

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



STANDARDS BRANCH - DIRECTION DES NORMES

NOTIGE OF APPROVAL AVIS D'APPROBATION

E - 124

OTTAWA November 19, 1973

SANGAMO TYPES "K2WA", "K2WS" AND "K2WF" SINGLE PHASE COMBINATION WATTHOUR AND THERMAL DEMAND METERS

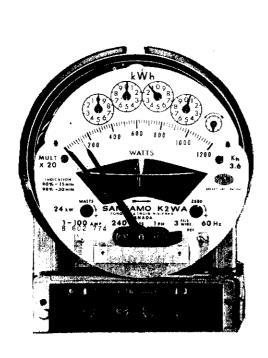
```
Current Ranges (amperes) 0.12-10 0.25-20 0.5-50 1-100 1-100 2-200
                         120, 240 and 480 volts all ratings
Voltages
Wire
                         2 and 3 wire all ratings
Full Scale Kilowatts &
                         1.5
                                   4.8
                                            12
                                                    15
                                                                  48
                         1500
                                  1200
                                            1200
                                                    1500
                                                           1200
                                                                  1200
Scale Marking
                                                    10
                                                           20
                                                                  40
Multiplier A
                         1
                                  4
                                            10
                         0.36
                                  0.72
                                                                  7.2
Disc Constant (kh) &
                                            1.8
                                                    3.6
                                                           3.6
                         277-7/9 555-5/9 555-5/9 277-7/9 555-5/9 555-5/
Register Ratio Rr
Register
                         4 dial clock type with test dial
                         all ratings
                         50 Hz and 60 Hz all ratings
Frequency
Indication 90%
                         15 minutes all ratings
Indication 99%
                         30 minutes all ratings
Burden Data
                         transformer type 0.12-10
                         ampere rating
Voltage Coil (at rated voltage)
                          2.2 w,
                 60 Hz
                                     8.1 rva,
                                                 8.4 va
                          2.5 w,
                 50 Hz
                                     10.1 rva,
                                                 10.4 va
Current Coil (at 5 amperes)
                          2 wire.
                                    3.5 w.
                 60 Hz
                                            5.0 rva.
                                            1.9 rva, 2.4 va (each coil)
                           3 wire,
                                    1.5 w,
                                    3.5 w,
                                            4.4 rva,
                 50 Hz
                           2 wire,
                                                      5.6 va
                                            1.7 rva,
                                    1.5 w,
                                                      1.9 va
                           3 wire,
                                               (each coil)
```

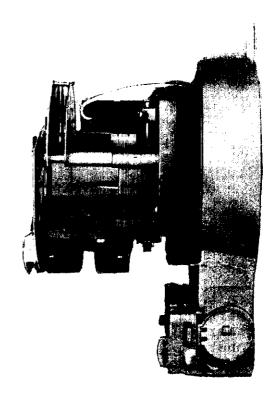
Full scale kilowatts, multiplier and disc constant are for 240 volt rating. For 120 volt rating, they must be multiplied by ½, 480 volt by 2.

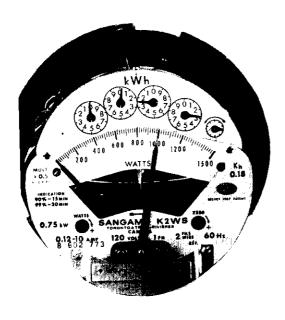
The multiplier applies to both Watthour and Demand meter readings. The 0.12-10 ampere rating is a transformer type meter, all other ratings are self contained.

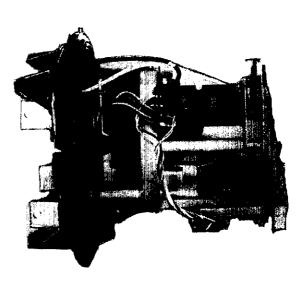
The 2-wire transformer type socket base meter is available in either the 4- or 5- terminal base.

SANGAMO TYPES K2WA and K2WS SINGLE PHASE COMBINATION WATTHOUR AND THERMAL DEMAND METERS









→ All ratings are available in "S" base socket mounting or bottom connected "A" base mounting. The 0.12-10 ampere rating is also available in semi-flush "F" base for panel mounting.

Description

The Type K2W is an energy-demand meter consisting of the same W demand element as used in the KW meter approved under E-92-1 and the K2 watthour element approved under E-121.

The demand element employs the same temperature compensators, full load and zero springs and adjustments as the KW meter.

The two sets of four heaters, which are connected in series, are fed by the parallel-connected secondaries of two toroidal current transformers and a single potential transformer.

The demand scales used on the K2W meters may differ from those of the KW however, in that they may be graduated down to zero with no blank space. Either arrangement of the scale is permitted.

All the components of the watthour element, including the single pair of braking magnets, the upper and lower bearings and the single ferrite support magnet of the disc assembly are the same as those used in the K2 meter.

Provision is made for making all calibration adjustments from the front of the meter.

The type K2W grid is rigidly mounted on three posts which are integral parts of the meter base.

The filter in the socket base meter is protected by a moulded cross to safeguard against its being pushed into the meter.

Approval granted to:

J.L. Armstrong

Chief, Standards Laboratory, Metrology & Laboratory Services.

Sangamo Company Limited, Leaside, Toronto 17, Ontario.

Chief, Electricity and Gas Division, Metrology & Laboratory Services.

Ref: GL 1145-57/S2-132 (a)

G 1145-57/S2-132