

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



NOTICE OF APPROVAL

E-80

OTTAWA October 20, 1969.

SANGAMO CYCLOMETER REGISTERS FOR USE ON CJ3A AND CJ3S SINGLE PHASE WATTHOUR METERS

Register Ratios

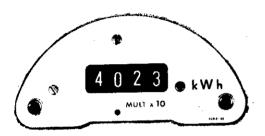
Current Rating (amperes)

120 volt 4 dial x l 5 dial x l 4 dial x 10	0.12-10 666-2/3 666-2/3	0.5-50 133-1/3 133-1/3	1.0-100 66-2/3 66-2/3 666-2/3	2.0-200 33-1/3 33-1/3 333-1/3
240 volt 4 dial x l 5 dial x l 4 dial x 10	333-1/3 333-1/3	66-2/3 66-2/3 666-2/3	33-1/3 33-1/3 333-1/3	16-2/3 166-2/3
345 volt 4 dial x 1 5 dial x 1 4 dial x 10	222 –2 /9 222 –2 /9 –	44-4/9 44-4/9 444-4/9	- 2 2- 2/9 222 - 2/9	- 11-1/9 111-1/9

DESCRIPTION

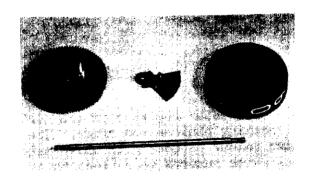
This new cyclometer register is the horizontal roller type design with moulded indexing pinions and drums. The numeral drums are moulded using a new two colour process with white material from inside the black drum producing white numbers on a black background.

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The indexing weight is mounted on the same shaft as the drums, and with a gravity fall, provides a rapid advance or index of the register reading as the digit drum rotates past the numeral "9". This prevents a partial number showing on any drum other than the units drum.

The register ratio is altered during manufacture by changing the gear ratio in a small gear box at the right hand end of the register. The outboard plate of this gearbox is stamped with the register ratio.

The recording drums, indexing weight and pinions are mounted in an aluminum die casting that is the same unit for all register ratios. All the recording drums are identical but two front dial plates are available. One has an opening displaying 4 drums, the other has a larger opening to display 5 drums.

The register is reset to zero by holding it in the left hand with the staff through the drums vertical and the gear box down. The thumb of the right hand can now lift each drum and rotate it to zero.

The worm wheel take-off gear has 50 teeth, consequently the register ratio will be exactly double that of an equivalent clock type register which has a 100 tooth take-off gear.

The first drum, weight, and driving gear with pin are so designed that they may be correctly assembled in only one position.

NOTE: the falling weight after it has tripped the units drum from "9" to "0" assists in the rotation of the drum until it reaches approximately bottom dead centre which is approximately midway between "1" and "2". At this point the units drum waits until the driving pin takes up the backlash which is approximately 1 test dial revolution.

It is therefore recommended that positions "9" to "2" on the units drum be avoided when dial testing.

Approval granted to:

Mr. J.S.T. Swanson, P. Eng., Chief, Standards Laboratory, Standards Branch.

Ref: SL-100-887 (U) supplement

SE-85-6-1

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W. J. Fraver

Mr. W. J. S. Fraser, Chief, Electricity and Gas Division.