts.

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Description (cont'd)

All instruments equipped with retransmitting slide wires will be wired internally for downscale burnout, "32".

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 returning to zero, in which case, the zero test may be dispensed with.

This instrument should be installed and used 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.

Where verifying a totalizing installation, care should be taken to ascertain that a given output in millivolts from each of the transmitters corresponds to the same value of primary units.

Please note that the illustration on the back of this circular does not show the door lock or the auxiliary nameplate. This latter is required on billing instruments having a retransmitting function.

Approval granted to: Honeywell Controls Ltd., Vanderhoof Ave., Leaside
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