

## DEPARTMENT OF TRADE AND COMMERCE

STANDARDS BRANCH

оттаwa October 24, 1963.

## TYPE APPROVAL

## SANGANO CYCLORETER REGISTER FOR USE ON TYPE "CJ" WATTHOUR METERS

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: Cyclometer Register, for use on Type "CJ" single phase watthour meters, manufactured by Sangamo Company Limited, Leaside, Toronto 17, Ontario.

Rating of Apparatus:

Register Ratios

4-dial x 1 4-dial x 10 20-5/6, 41-2/3, 83-1/3, 208-1/3, 416-2/3 104-1/6, 208-1/3

Description: On this register, the test dial is driven through gearing directly from the take-off gear so that it follows the disc revolutions closely. However, the reading dials are driven by a dog projecting into a cut-away disc having a sliding counterweight. The angular size of the cut-away section is equivalent to the distance between two consecutive digits on the units dial.

The falling of the sliding weight over top dead centre produces the impulse that advances the register one digit without the corresponding test dial revolution. This produces an apparent loss of one test dial revolution at the turn-over point. This apparent loss is made up when the units dial just passes "1" where the units dial waits while the test dial continues to advance a complete revolution as the backlash is taken up. This is characteristic of the design and is not a defect.

In general, dial testing of these registers should be confined to observation of the test dial only and the fact that the test dial revolutions and units dial reading may be "out-of-step" by one unit, in certain positions of the unit dial, should be ignored. If this characteristic of this register is understood and kept in mind there should be no difficulty in making a proper dial test.

C. F. Power

Chief, Electricity and Gas Division, Standards Branch.

R.W. Waclean, Director, Standards Branch.

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