



# SYNCONpanel

## Transportable Remote Synchronizing Panel

### OPERATION

The user locally measures voltage  $U_{L1-N}$  of the one system and voltage  $U_{L1-N}$  of the other system via direct measuring inputs on the front of the SYNCONpanel. In the SYNCONpanel package is the control unit SYNCON included which compares those two voltages with each other. A delta angle and delta voltage value are calculated and displayed in the LC display. This value is transferred via a CAN bus to the genset control GCP which is situated in the mobile genset container. There the control of frequency and voltage are progressed.

- Flexible solution for mobile genset maintenance applications
- Synch-check relay
- Synchronizer
- Power transfer zero control
- CAN bus based communication
- True RMS sensing
- Front panel configurable
- Microprocessor technology for accurate, repeatable and reliable operation

### APPLICATIONS

For maintenance on a high voltage transformer or on the high voltage utility it is necessary to supply the load of the isolated (and with switching the transformer OFF) voltage free busbar with power. Therefore one or several mobile container(s) with can be used. Because this containers are placed outside the building with the transformer the service personnel needs an direct access to remote set the frequency and the voltage of the mobile genset for synchronization. If there is no circuit breaker but only a fuse accessible a need for the additional feature "zero-angle-control" at that point is necessary.

The SYNCONpanel is a remote synchronizing panel that transfers a local measured delta between two voltage systems via CAN bus to a genset control (GCP Series; special versions only).

### DESCRIPTION

#### Features

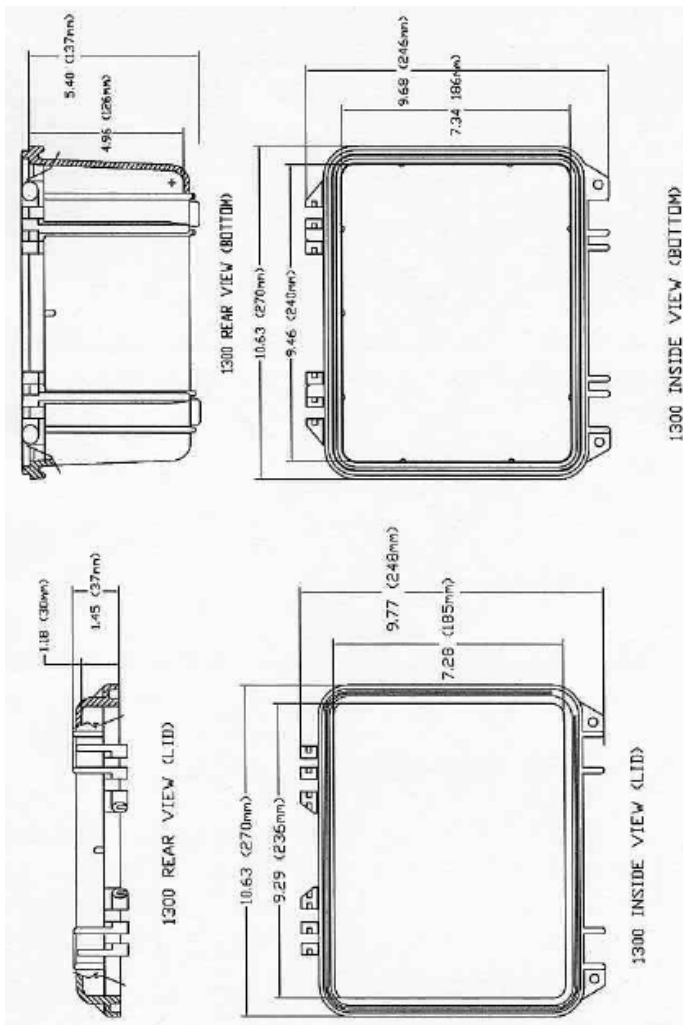
- True RMS voltage (A and B side)
- True RMS current (A side)
- Synch-check functionality
- Remote control of frequency, voltage, real power, and cosphi
- Zero-phase-angle-control
- Power transfer zero control (softload)
- Two-line LC display

# SPECIFICATIONS

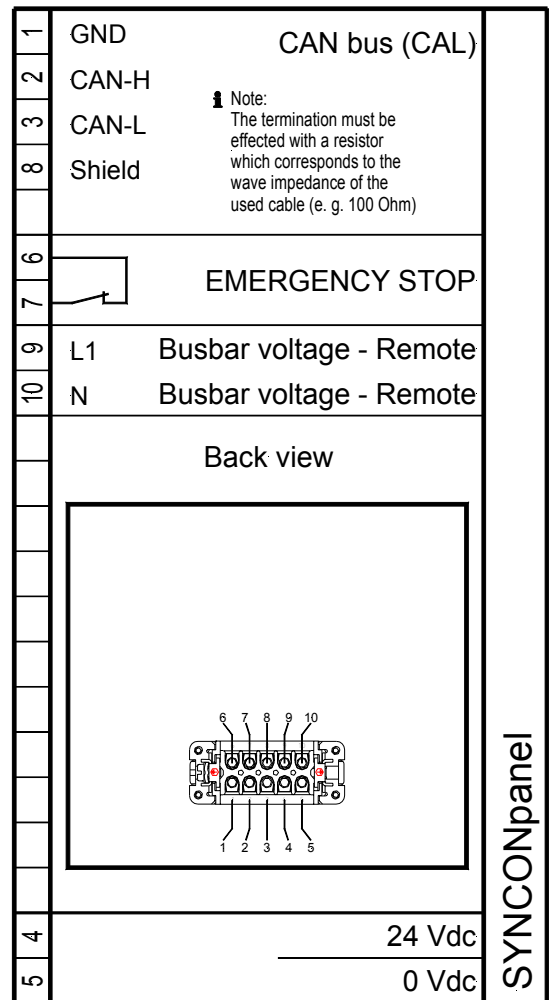
Power supply ..... 24 Vdc (18..32 Vdc)  
 Intrinsic consumption .....max. 12 W  
 Ambient temperature .....-20..70 °C  
 Ambient humidity ..... 95 %, non-condensing  
**Voltage** ..... rated: 230 Vac  
 Accuracy ..... Class 1  
 Fuse (front measuring)..... 5×20 mm, 5 A slow-blow, internal  
 Measuring frequency .....rated: 50/60 Hz (40..70 Hz)  
 Linear measuring range up to ..... 1.3×Vn  
 Input resistance ..... 0.7 MΩ  
 Max. power consumption per path ..... < 0.15 W  
**Current**..... clamp-on transducer (front safety connectors)  
 1 mV/1 Aac or 10 mV/1 Aac  
 Rated measuring voltage ..... 1 Vac  
 Accuracy ..... Class 1  
 Linear measuring range up to ..... 1.6×Vac  
 Input resistance ..... 0.21 MΩ

**EMERGENCY STOP push-button**.....potential free  
 Version .....NC (opener)  
 Switching voltage..... 250 Vac/dc  
**Interface** .....metallically isolated  
 Type .....CAN bus (CAL)  
 Insulation voltage ..... min. 3,000 Vdc  
**Housing**..... portable (with tip-up cover)  
 Type ..... Peli 1300 Case Plastic  
 Dimensions..... 270×174×246 mm  
 Connection .....  
 - Front ..... Safety connectors 4 mm<sup>2</sup> (insulated)  
 - Back..... Industrial connector, male  
 (Harting HAN-A, Type 0920 010 2612)  
 Front..... insulating surface  
 Protection system ..... at professional installation  
 IP 65 (closed case cover)  
 IP 40 (opened case cover)  
 Weight .....approx. 3.3 kg  
**Disturbance test** (CE)..... tested according to  
 applicable EN guidelines

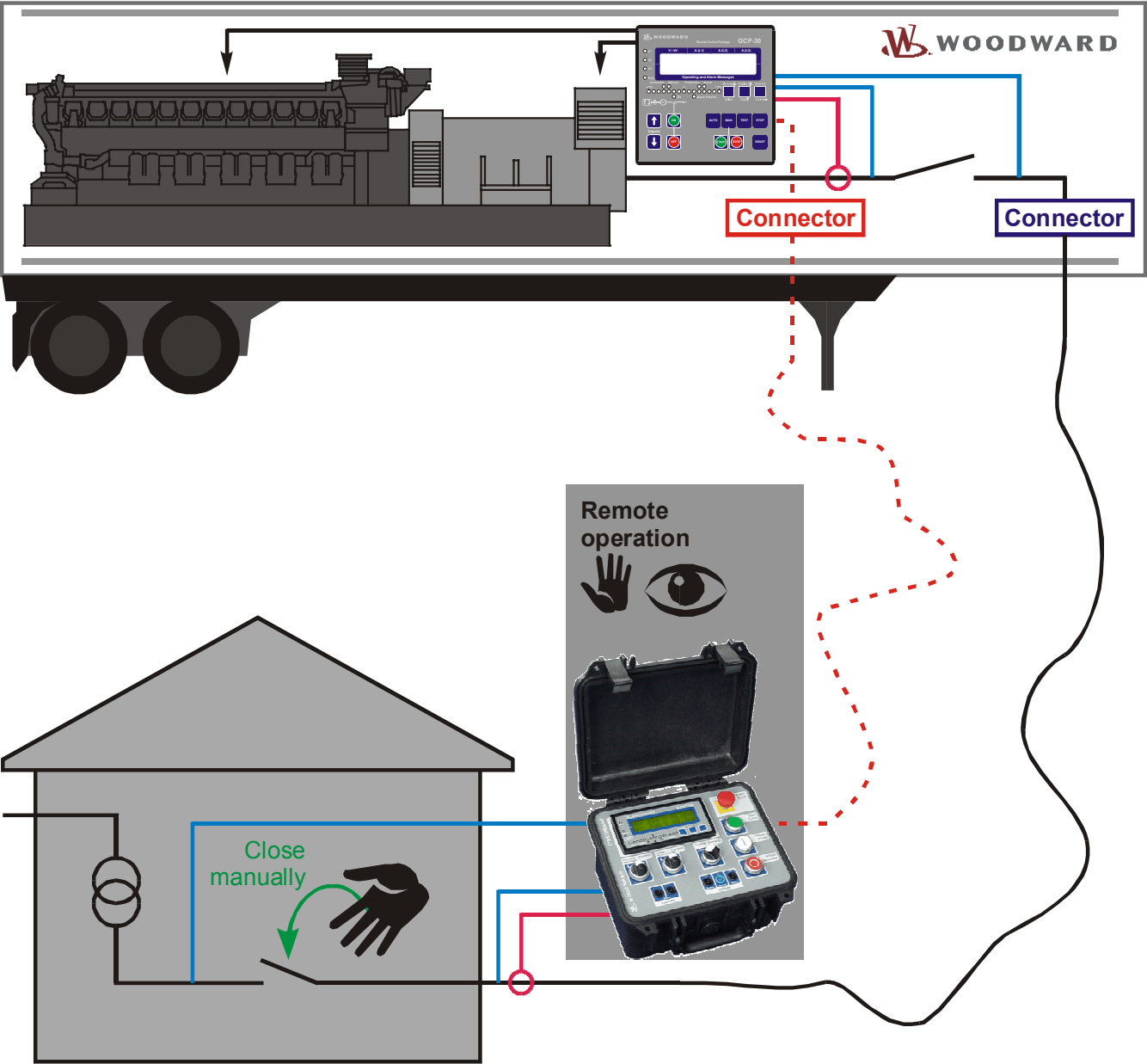
# DIMENSIONS



# WIRING DIAGRAM



# APPLICATION



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**Distributors & Service**  
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## OVERVIEW

Included in SYNCONpanel Package

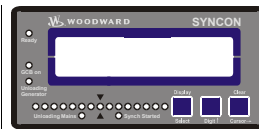
### SYNCONpanel Package

**SYNCONpanel Remote Control Box**



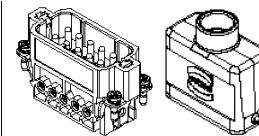
yes P/N 8440-1276

**SYNCON Control Unit**



yes

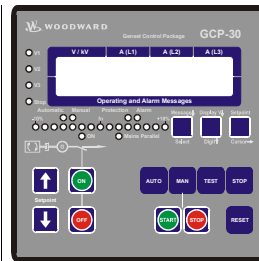
**Connector Set**  
 - Male  
 - Female



yes

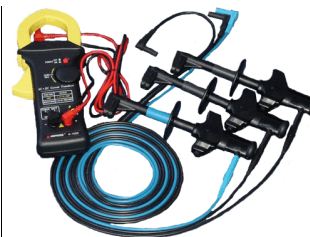
### SYNCONpanel Accessories (not included in the SYNCONpanel Package)

**Genset Control GCP-31**



no e.g. P/N 8440-1111  
 (others upon request)

**Measuring Kit**  
 - 3× Flat Bar Clamp  
 - 1× Clamp-On Transducer  
 - Wires



no P/N 8923-1035

For more information contact: