



Supplier of Control Instrumentation to the South African Electrical Industry

ACTIVE OR REACTIVE POWER METERS



EQ 0207



EQ 2207

Power meters are electronic meters intended for measuring active or reactive power in single phase or three-phase networks, with balanced or unbalanced load. The accuracy class is 1.5.

The scale value depends on primary values of current and voltage. It is defined by the following formulas:

	active power	reactive power
for single phase system	1b $I_{prim} \times U_{prim} \times \cos \phi$	1br $I_{prim} \times U_{prim} \times \sin \phi$
for three-phase system	3u $\sqrt{3} I_{prim} \times U^{*prim} \times \cos \phi$	3ur $\sqrt{3} I_{prim} \times U^{*prim} \times \sin \phi$
for three-phase system	4u $3 I_{prim} \times U_{prim} \times \cos \phi$	4ur $3 I_{prim} \times U_{prim} \times \sin \phi$

* U_{L-L} In the equations U means phase voltage at single phase network and three-phase four-wire network 4u as well as line-to-line voltage at three-phase three-wire network 3u. Ratio between the selected final scale value and calculated power should be within the limits from 0.6 to 1.2 at $\cos \phi = 1$ or $\sin \phi = 1$.

TYPE	EQ 0307	EQ 0207	EQ 0107	EQ 2307	EQ 2207**	EQ 2107
Front frame (mm)	72 x 72	96 x 96	144 x 144	72 x 72	96 x 96	144 x 144
Cutting for mounting (mm)	68 x 68	92 x 92	138 x 138	68 x 68	92 x 92	138 x 138
Scale length (mm)	63	95	135	113	135	220
Voltage input*	100 V, 110 V, 230 V, 400 V					
Current input	1 A, 5 A					
1b single phase system	•	•	•	•	•	•
3b three-phase three-wire system with balanced load	•	•	•	•	•	•
3u three-phase three-wire system with unbalanced load	•	•	•	•	•	•
4b three-phase four-wire system with balanced load	•	•	•	•	•	•
4u three-phase four-wire system with unbalanced load	•	•	•	•	•	•
Option						
Separated AC auxiliary supply 57 V, 63.5 V, 100 V, 230 V, 400 V	-	•	•	-	•	•

Class I on request (only for 90 degree dials). Self-consumption of current circuits approx. 0.1 VA and voltage circuits 0.2 VA.

* Max. voltage input for EQ 0307, EQ 2307 for 3u, 3b: 150 V/250 V AC

* Max. voltage input for EQ 0307, EQ 2307 for 4u, 4b, 1b: 230 V/400 V AC

** Overloads of short duration on page 230.

Ship version meters EQ0207, EQ0107 are available on request.