

Determination of Errors in Meters  
without Current Transformers.

$n_1$  = Revolutions of substandard

$n_2$  = Revolutions of meter under test

$K_1$  = Constant of substandard (revs. per kWh)

$K_2$  = Constant of meter under test (revs. per kWh)

$F$  = Error, percent

$$F = \frac{n_2 \cdot K_1 - n_1 \cdot K_2}{n_1 \cdot K_2} \cdot 100 = \frac{n_2 \cdot \frac{K_1}{K_2} - n_1}{n_1} \cdot 100$$

Multiplying factor  $C$  for the reading = Value  $C_4$  in table

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$n_1$  = Revolutions of substandard

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$K_1$  = Constant of substandard (revs. per kWh.)

$K_2$  = Constant of meter under test (revs. per kWh.)

$K_3$  = Constant of substandard, referred to primaries of instrument transformers. (revs. per kWh.)

$\frac{I_p}{I_s}$  = Ratio of current transformers

$\frac{U_p}{U_s}$  = Ratio of voltage transformers

F = Error, percent

$$K_3 = \frac{I_s}{I_p} \cdot \frac{U_s}{U_p} \cdot K_1 \qquad K_1 = \text{Value in table}$$

If voltage transformers are not used, ratio  $\frac{U_s}{U_p} = 1$

$$F = \frac{n_2 \cdot K_3 - n_1 \cdot K_2}{n_1 \cdot K_2} \cdot 100 = \frac{n_2 \cdot \frac{K_3}{K_2} - n_1}{n_1} \cdot 100$$

Multiplying factor C for the reading:

$$C = \frac{I_p}{I_s} \cdot \frac{U_p}{U_s} \cdot C_4 \qquad C_4 = \text{Value in table}$$

If voltage transformers are not used, ratio  $\frac{U_p}{U_s} = 1$







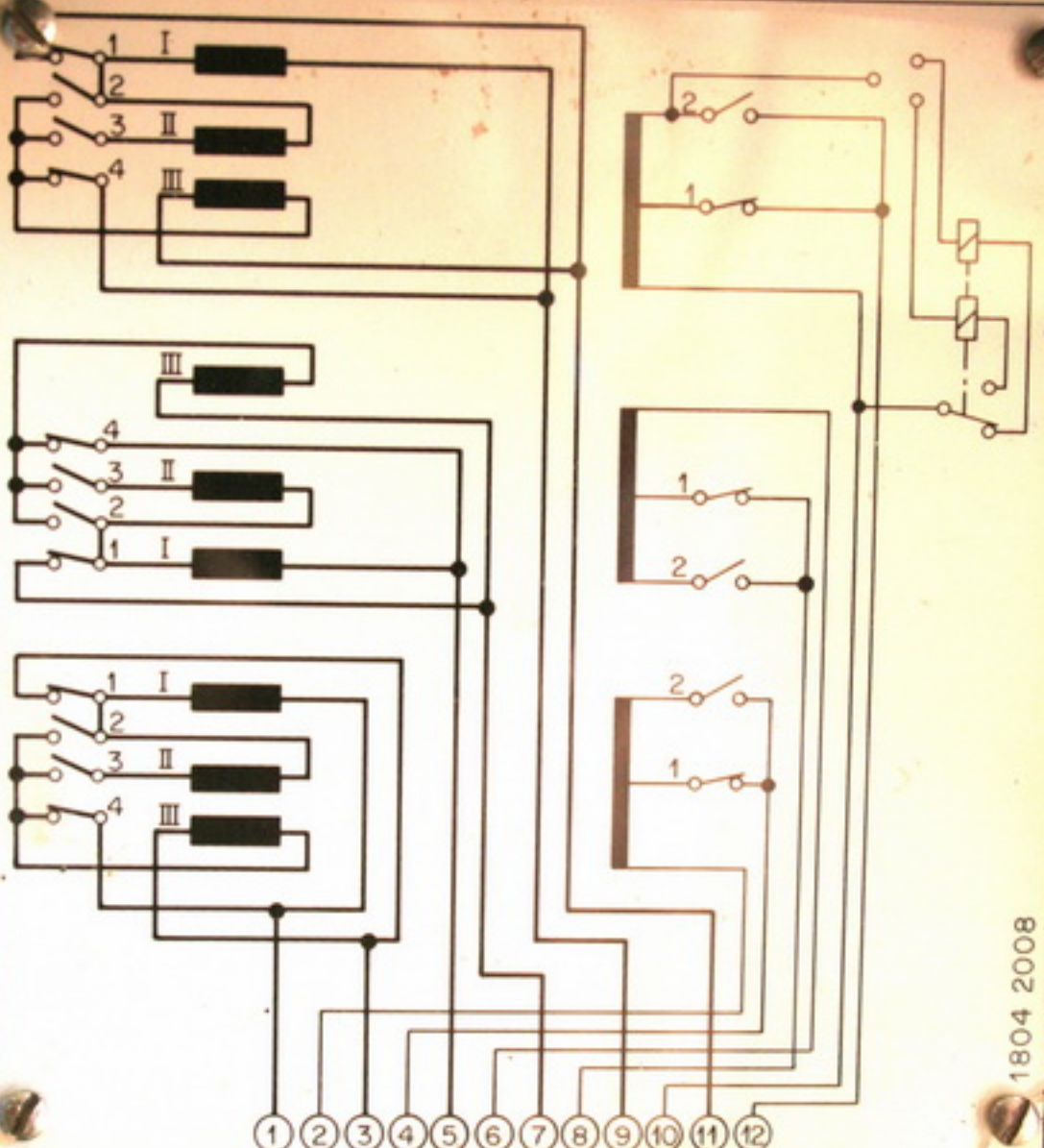












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LANDIS & GYR

Made in Switzerland

CFMF 3E 1

No. 5 1 0 4 7 2 3 5

50 Hz

4 312

1892 0