



## SMC144 230V

SMC144 230V, Synchronoscope

Code: M14442.

- > System: Single-phase
- > Accuracy: 1,5
- > Measurement Range (V): 230
- > Device: SMC144
- > Modules: 144x144

### Description

- Does not need an auxiliary power supply
- DIN box with dimensions: 96 and 144 mm
- Class 1
- For single and three-phase circuits
- Does not need an auxiliary power supply
- DIN box with dimensions: 72 and 96 mm
- Class 1.5
- Built-in voltage relay
- Low consumption

### Application

To provide a correct reading of the difference between the frequency and phase angle between two generators or a generator and the network, when connected in parallel. When the difference is zero, the instrument's needle does not move from the synchronization mark located in the centre of the scale.

The instrument scale is divided in two areas marked with the (+) and (-) signs. These signs indicate whether the machine being connected has a higher or lower frequency than the other one, respectively. Synchronism is achieved when the needle is on the (-) side, slowly turning towards (+). The needle of the instrument starts to turn in the correct direction when the difference in frequencies is 1.5 Hz for three-phase systems or 0.5 Hz for single-phase systems.



## SMC144 230V

Synchronization and marine applications equipment

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### Specifications

#### Electrical characteristics

Frequency	50 Hz.
Permanent overload	1,2 Un

#### Mechanical characteristics

Size (mm) width x height x depth	144 x 144 x 102 (mm)
Weight (kg)	2,25

#### Environmental characteristics

Operating temperature	+10 ... +30 °C
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#### Standards

Electrical safety, Maximum height (m)	2000
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#### SMC / STC

Synchronoscope

CODE	TYPE	Accuracy	Modules	Device
<b>Single-phase</b>				
M14431.	SMC96 110V	1,5	96x96	SMC96
M14432.	SMC96 230V	1,5	96x96	SMC96
M14433.	SMC96 400V	1,5	96x96	SMC96
M14434.	SMC96 500V	1,5	96x96	SMC96
M14441.	SMC144 110V	1,5	144x144	SMC144
M14442.	SMC144 230V	1,5	144x144	SMC144
M14443.	SMC144 400V	1,5	144x144	SMC144
M14444.	SMC144 500V	1,5	144x144	SMC144
<b>Three-phase</b>				
M14435.	STC96 110V	1,5	96x96	STC96
M14436.	STC96 230V	1,5	96x96	STC96
M14437.	STC96 400V	1,5	96x96	STC96
M14438.	STC96 500V	1,5	96x96	STC96
M14445.	STC144 110V	1,5	144x144	STC144
M14446.	STC144 230V	1,5	144x144	STC144
M14447.	STC144 400V	1,5	144x144	STC144
M14448.	STC144 500V	1,5	144x144	STC144



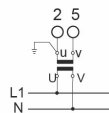
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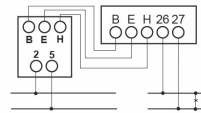
## Connections

### Esquemas de conexión Connections diagrams



Connection:  
Conexión:

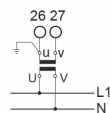
Voltage transf.  
Transf. Tensión



Red Network  
Generador  
Generator

Directa / Direct

### Monofásico (100, 110, 230 V) Single-phase



Voltage transf.  
Transf. Tensión