Product Specification

82314D

Generator Load Sensor

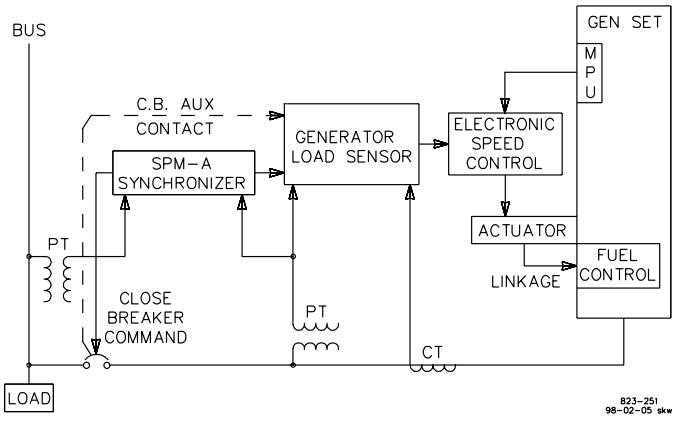
- Adds Gen Set Load Sharing Capability to Woodward Speed Controls
- CSA Certified
- Allows Automatic Speed/Phase Matching
- Allows Automatic Generator Loading with Speed Controls

APPLICATIONS

The Generator Load Sensor is used to provide droop and isochronous load sharing for generator applications which use Woodward 701, EPG, and 2301A speed controls. It has an SPM-A synchronizer input and shares load with all Woodward load sensors and load sharing and speed controls.

DESCRIPTION

The Generator Load Sensor receives input from current transformers (CTs) and potential transformers (PTs), to calculate power from the generator, assuming constant voltage. It generates an output which biases the speed reference of the speed control. The Generator Load Sensor uses paralleling lines to ensure proportional load sharing when generators are isochronously paralleled.



SYSTEM BLOCK DIAGRAM SHOWING OPTIONAL SPM-A SYNCHRONIZER

WOODWARD

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SPECIFICATIONS

INPUTS

Load Sensing Voltage..... 3-phase PT input, jumper terminal 17 to 18 and 19 to 20 for 95 to 130 Vrms (power consumption 2.5 VA). Jumper terminal 18 to 19 for 190 to 260 Vrms (power consumption 5 VA).

Load Sensing Current..... 3-phase CT input, 5A at full load. Internal instrument CTs produce essentially O burden.

Optional Inputs..... SPM-A Synchronizer, Process/Import Export Control, Precise Frequency Control, Automatic Generator Load Control.

Droop..... Selected by opening terminals 15 to 16.

PERFORMANCE

Load Sharing Accuracy..... ± 5% of rated load with speed settings matched.

PHYSICAL CHARACTERISTICS

Weight..... .91 kg (2.0 lbs)

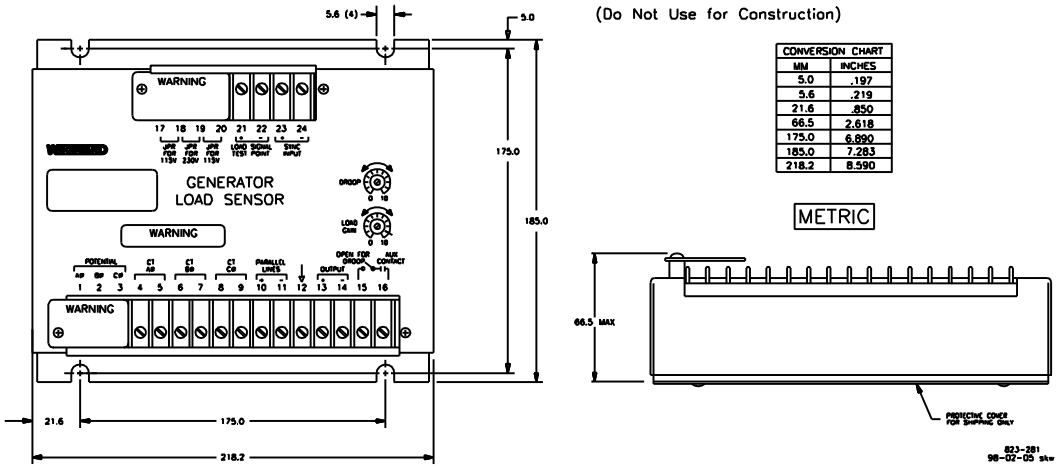
Mounting..... Any convenient location except on engine, any attitude.

Ambient Temperature Range..... -40°C to 75°C (-40°F to 167°F)

ADJUSTMENTS

Load Gain..... Calibrates Generator Load Sensor to CT ratio.

Droop..... Adjustable from 0 to 10% with CT currents of 5 amps.



OUTLINE DRAWING

For more information contact: