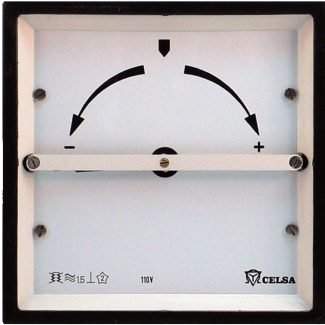
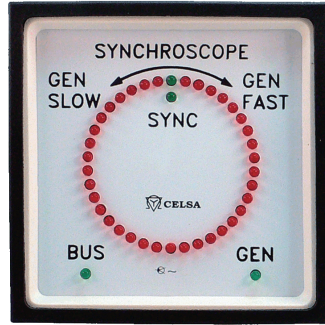


ANALOGUE MEASURING INSTRUMENTS

SQ - Synchrosopes



SQ...s



SQ96n

- For alternating current 50-60 Hz
- Analogue execution
- Digital LED execution

Description SQ... analogue

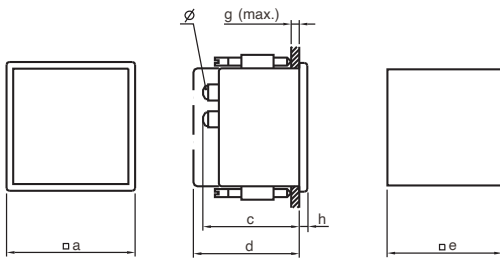
This instrument uses a moving-iron ratiometer, with eddy-current damping. Only when the pointer stops on the scale mark, the frequencies and phase angles of the voltages of both generators are the same. If it stops on another point, there is phase displacement between both voltages or at least one generator is disconnected. When the frequency difference is less than approximately 1.5Hz, the pointer rotates in the direction marked as "+" (if the frequency of the generator G2 is higher than the frequency of G1) or in the direction marked as "-" (if the frequency of G2 is lower).

Description SQ... digital

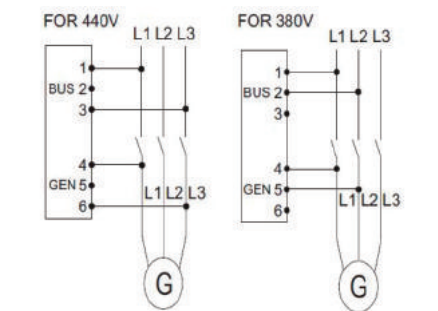
This instrument shows as well the phasing and the frequency of two current circuits to each other. Only if phasing and frequency are the same the green LEDs are flashing in the middle on the top. When there are different phasings or frequencies the red LEDs are flashing, depending on degree of deviation per size of difference more on the left or more on the right.

Dimensions in mm / Weight in gramme

Type	a	c	d	e	g	h	Ø	Weight
SQ96n/1 -/2	96	107	119	92 ^{+0,8}	40	5	M4	680
SQ96s/1 -/2	96	136	76	92 ^{+0,8}	10	5	M4	1100
SQ144s/1 -/2	144	136	95	144 ⁺¹	1	5,5	M4	1800



Connection diagrams: SQ96n LED execution



Technical Features

Marco (mm)	96 x 96	96 x 96	144 x 144
Measuring range U (V)	Digital type	Analogue type	Analogue type
Single-phase AC	SQ 96n/1	SQ 96s/1	SQ 144s/1
Consumption	max.6 VA	5 VA	max.25 mA
100 / $\sqrt{3}$ *	○	○	○
100 / $\sqrt{3}$ *	○	○	○
100 - 110*	●	●	○
230*	●	●	○
Three-phase, 3 wire balanced load	SQ 96n/2	SQ 96s/2	SQ 144s/2
Consumption	max.6 VA	5 VA	max.25 mA
100	●	●	○
110	●	●	○
230*	●	●	○
400*	●	●	○
440*	●	●	○
Terminal covers	-	●	-

● available ○ on request

*with separated series resistor (external) / only analogue type

Connection diagrams: SQ96s/SQ144s analogue execution

