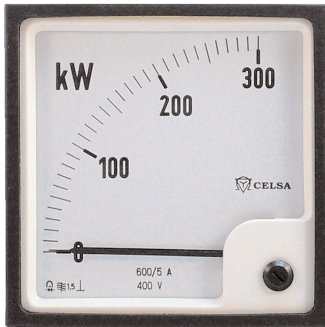


ANALOGUE MEASURING INSTRUMENTS

DQ...n - Wattmeter Active Power



- For alternating current 50-60 Hz
- Class 1.5
- Scale 90°

Description

DQ wattmeters are used for active power measurement. There are versions for single-phase AC and three-phase with 3 or 4 wires for balanced and unbalanced loads. The frequency range is 50 - 60 Hz.

Ferrodynamic system, with one measuring element for DQ/1w, DQ/1d and DQ/1; two elements for DQ/2 (aron system), and 2 ^{1/2} elements for DQ/3. Eddy-current damping, with pivot suspension and spring-loaded jewel bearings for vibration and shock resistance.

Consumption

The consumption per current path is < 0,2 VA

The current consumption in the voltage path is < 3,9 VA

Scales

90° scale, practically linear. Coarse-fine division-The full-scale value must be between 0.2 and 2 times rated apparent power, which is calculated as follows:

- For single-phase AC:

$$S(W) = \text{Primary voltage (V)} \times \text{Primary current (A)}$$

- For three-phase AC:

$$S(W) = \sqrt{3} \times \text{Primary line-to-line voltage (V)} \times \text{Primary current (A)}$$

Unless otherwise indicated, the full-scale value is calculated by rounding S down to one of the following standard value: 1 - 1,2 - 1,5 - 2 - 2,5 3 - 4 - 5 - 6 - 7,5 - 8 or their decimal multiples.

On request: Zero center. Por example, -100-0-100kW

Overload capacity according to DIN 43780

Overload capacity continuously 1,2 I_n.

Dimensions in mm						
Type	a	c	e	g	h	Ø
DQ96n/1w, /1d, /1	96	134	92 ^{+0,8}	40	5,5	M4
DQ96n/2, /3	96	134	92 ^{+0,8}	40	5,5	M4
DQ144n/1w, /1d, /1	144	134	138 ⁺¹	40	5,5	M4
DQ144n/2, /3	144	134	138 ⁺¹	40	5,5	M4

Technical Features

Front frame	(mm)	96 x 96	144 x 144		
Scale length	(mm)	97	146		
Weight	(g)	a = 650	a = 900		
		b = 650	b = 950		
		c = 750	c = 1000		
		d = 900	d = 1100		
Measuring range	U (V)	I (A)	Type	Type	
Single-phase AC			DQ96n/1w	DQ144n/1w	
a	~	57,7 - 63,5	5	●	●
		100 - 110 - 127	1	●	●
Three-phase AC, three wires, balanced load			DQ96n/1d	DQ144n/1d	
b	≅	100 - 110 - 230	5	●	●
		400	1	●	●
Three-phase AC, three wires, unbalanced load			DQ96n/2	DQ144n/2	
c	≅	100 - 110 - 230	5	●	●
		400	1	●	●
Three-phase AC, four wires, balanced load			DQ96n/1	DQ144n/1	
d	≅	100 - 110 - 230	5	●	●
		400	1	●	●
Three-phase AC, four wires, unbalanced load			DQ96n/3	DQ144n/3	
e	≅	100 - 110 - 230	5	●	●
		400	1	●	●

● available ○ on request

Connection diagrams see page 4/16.

