



DEPARTMENT OF TRADE AND COMMERCE
STANDARDS BRANCH

E - 6

OTTAWA, May 6, 1965.

NOTICE OF APPROVAL

FOR

FERRANTI TYPE "CVA" VECTORIAL MAXIMUM DEMAND SUMMATOR

Apparatus

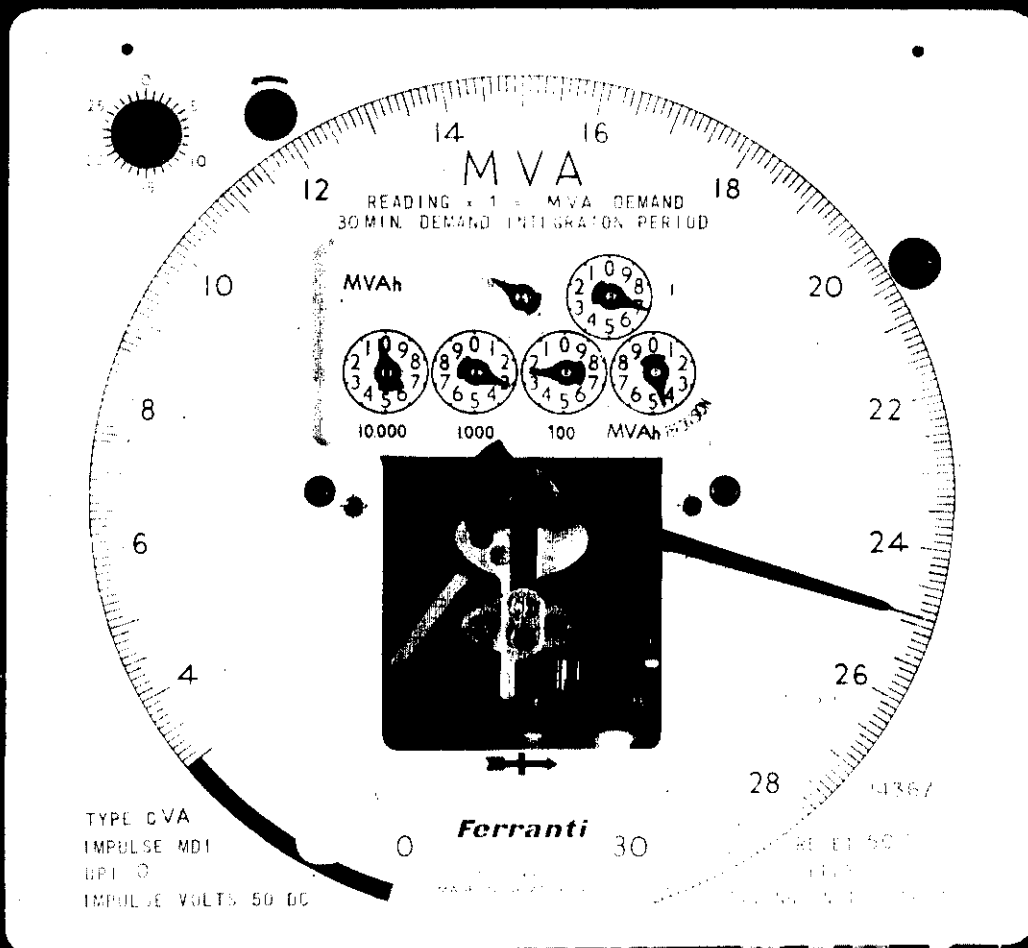
Rating:

| | |
|--|---|
| Type of inputs | Two input channels are fitted, one for kwh pulses, the other for kvarh pulses |
| Impulse coil ratings | 15 V.D.C., 32 V.D.C., 50 V.D.C. each $\pm 15\%$. Centre-tapped or two-terminal coils. |
| Maximum impulse rate | 10 per second. Vectorial sum of kwh and kvarh pulses maximum 3600 per demand period. |
| Maximum demand indicator | 32 V.D.C., 50 V.D.C., 110 V.A.C. or 230 V.A.C. each $\pm 15\%$ |
| Reset supply | close or open circuit to reset. |
| Internal power pack (when fitted) | 110V or 230V $\pm 10\%$ 60 cycles. Output suitable for impulsing circuit. |
| Internal time switch (where fitted) | Synchronous motor 110V or 230V 60 cycles Contacts "open to reset" 230V 5A rating |
| Demand period | 10, 15, 20, 30 or 60 minutes. |
| Register | 4, 5 or 6 circle clock type, or 6 digit cyclometer. |

Description

The type "CVA" maximum demand indicator is similar in appearance to the type "C" but differs in that it has two inputs. Both of these inputs are in pulse form, one input originates from a watthour meter and the other originates from a meter measuring reactive voltampere hours. A Ferranti type "PE" electronic summator may be used as an intermediate agent. Both of these pulse inputs are fed to stepping motors which drive corresponding registers reading in watthours and varhours. Gear trains from both sections feed into a vectorial summation mechanism, the output of which operates a driving hand to drive the maximum demand pointer upscale to a reading in voltampere demand.

FERRANTI TYPE "CVA" VECTORIAL MAXIMUM DEMAND SUMMATOR



Description (Con'd.)

It is essential to the correct operation that each pulse have the same value, i.e., if each pulse to the watt-hour section represents 10 watt-hours, each pulse to the reactive energy section should represent 10 var-hours.

In the case where the readout is in large units such as megavolt-amperes, it is permissible for the register to have the value of one division marked below each circle.

Approval is granted to: Ferranti-Packard Electric Limited,
St. Catharines, Ontario.

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