DEPARTMENT OF

TRADE AND COMMERCE
CANADA

S-EA.466

STANDARDS BRANCH

OTTAWA August 15, 1960.

TYPE APPROVAL

CANADIAN GENERAL ELECTRIC TYPES "D-20I", "D-30I", "D-20V", "D-30V" AND "D-31V" CONTACT DEVICES AND RELAY FOR USE WITH "D-31V" CONTACTS

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: Types "D-20I", "D-30I", "D-20V", "D-30V" and "D-31V" Contact Devices (and Relay for use with "D-31V"), manufactured by Canadian General Electric Company Limited, Quebec, P. Q.

Rating of Apparatus:	"D-20I" "D-20V"	"D-30I" "D-30V"	"D-31V"
Voltage Rating Maximum	120 or 240 volts (60VA)	120 or 240 volts (60VA)	120 volts (5ma)
Maximum Impulses in 15 min. ..	299	299	999
Contact Arrangement	2-wire	3-wire	3-wire
Maximum Contacts per disc revolution	(0.25 - "D-20I" (0.4 - "D-20V"	(0.5 - "D-30I" (0.8 - "D-30V"	5.0
Minimum Contacts per disc revolution	(1/120 - "D-20I" (1/324 - "D-20V"	(1/60 - "D-30I" (1/162 - "D-30V"	0.4
Relay Contact Rating	---	---	120V, 1.0 amp. 60 cycles

Description: These contact devices are for use with approved meters having magnetic suspension. They are pinion gear driven and hence do not impose any vertical forces on the disc shaft which could result in displacement of the disc with possible consequent errors. The suffix "I" indicates that the mounting bracket is designed for installation on single-phase meters, and the suffix "V" indicates a different bracket for mounting on V-type polyphase meters.

Type "D-20" is a 2-wire quick-make, quick-break contact device, and the "D-30" and "D-31" are 3-wire contact devices, quick-make, quick-break, single-pole double-throw. Types "D-20" and "D-30" use cams driven through a gear train from the disc shaft and operate a set of bronze blades carrying the contacts. In the type "D-31" a silver commutator is driven through reduction gearing from the disc shaft, and gold alloy brushes bearing on the commutator actuate an external relay. The carrying capacity of the brushes is only 5 milliamperes so that the relay is necessary. This relay with its single-pole double-throw contact arrangement may be used to operate a number of remote recorders. The relay consists of

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(a small