



CONTROL CONCEPTS

5330

Three Channel
Current to Voltage
Signal Conditioner

Description

The Control Concept's model 5330 is a signal conditioning circuit which accepts three input currents and provides three output voltages each of which is proportional to the RMS value of the input waveform. In addition a 4th voltage output is provided which is proportional to the sum of the three individual outputs. The circuit also provides a regulated 5Vdc supply which is intended as a supply for digital panel meters used to display the output of the circuit.

The circuit is intended to be used to measure DC waveforms, sinusoidal waveforms or non-sinusoidal waveforms resulting from either phase-angle or zero-cross control. The output response due to a step change of the input is equivalent to an RC time constant of 4 seconds. The model 5330 may be used to monitor the current applied to a three-phase load.

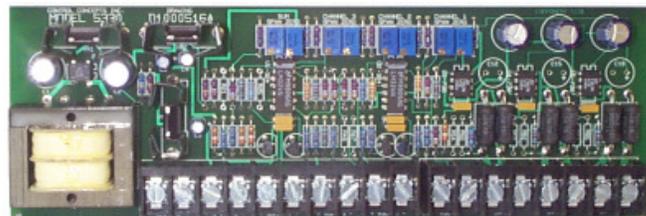
The circuit is 9 inches long by 3.2 inches wide and 1.9 inches deep and is intended to be mounted using the Snap-Trak provided with the circuit.

How to Order

5330-(INPUT)-(OUTPUT)-(PA or ZC)

- 5330** Specifies the basic three channel circuit.
- (INPUT)** Specifies the input current range. 0/50mA, 0/100mA, 0/2.5A & 0/5A are among the choices.
- (OUTPUT)** Specifies the output voltage. 0/5V, 1/5V & 0/10V are a few of the choices.
- (PA or ZC)** "PA" specifies that the circuit is intended for use on phase-angle controlled applications.
- "ZC" specifies that the circuit is intended for use on applications in which the load is controlled by zero-cross controllers.
- The response time for "PA" circuits is approximately 0.25 seconds. The response time for "ZC" circuits is approximately 4 seconds.

Call the factory for complete selection information.



Specifications

Supply Voltage:

120Vac +10, -15%, 50/60 Hertz (10VA)

Input impedance:

The input impedance varies as a function of the current transformer output current rating. The maximum current transformer load presented by the circuit is 2VA.

Accuracy:

The output is accurate to within 2% of the RMS value of the input waveform.

Output current:

10mA continuous, Output is short circuit protected.

5Vdc output supply:

Voltage: 5Vdc ± 0.25 Vdc

Current: 25mA continuous. The output is short circuit protected.

NOTE: Current transformers used to measure currents controlled by zero-cross controllers must be rated for twice the load current. For example, a current transformer rated for 200 amps must be used to measure the current controlled by a zero-cross controller to a 100 amp load. No derating of the current transformer is required with phase-angle controlled currents.

Manufactured by



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