

**SCR 2.0** 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 sources as well as the instantaneous phase angle between them.

The measured parameters are displayed on the 3 digit display and 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.

### ADVANTAGES

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



SCR 2.0 MODULE FRONT VIEW



SCR 2.0 MODULE REAR VIEW



### Part numbers:

A60X2 SCR 2.0 Module

## FEATURES & SPECIFICATIONS

### ▶ 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:

- Busbar phase (busbar phase voltage) voltage between set limits.
- Generator phase voltage between set limits.
- Busbar-generator frequency difference below the set limit.
- Busbar-generator voltage difference below the set limit.
- Busbar-generator phase difference (phase difference below) 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

**SCR2.0** provides a comprehensive set of digitally adjustable threshold 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. The front panel is IP65 for the front panel, IP30 for the rear.

### ▶ RELIABLE AND SIMPLE

**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 voltage free contacts.

### ▶ FEATURES

24 led circular synchroscope, programmable  $\Delta V$ ,  $\Delta f$ ,  $\Delta \theta$  for check synch relay, 1 phase genset & busbar voltage input, auto power off, adjustable parameters, lug-in connection system for easy replacement.

### ▶ CURRENT, VOLTAGE AND FREQUENCY

- **Generator voltage:** 300 V<sub>AC</sub> max. (Ph-N)
- **Generator frequency:** 0-100 Hz.
- **Busbar voltage:** 300 V<sub>AC</sub> max. (Ph-N)
- **Busbar frequency:** 50/60 Hz.
- **Digital inputs:** 0 - 30 V<sub>DC</sub>.
- **DC supply range:** 9.0 to 33.0 V<sub>DC</sub>.
- **Current consumption:** 100 mA-DC.
- **Max. operating current:** 150 mA-DC (Relay outputs open)
- **Synch check relay output:** 16A/250V<sub>AC</sub>

### ▶ DIMENSIONS AND WEIGHT

- **Dimensions:** 102x102x57mm (WxHxD)
- **Panel cut-out dimensions:** 92x92mm minimum
- **Weight:** 170 g (approx.)
- **Installation:** Flush mounted with retaining plastic brackets

### ▶ ENVIRONMENT & PROTECTIONS

- **Operating temperature:** -20°C (-4°F) to 70 °C (158°F).
- **Storage temperature:** -30°C (-22°F) to 80 °C (176°F).

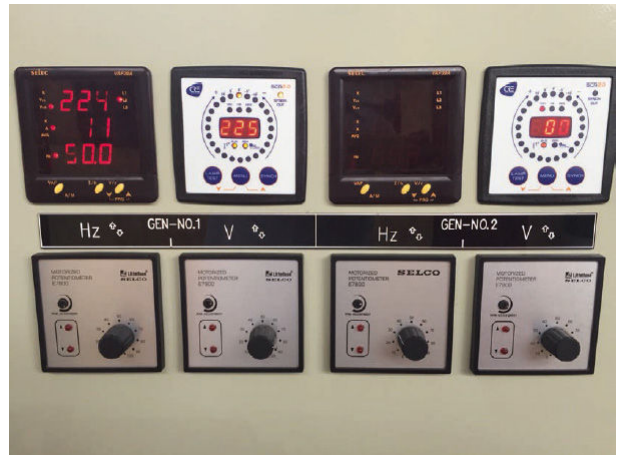
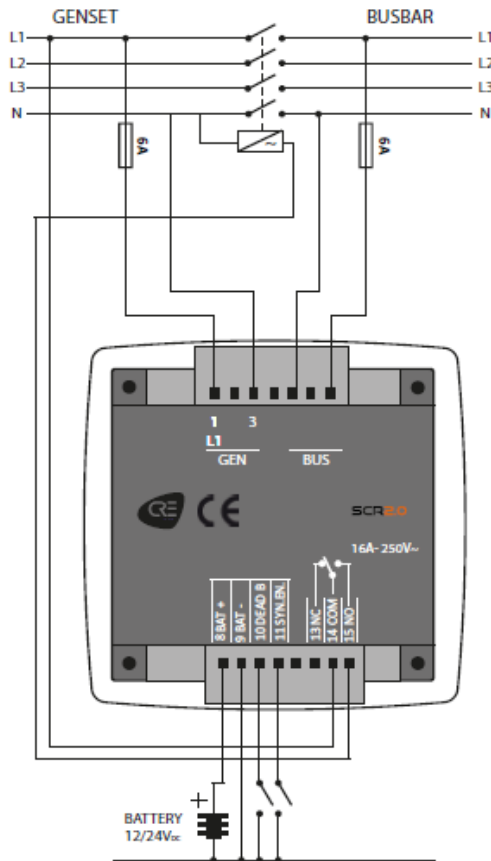
- **Maximum humidity:** 95% non-condensing.
- **Case:** High Temperature ABS (UL94-V0, 100°C)

### ▶ DIRECTIVES

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

### APPLICATIONS

The **SCR 2.0** unit works in High-Voltage/Low-Voltage applications where it will test the phase-to-phase synchronization in 100V (rather than phase-neutral). Adjust parameters accordingly.



### RELATED PRODUCTS

The **GENSYS COMPACT PRIME CORE** is made for gensets used in power plant applications requiring synchronizing, active and reactive load sharing and electrical/mechanical protections. **GENSYS COMPACT PRIME CORE** offers full flexibility and time saving thanks to its simple wiring, all features included (no option), and easy engineering & programming.

The **GENSYS COMPACT MAINS CORE** is used on standalone genset in mains paralleling application. **GENSYS COMPACT MAINS CORE** range offers full flexibility and time saving thanks to its simple wiring, all features included (no option), and easy engineering & programming.



GENSYS COMPACT MAINS CORE  
BASE MOUNTED VERSION



GENSYS COMPACT PRIME CORE  
BASE MOUNTED VERSION