CANADA

DEPARTMENT OF TRADE AND COMMERCE

STANDARDS BRANCH

E-35

OTTAWA May 19th 1966

NOTICE OF APPROVAL

FOR

SANGAMO TYPE "CJ3BA" AND "CJ3BS" SINGLE-PHASE WATTHOUR METERS

with 2-Rate Register

Apparatus

Current Range	2-200 amperes
Voltage	230 and 240 volts
Wire	3
Frequency	60Hz
Disc constant	12.0
Register	Two - 4-dial x 10 clock type, each with test dial
Register ratio	83 - 1/3
Timing motor	230 - 240 volts 60 Hz
*Min. time at either rate	2 hours because of mutual interference of riders

* The minimum time of two hours is due to the mechanical nature of the tripping mechanism which requires that the first rider be clear before the arrival of the second rider.

Description

The type "CJ3BA" and "CJ3BS" single phase watthour meters are electrically identical to the type "CJ3B" and "CJ3S" of the same rating that received approval under circular "E-16", but because of the 2-rate register and its associated timing motor it requires a deeper glass cover.

The 2-rate register has two sets of dials set one above the other and a synchromous timing motor that transfers registration from one to the other according to two preset riders on a 24 hour dial.

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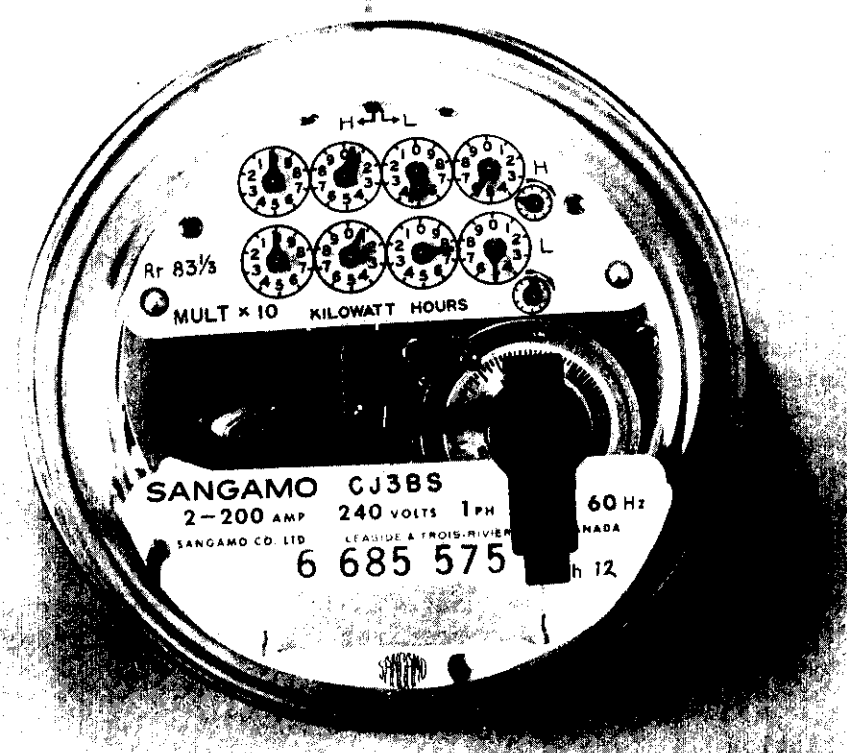
with 2-Rate Register



Each register has its own test dial and the multiplier of 10 applies to both registers.

The 24 hour dial is divided into two 12-hour sections, the one from 6 p.m. to 6 a.m. being black to denote the night hours.

The riders, one marked "L ON" and the other "L OFF" can be moved around the periphery of the disc, and can be clamped into place at the times between which it is desired that registration should take place on the "low rate" register. A pin on the back of each rider accomplishes the transfer, and a small red pointer at the top of the register face indicates which of the two registers is currently in operation.

The positions of these riders is determined by the utility, because once the cover is in place they are inaccessible, so that to change the position of either pin it will be necessary to remove the glass cover, and if the meter has been sealed, to break the seal.

A hole is provided in the glass cover directly over the hour dial, so that the utility may, by means of a screwdriver, set the hour dial according to the time of day the meter is installed, or re-set it should there be a power interruption. A cap with provision for a utility seal covers this hole.

When verifying, it will be necessary to "dial test" each register separately, and the register desired can be selected by operating the hour dial by means of a screwdriver through the hole in the cover.

In order to prevent transfer from one register to the other during the course of the dial test, it is advisable to set the hour dial so that the fixed time reference pointer comes approximately midway between the two riders.

As the operation of the register bears a similarity to a differential register, the load should be applied for a sufficient length of time to take up the backlash in each register.

As part of the verification procedure, it will be necessary to check the operation of both of the riders.

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This may be done by noting the setting of the riders, and rotating the hour dial by means of a screwdriver through the hole in the cover until the rider being tested and the fixed time reference pointer almost coincide and the rider begins its tripping action. The screwdriver is removed and the rider is permitted to continue its operation driven by the synchronous timing motor. The instant that the actual turnover takes place can be ascertained by observing the small red pointer at the top of the register face, and the time by reference to the fixed pointer and the hour dial.

A tolerance of ± 15 minutes has been set in the operation of each of the riders, which means that if a certain rider has been set to operate at 7.00 p.m., operation is satisfactory if the action takes place between 6.45p.m. and 7.15 p.m.

Approval granted to: The Sangamo Company Limited,
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