



BBG-SSCS

Synchro Signal Conversion System



Description

The Synchro Signal Conversion System (SSCS) is a stand-alone system, which provides amplification of low power synchro signals into 125VA synchro signals. The SSCS provides four channels synchro conversion.

The SSCS is factory configurable to customer requirements for easy field installation.

Applications

- Radar Systems (antenna azimuth)
- Navigation Systems (gyrocompass, speedlog, course, pitch, and roll)
- Industrial Processes (position, velocity)
- Meteorology Instruments (wind speed and direction)
- Many Others

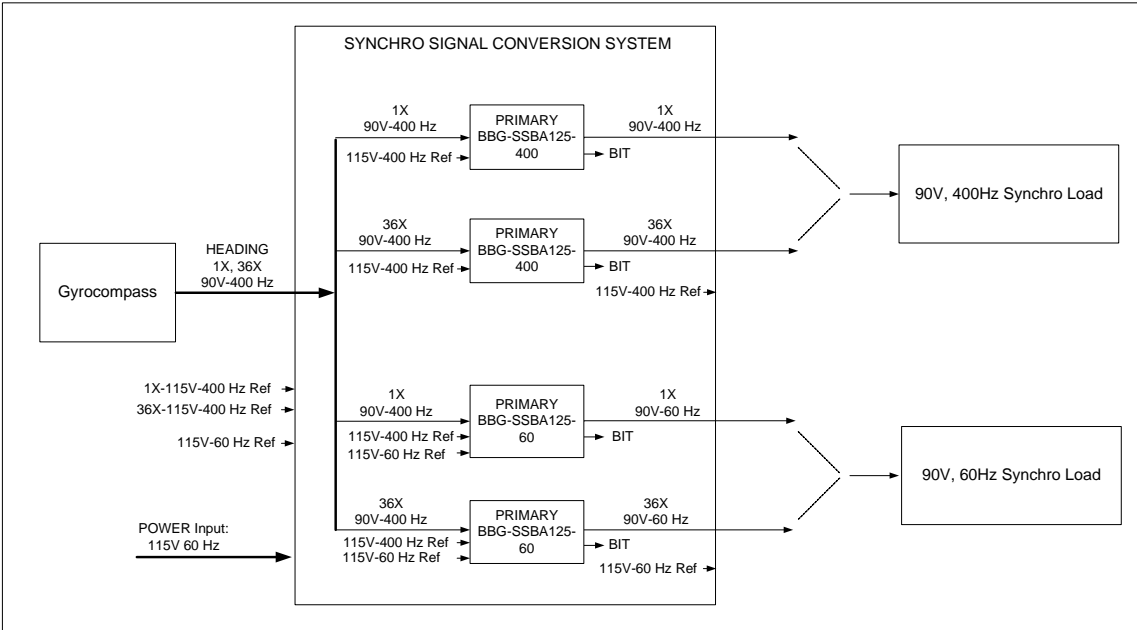
Features

- 6.81Vrms Resolver
- 11.8 or 90 Vrms Synchro
- High Efficiency
- 125 VA (Peak), 30VA (Continuous) Output
- Short Circuit and Transient Protected
- Temperature Protected
- Enable, BIT and Kick Circuitry

BBG Incorporated

1708 South Park Court • Chesapeake, VA 23320

Phone:(757) 366-9211 • Fax:(757) 366-9170 • E-mail: sales@bbginc.com • Website: www.bbginc.com

Chart

The SSCS operates on 115 Volt, 60 Hz AC power to convert synchro inputs into high power synchro outputs. The SSCS accepts two channels of 60 Hz synchro data and two channels of 400 Hz synchro data. Custom channels are available upon request.

The SSCS provides four channels of synchro/resolver to high power synchro conversion. Each channel is fault protected against over current and over temperature faults. In addition, the SSCS provides power supply status, BIT status and internal kick circuitry for added control and protection. An onboard microcontroller configures the cards from power up or reset and provides all signals and control to read the synchro input information and output the 125VA synchro/resolver information. Health monitoring of each 1X/36X channel for over-current, over-temperature and loss of reference is provided via visual display indicators. Synchro data formats, power outputs, synchro and resolver voltages and frequencies are factory configured to user requirements.



Technical Specifications

Parameter	Value	Units
Power Input	115	Volts AC
	60	Hertz
	6.3	Amps
Temperature Range		
Operating	-25 to +85	°C
Storage	-65 to +125	°C
Inputs		
Reference Input	115	Volts AC
	60/400	Hertz
Synchro (Channel 1 1X, 36X)	90	Volts
	60/400	Hertz
Synchro (Channel 2 1X, 36X)	90	Volts
	60/400	Hertz
Outputs		
Synchro (Channel 1 1X, 36X)	90	Volts
	400	Hertz
	125	VA (Peak)
	30	VA (Continuous)
Synchro (Channel 2 1X, 36X)	90	Volts
	60	Hertz
	125	VA (Peak)
	30	VA (Continuous)
Accuracy	+/- 4	arc minutes
Dimensions	30.0 W x 12.0 H x 12.0 D	In
	76.2 x 30.48 x 30.48	Cm



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INPUTS/OUTPUTS

Inputs and outputs are available on DIN rail terminal blocks provided with the RSSS. Inputs and outputs are listed below:

I/O CONNECTOR TYPE: DIN Terminal Blocks

CONNECTOR MATE: Ferrules

Signal	Connector
ACN_60Hz (115V, 60Hz Neutral) (FUSED 6.3 Amp SLO)	TB1
ACL_60Hz (115V, 60Hz Line) (FUSED 6.3 Amp SLO)	TB2
Chassis GND	TB3
R1_1X_115V_400Hz_IN (FUSED 3.15 Amp SLO)	TB4
R2_1X_115V_400Hz_IN (FUSED 3.15 Amp SLO)	TB5
S1_1X_90V_400Hz_IN	TB6
S2_1X_90V_400Hz_IN	TB7
S3_1X_90V_400Hz_IN	TB8
R1_36X_115V_400Hz_IN (FUSED 3.15 Amp SLO)	TB9
R2_36X_115V_400Hz_IN (FUSED 3.15 Amp SLO)	TB10
S1_36X_90V_400Hz_IN	TB11
S2_36X_90V_400Hz_IN	TB12
S3_36X_90V_400Hz_IN	TB13
R1_115V_60Hz_IN (FUSED 3.15 Amp SLO)	TB14
R2_115V_60Hz_IN (FUSED 3.15 Amp SLO)	TB15
1R1_1X_115V_400Hz_OUT (FUSED 3.15 Amp SLO)	TB16
1R2_1X_115V_400Hz_OUT (FUSED 3.15 Amp SLO)	TB17
1S1_1X_90V_400Hz_OUT (FUSED 1.6 Amp FAST)	TB18
1S2_1X_90V_400Hz_OUT (FUSED 1.6 Amp FAST)	TB19
1S3_1X_90V_400Hz_OUT (FUSED 1.6 Amp FAST)	TB20
1R1_36X_115V_400Hz_OUT (FUSED 3.15 Amp SLO)	TB21
1R2_36X_115V_400Hz_OUT (FUSED 3.15 Amp SLO)	TB22
1S1_36X_90V_400Hz_OUT (FUSED 1.6 Amp FAST)	TB23



Signal	Connector
1S2_36X_90V_400Hz_OUT (FUSED 1.6 Amp FAST)	TB24
1S3_36X_90V_400Hz_OUT (FUSED 1.6 Amp FAST)	TB25
2R1_1X_115V_60Hz_OUT (FUSED 3.15 Amp SLO)	TB26
2R2_1X_115V_60Hz_OUT (FUSED 3.15 Amp SLO)	TB27
2S1_1X_90V_60Hz_OUT (FUSED 1.6 Amp FAST)	TB28
2S2_1X_90V_60Hz_OUT (FUSED 1.6 Amp FAST)	TB29
2S3_1X_90V_60Hz_OUT (FUSED 1.6 Amp FAST)	TB30
2R1_36X_115V_60Hz_OUT (FUSED 3.15 Amp SLO)	TB31
2R2_36X_115V_60Hz_OUT (FUSED 3.15 Amp SLO)	TB32
2S1_36X_90V_60Hz_OUT (FUSED 1.6 Amp FAST)	TB33
2S2_36X_90V_60Hz_OUT (FUSED 1.6 Amp FAST)	TB34
2S3_36X_90V_60Hz_OUT (FUSED 1.6 Amp FAST)	TB35



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