# **ANALOGUE MEASURING INSTRUMENTS**

### **DAQ...n** - Wattemeter Active Power



- For alternating current 50-60 Hz
- Class 1.5
- Scale 240°

#### 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 DAQ/1w, DAQ/1d and DAQ/1; two elements for DAQ/2 (aron system), and 2 <sup>1/2</sup> elements for DAQ/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) = Primary voltage (V) x 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 l<sub>n</sub>.

Dimensions en mm								
Туре	а	С	е	g	h	Ø		
DAQ96n/1w, /1d, /1	96	134	92+0,8	40	5,5	M4		
DAQ96n/2, /3	96	134	92+0,8	40	5,5	M4		
DAQ144n/1w, /1d, /1	144	134	138 +1	40	5,5	M4		
DAQ144n/2,/3	144	134	138 +1	40	5,5	M4		

Technical Features							
Front frame	(mm)		96 x 96	144 x 144			
Scale length	(mm)		142	230			
Weight (g)		a = 460 b = 510 c = 695 d = 725	a = 900 b = 950 c = 1000 d = 1100				
Measuring	U (V)	I	Tymo	Tyma			
range	0 (4)	(A)	Туре	Туре			
Single-phase AC			DAQ 96n/1w	DAQ 144n/1w			
a ~	57,7 - 63,5 100 - 110 - 127 230 - 400	5 1	•	•			
Three-phase AC, three wires, balanced load			DAQ 96n/1d	DAQ 144n/1d			
b ≋	100 - 110 - 230 400 440 - 500	5 1	•	•			
Three-phase AC, three wires, unbalanced load			DAQ 96n/2	DAQ 144n/2			
c <b>≋</b>	100 - 110 - 230 400 440 - 500	5 1	•	•			
Three-phase AC, four wires, balanced load			DAQ 96n/1	DAQ 144n/1			
d ≋	100 - 110 - 230 400 440 - 500	5 1	•	•			
Three-phase AC, four wires, unbalanced load			DAQ 96n/3	DAQ 144n/3			
e <b>≋</b>	100 - 110 - 230 400 440 - 500	5 1	•	•			

• available O on request

Connection diagrams see page 4/16.



