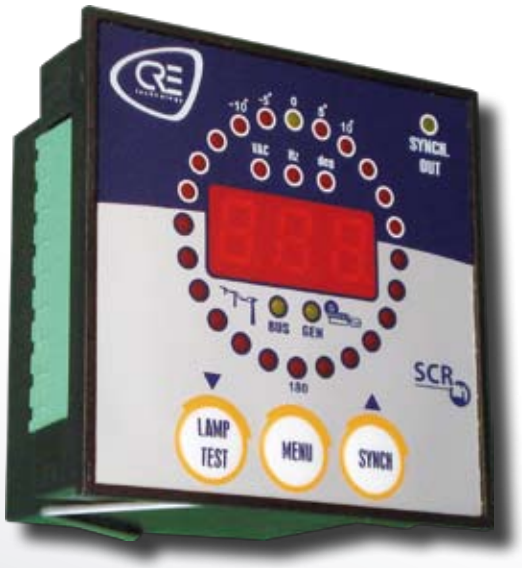
SCR

Synch check relay



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

The SCR is a microprocessor controlled synchroscope with programmable synch check relay in a DIN72 front panel mounted package. It monitors the voltage and frequency of 2 independent power networks 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 networks. The synchroscope display is only activated if both network voltages are within the set limits.

The SCR is mainly used in manual genset synchronization applications for synchronization checking between a genset and the genset busbar or between the genset busbar and the mains.

A SIMPLE PRODUCT FOR BASIC 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 for 4 consecutive busbar cycles then the SYNCH CHECK relay will be energized immediately. If the busbar is not powered up, synch checking may be overridden with the DEAD BUS ENABLE signal input.

FRONT PANEL CONFIGURATION

The SCR module provides a comprehensive set of digitally adjustable threshold levels and timers. All programs 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 SCR 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 SCR has passed EMC and low voltage tests, and each unit is 100% tested before delivery.

AFTER SALES SERVICE

Like every CRE Technology product, the unit also benefits from our technical support. All CRE products are delivered with one year warranty.

RELAY OUTPUTS

The unit provides a synch check relay output with volt free contacts.
The relay output is capable of driving a 10A/28V-DC load.

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.

FEATURES

- 24 led circular synchroscope
- Programmable ΔV, Δf, Δθ for check synch relay
- 1 phase genset voltage input
- 1 phase busbar voltage input
- Synch check enable input
- Dead bus enable input
- Auto power off
- Adjustable parameters
- Front panel configurable
- Survives cranking dropouts
- Plug-in connection system for easy replacement

MEASUREMENT

- Generator voltage: U-N
- Generator frequency
- Busbar voltage: R-N
- Busbar frequency
- Frequency difference between busbar and generator
- Voltage difference between busbar and generator
- Phase angle between busbar and phase U

CHARACTERISTICS

Current, voltage and frequency

- Generator voltage: 300 VAC max. (Ph-N)
- Generator frequency: 0-100 Hz.
- Busbar voltage: 300 VAC max. (Ph-N)
- Busbar frequency: 50/60 Hz.
- Digital inputs: 0 - 30 VDC
- DC supply range: 9.0 to 33.0 VDC
- Cranking dropouts: survives 0 V for 100ms.
- Typical standby current: 100 mA-DC
- Maximum operating current: 150 mA-DC (Relay outputs open)
- Synch check relay output: 10 a / 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: 72x72x52 mm (Wx-HxD)
- Panel cut-out dimensions: 68x68 mm minimum.
- Weight: 130 g (approx.)

Certifications

- Low voltage
- CEM

PART NUMBER
A60X1

ASSOCIATED PRODUCTS
Advanced : C2S
Complementary : UNIGEN PLUS