



SPM-D10/YB

Three Phase Synchronizer

APPLICATIONS

The SPM-D10/YB is a microprocessor-based synchronizer designed for use on three phase AC generators equipped with Woodward or other compatible speed controls and automatic voltage regulators. The SPM-D10/YB synchronizer provides automatic frequency and voltage matching using discrete output bias signals.

DESCRIPTION

Synchronizing

- Slip frequency synchronization with voltage matching
- Three-phase sensing of generator and bus (adjustable measurement three-phase or two-phase)
- Synchro-check functions possible
- Synchronization time monitoring
- A discrete input can utilize an adjustable closure relay for slip synchronizing or dead bus closure

Isolated operation

- Frequency control
- Voltage control

Dead bus operation

- Closing of CB on demand
- Dead bus check adjustable for any application
 - a) System 1 live – system 2 dead
 - b) System 1 dead – system 2 live
 - c) System 1 dead – system 2 dead

FURTHER SPM-D SYNCHRONIZERS

- The SPM-D10 Series provides two-phase generator and bus measurement refer to product specifications 37297 for more information
- The SPM-D11 Series provides load/var sharing refer to product specifications 37292 for more information

¹⁾ Remote configuration via PC is not available

DESCRIPTION

Control outputs

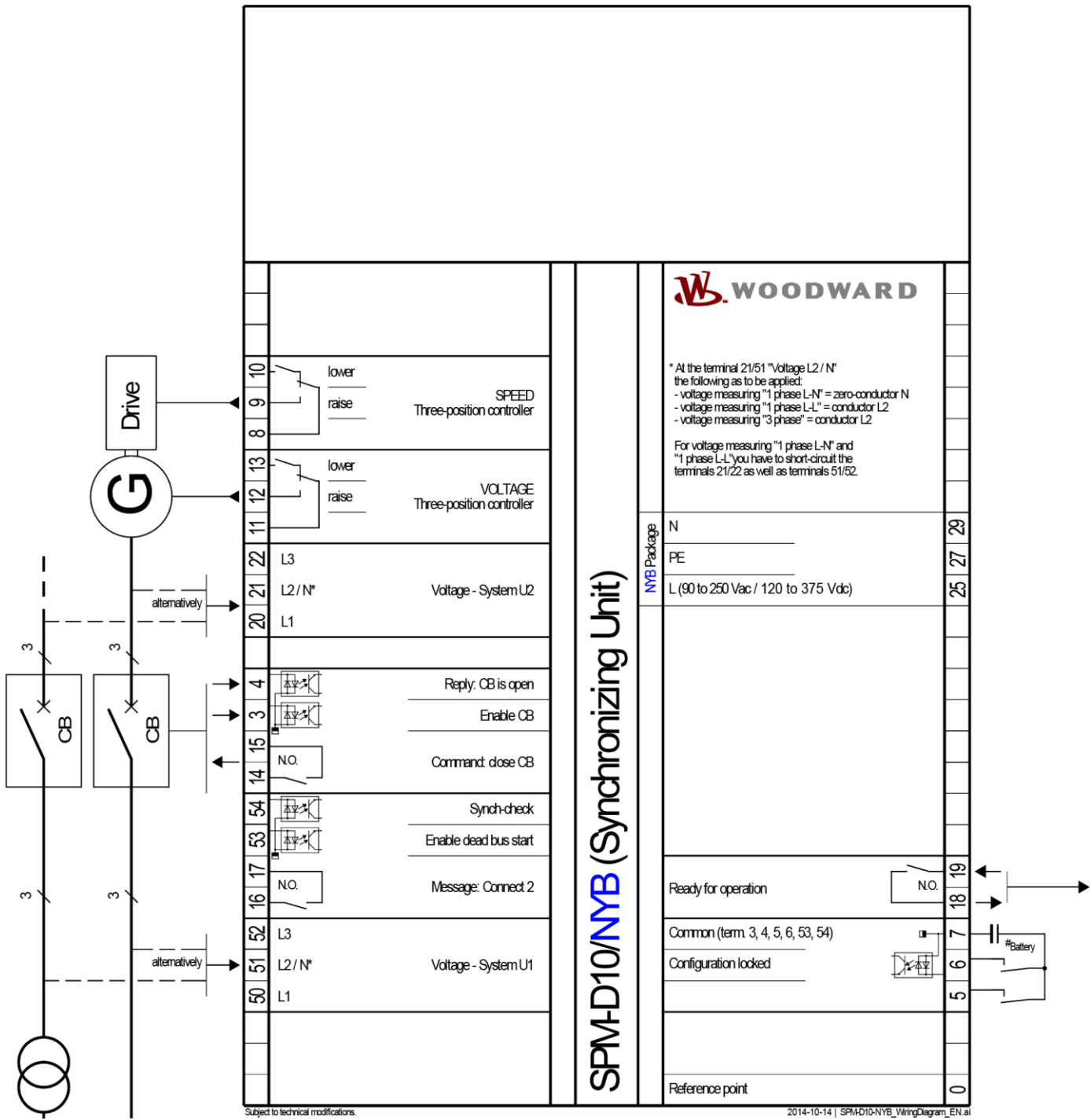
- Discrete raise/lower for speed
- Discrete raise/lower for voltage

Operating Features

- Two-line Liquid Crystal display for operation and alarm indication
- Synchroscope
- Indication of control activity and breaker state
- Configuration directly
- English or German language adjustable
- Blocking of configuration by digital input
- Check of parameter change by software sealing function

- Synchronization for one circuit breaker
- Frequency and voltage matching
- Discrete raise/lower control output
- Digital display of generator and bus values
- Front panel configurable¹⁾
- Wide range power supply available
- CE marked
- UL/cUL Listed

WIRING DIAGRAM



CONTACT
North & Central America

Tel.: +1 970 962 7331

 ✉ SalesPGD_NAandCA@woodward.com
South America

Tel.: +55 19 3708 4800

 ✉ SalesPGD_SA@woodward.com
Europe

Tel. Stuttgart: +49 711 78954 510

Tel. Kempen: +49 2152 145 331

 ✉ SalesPGD_EUROPE@woodward.com
Middle East & Africa

Tel.: +971 2 6275185

 ✉ SalesPGD_MEA@woodward.com
Russia

Tel.: +7 812 319 3007

 ✉ SalesPGD_RUSSIA@woodward.com
China

Tel.: +86 512 8818 5515

 ✉ SalesPGD_CHINA@woodward.com
India

Tel.: +91 124 4399 500

 ✉ SalesPGD_INDIA@woodward.com
ASEAN & Oceania

Tel.: +49 711 78954 510

 ✉ SalesPGD_ASEAN@woodward.com
www.woodward.com

 Subject to alterations and errors.
 Subject to technical modifications.

This document is distributed for informational purposes only. It is not to be construed as creating or becoming part of any Woodward Company contractual or warranty obligation unless expressly stated in a written sales contract.

We appreciate your comments about the content of our publications. Please send comments including the document number below to stgt-doc@woodward.com

© Woodward
 All Rights Reserved

For more information contact:

FEATURES OVERVIEW

SPM-D10YB Synchronizer #1	SPM-D10YB	SPM D10INYB
Measuring/Display		
Generator voltage, 3/2 phase	✓	✓
Busbar voltage, 3/2 phase	✓	✓
Control		
Breaker	1	1
Synchronization, 3/2 phase	✓	✓
Enhanced dead bus start functionality #2	✓	✓
Isolated operation	✓	✓
Controller		
Discrete raise/lower: speed	✓	✓
Discrete raise/lower: voltage	✓	✓
Listings/Approvals		
CE marked	✓	✓
UL/cUL listed	✓	✓
Power supply		
24 Vdc	✓	
Wide range: 90 to 250 Vac / 120 to 375 Vdc		✓
Accessories		
Configuration via PC#3		
Manuals		
	English	37134
	German	GR37134
Part numbers P/N		
Measuring inputs 100 Vac	5448-906	8440-1434
Measuring inputs 400 Vac #4	8440-1021	8440-1435

#1 Information about all other SPM-D10 models can be found in the separate product specs 37297

#2 Black start (closing to de-energized second side of a breaker for following conditions):

- dead system 1 - live system 2
- live system 1 - dead system 2
- dead system 1 - dead system 2

#3 Remote configuration via PC is not available

#4 All units with 400V measuring inputs can also be used for 100V system voltage