



S-EA.580  
(Amended)

DEPARTMENT OF TRADE AND COMMERCE  
STANDARDS BRANCH

OTTAWA, September 25, 1963.

TYPE APPROVAL

CANADIAN GENERAL ELECTRIC TYPE "I-60S" DUAL-RATED  
SINGLE-PHASE WATTHOUR METER

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

Apparatus Approved: Type "I-60S" Dual Rated Single-Phase Watthour Meter, manufactured by the Canadian General Electric Company Limited, 1130 Blvd. Charest, Quebec 8, P.Q.

Rating of Apparatus:

Volts	230 or 240 volts
Current Ranges	1.0-200 amperes (1.0-100 amperes)*
Frequency	60 cycles
Wire	3
Disc Constant Kh	7.2 watthours per rev.
Register Ratio	138-8/9 4-dial x 10 <sup>0</sup> 13-8/9 5-dial x 1
Register Type	clock and cyclometer <sup>o</sup>

\*marked on small removable '100' tab.

#if a clock type register is installed, the 5th dial may be covered with a circular mask when the meter is presented as 1.0-100 amperes with the tab in place; if the meter is presented as 1.0-200 amperes, the register may be either a 4-dial with multipliers of 10 or a 5-dial with a multiplier of 1.

<sup>o</sup>The "Q-10" cyclometer register (SD-EA.191, May 19, 1955) as a 4-dial with a multiplier of 10 and a register ratio of 138-8/9 is the only cyclometer register approved for use with this meter.



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CANADIAN GENERAL ELECTRIC TYPE "I-60S" DUAL-RATED  
SINGLE-PHASE WATTHOUR METER





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Description: The type "I-60S" dual-rated 1.0-200 (1.0-100) ampere watt-hour meter is similar in design and appearance to the type "I-60S" voltage compensated 'VC' watt-hour meter which received approval under Circular S-EA.469 of September 7, 1960. It also incorporates the modifications listed in Circular S-EA.576 of February 1, 1963, and may have one or two test links.

The purpose of the dual rating is to procure a more universal meter that can be used on either 100-ampere or 200-ampere 3-wire services. To do this the minimum current has been reduced to 1.0 ampere along with a reduction in the size of the anti-creep holes in the disc. Because of the reduced minimum current and consequent lower disc speed, the dual-rated "I-60S" meter is not approved in the voltage compensated design and is not intended to be used on 2-wire 115-120 volt service.

Changing the current range from 1.0-100 amperes to 1.0-200 amperes is done by removing the '100' tab covering the '200' on the nameplate. It is then necessary to see that the register is either a 5-dial with a multiplier of 1 or a 4-dial with a multiplier of 10.

This meter may be presented for verification equipped with (a) a 5-dial with test dial and multiplier of 1, (b) a 4-dial with test dial and multiplier of 10, or (c) a convertible 4/5 dial with test dial and multiplier of 1. The 4/5 dial register would be supplied as a 4-dial register for 100-ampere capacity meters with the 5th dial covered by a mask. Where the meter would be used initially as a 100-ampere meter but at some future date may be used as a 200-ampere meter, the mask can be removed and replaced by a pointer on the 5th dial. The convertible 4/5 dial register is approved for use with any approved Canadian General Electric watt-hour meter of suitable range.

Owing to the "storage and release" effect of the magnets used in the type 'Q-10' cyclometer register, the first digit of the reading dial may be 'out-of-step' with the test dial. This is characteristic of the design and is not a defect. To avoid the backlash associated with this effect it is recommended that positions 9 and 4 on the first reading dial be avoided when dial testing this register.

This circular cancels and replaces circular S-EA.580 of March 26, 1963.

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