

NEW PRODUCT 2014

SCR2.0

Synchroscope/Synch check relay

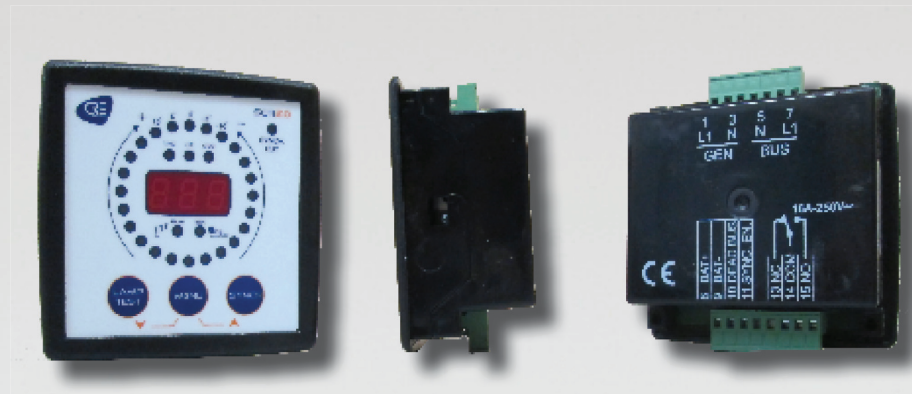
- Synch check relay
- Front panel configurable
- 50/60 Hz compatibility
- Basic unit

PART NUMBER
A60X2

ASSOCIATED PRODUCTS
Advanced: C2S
Complementary: UNIGEN
Family

The SCR2.0 is a microprocessor controlled synchroscope with programmable synch check relay in a DIN96 front panel mounted package. It monitors the voltage and frequency of 2 independent power source as well as the instantaneous phase angle between them.

The measured parameters are displayed on the 3 digit digital display. The 24 led circular synchroscope displays the phase angle between the 2 power source. The synchroscope display is only activated if both power source voltages are within the set limits.



A SIMPLE PRODUCT FOR SAFETY FUNCTIONS

Synchronization checking is enabled either via the SYNCH CHECK ENABLE signal input or by pressing the front panel SYNCH pushbutton.

If all the necessary conditions are satisfied:

- the busbar voltage between set limits
- genset phase voltage between set limits
- busbar-genset frequency difference below the set limit
- busbar-genset voltage difference below the set limit
- busbar-genset phase angle below the set limit

The SYNCH CHECK relay will be energized. If the busbar is not powered up, the synch checking may be overridden with the DEAD BUS ENABLE signal input.

FRONT PANEL CONFIGURATION

The SCR2.0 module provides a comprehensive set of digitally adjustable threshold levels and timers. All settings are modified via front panel pushbuttons, and do not require an external unit. The MENU pushbutton allows the digital display to navigate between various measured parameters.

RELIABLE AND SIMPLE

The SCR2.0 is dedicated to basic applications which require no extra costs or expensive hardware.

All CRE TECHNOLOGY products aim to provide the same satisfaction levels. The SCR2.0 has passed EMC and low voltage tests, and each unit is 100% tested before delivery.

RELAY OUTPUTS

The unit provides a synch check relay output with volt free contacts. The relay output is capable of driving a 16A/250V_{AC} load.

SCR2.0 Synch check relay



FEATURES

- 24 led circular synchroscope
- Programmable ΔV , Δf , $\Delta \theta$ for check synch relay
- 1 phase genset & busbar voltage input
- Synch check & dead bus enable input
- Auto power off
- Adjustable parameters
- Front panel configurable
- Plug-in connection system for easy replacement

DIGITAL INPUTS

The unit has 2 digital inputs:

- Synch check enable
- Dead-bus enable

The inputs will be active when connected to the battery negative. The input function will be disabled if the input is left open.

CHARACTERISTICS

Current, voltage and frequency

- **Generator voltage:** 300 V_{AC} max. (Ph-N)
- Generator frequency: 0-100 Hz.
- **Busbar voltage:** 300 V_{AC} max. (Ph-N)
- Busbar frequency: 50/60 Hz.
- Digital inputs: 0 - 30 V_{DC}
- DC supply range: 9.0 to 33.0 V_{DC}
- Typical standby current: 100 mA-DC
- Max. operating current: 150 mA-DC (Relay outputs open)

- Synch check relay output: 16A/250V_{AC} /28V_{DC}

Environment

- Operating temp.: -20°C (-4°F) to 70 °C (158°F).
- Storage temp.: -30°C (-22°F) to 80 °C (176°F).
- Maximum humidity: 95% non-condensing.
- IP Protection: IP65 for the front panel, IP30 for the rear.
- Case Material: High Temperature ABS (UL94-V0, 100°C)

Size and weight

- Dimensions: 102x102x52mm (WxHxD)
- Panel cut-out dimensions: 92x92mm minimum
- Weight: 170 g (approx.)
- Installation: Flush mounted with retaining plastic brackets

Certifications

- Low voltage
- EU Directives: 2006/95/EC (LVD), 2004/108/EC (EMC)
- Normes of reference: EN61010 (safety)/EN61326 (EMC)

