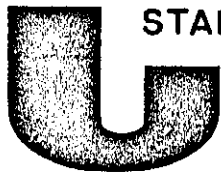




Department of consumer and corporate affairs / Ministère de la consommation et des corporations



STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL

E-91

OTTAWA July 7, 1970.

CANADIAN GENERAL ELECTRIC TYPES "DS-53", "DS-54", "DS-55", "DSM-53", "DSM-54", AND "DSM-55" POLYPHASE WATTHOUR AND COMBINATION DEMAND-ENERGY METERS

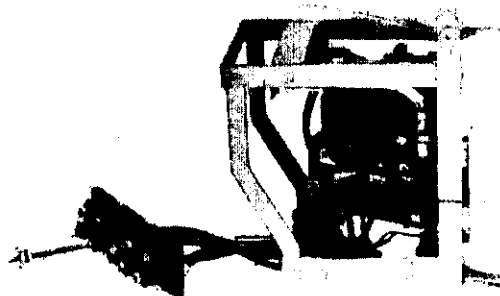
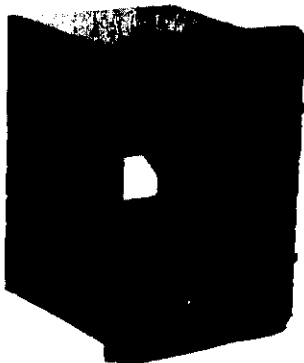
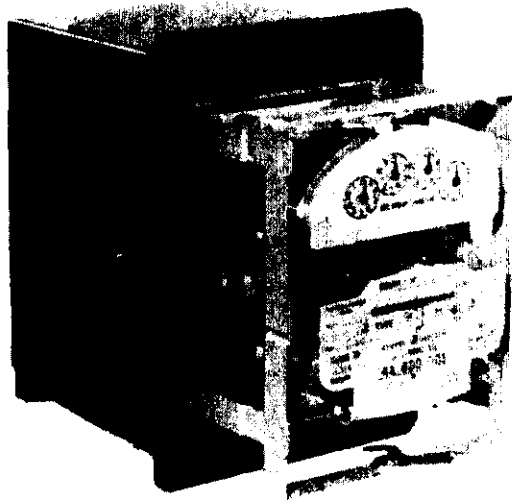
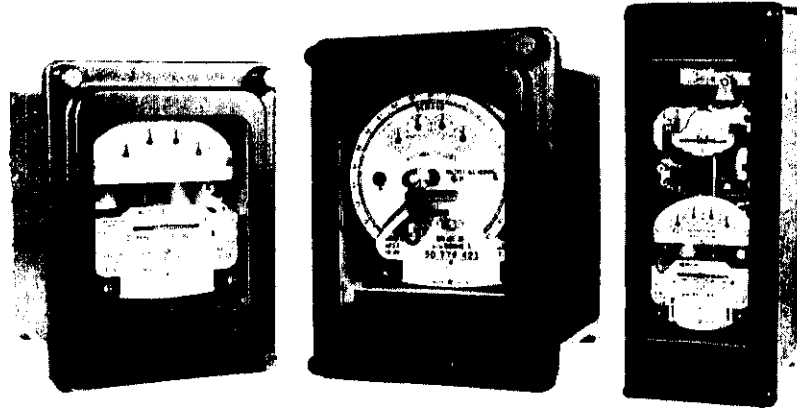
| | |
|---------------------|---|
| Current Ranges | Types "DS-" |
| "DS-53", "DS-55" | 0.12-10 ⁽¹⁾ 0.25-20 amperes |
| "DS-54" | 0.12-10 ⁽¹⁾ amperes |
| Voltage Ratings | |
| "DS-53" | 115, 120, 230, 240 ⁽²⁾ , 345, 460, 480 and 600 volts |
| "DS-54", "DS-55" | 115, 120, 230, 240 ⁽²⁾ and 345 volts |
| Circuit | |
| "DS-53" | 2-element, 3 phase 3 wire |
| "DS-54" | 3-element, 3 phase 4 wire Y |
| "DS-55" | 2½-element Y, 3 phase 4 wire Y |
| Frequency | 50 and 60 hz |
| Approved attachment | M-30 Demand Register ("M" in the type designation) |

- (1) 0.12-10 ampere rating may be self-contained or for use with instrument transformers. Potential indicating lamps are optional equipment on both transformer types and self-contained types.
- (2) 240 volt 60 hz meters are approved for use on 277 volts. They will be marked and tested as 240 volt meters. 50 hz meters may not be so used.

Disc Constants (kh)

| | 115,120V | 230,240V | 345V | 460,480V | 600V |
|---------------------|----------|----------|------|----------|------|
| <u>DS-53</u> | | | | | |
| 0.12-10 amp. | 1.2 | 2.4 | 3.6 | 4.8 | 6.0 |
| 0.25-20 amp. | 2.4 | - | - | - | - |
| <u>DS-54, DS-55</u> | | | | | |
| 0.12-10 amp. | 1.8 | 3.6 | 5.4 | - | - |

CANADIAN GENERAL ELECTRIC TYPES "DS-53", "DS-54", "DS-55", "DSM-53", "DSM-54"
AND "DSM-55" POLYPHASE WATTHOUR AND COMBINATION DEMAND-ENERGY METERS



Register Ratios

| | | | | | |
|---------------------|---------|--------|---------|--------|--------|
| <u>DS-53</u> | | | | | |
| 0.12-10 amp. | 116 2/3 | 83 1/3 | 55 5/9 | 41 2/3 | 33 1/3 |
| 0.25-20 amp. | 83 1/3 | - | - | - | - |
| <u>DS-54, DS-55</u> | | | | | |
| 0.12-10 amp. | 111 1/9 | 55 5/9 | 37 1/27 | - | - |

All registers are 4-dialxl with test dial. Type DS-54 may have a 5-dialxl with test dial.

Types DSM- 0.12-10 amp.
Disc Constant (kh)

| | | | |
|----------------|------|------|------|
| | 120V | 240V | 480V |
| DSM-53 | 1.2 | 2.4 | 4.8 |
| DSM-54, DSM-55 | 1.8 | 3.6 | - |

Register Ratio

DSM-53, DSM-54, DSM-55 333 1/3

Demand Scale

| | | | | |
|----------------|--------|---------------------------|------|------|
| | | Multiplier ⁽³⁾ | | |
| | | 120V | 240V | 480V |
| DSM-53 | 0-1000 | 2 | 4 | 8 |
| DSM-54, DSM-55 | 0-1200 | 3 | 6 | - |

Frequency 50hz and 60hz
Time Interval 15 minutes

Timing Motor Burden 3.4w, 3.9rva, 5.1va (at 120V. 60hz)
Potential Coil Burden 1.17w, 8.3rva, 8.4va (at 120V. 60hz)
Current Coil Burden
 single coil .38w 0.6rva 0.7va (at 5 amp. 60hz)
 split coil .77w 1.1rva 1.4va (at 5 amp. 60hz)

(3) multiplier applies to both watt-hour and demand readings.

Description

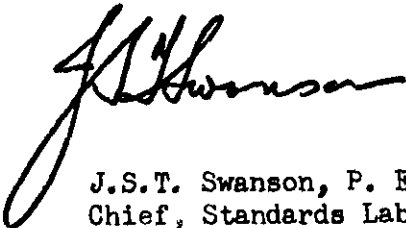
The types DS-53, DS-54 and DS-55 are electrically identical to the corresponding ratings of the types DS-63, DS-64 and DS-65 which latter received approval under circular E-24.

The DS-53, DS-54 and DS-55 are switchboard type in what is termed semi-drawout design in that the meter elements are connected to terminals at the back of the case by flexible leads.

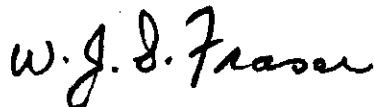
These meters may be supplied with or without an attached seal pan. For meters that do not have the attached seal pan, a separate pan and a sufficient length of wire will be supplied with each meter sold, for the use of those customers who desire to seal their meters.

Approval granted to

Canadian General Electric Company Limited,
1130 Boulevard Charest,
Quebec 8, Quebec



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