SCAC06
LVDT SIGNAL CONDITIONER

Features

Push-button auto-calibration

Analog voltage or current loop output

Supports all standard AC LVDTs, RVDTs, and VR half-bridge sensors

Master/slave excitation synchronization

DIN35-rail mountable

Color-coded terminal blocks

User Selectable Features

0-5V DC, 0-10V DC, 0.5-4.5V DC, ±5V DC, ±10V DC or

4-20 mA output

1.5Vrms or 3.0Vrms sensor excitation

2.5, 5, 7.5, or 10 kHz excitation frequency

The SCAC06 single-channel push-button calibrated signal conditioner from ABEK SENSORS, with a 9 - 30V DC supply, supports any standard LVDT, RVDT and half-bridge LVRT position sensor. Multiple voltage and current outputs are available simultaneously.

The SCAC06 is housed in a DIN rail-mounted plastic case with different colored terminals for differentiation and to prevent wiring errors. Two front panel calibration buttons allow calibration of the LVDT or RVDT position transducer for any range segment within the full travel range.

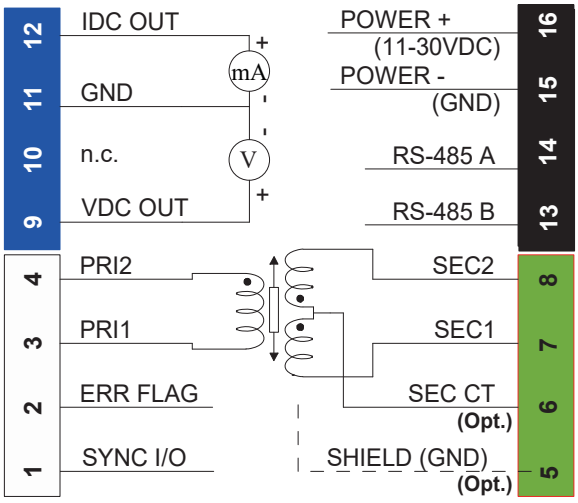
The SCAC06 also provides functions such as excitation voltage, excitation frequency selection, adjustment of different output bandwidths, and LVDT fault indication.

Specifications

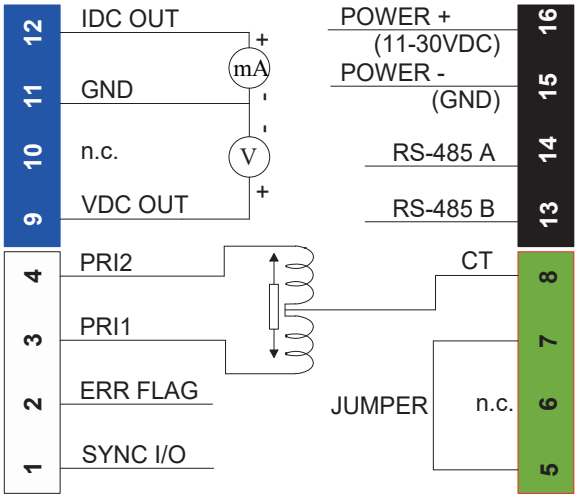
Parameter	Description
Input Voltage:	9-30V DC (24V (nominal), 90mA (max))
LVDT Excitation Voltage:	1.5 V, 3.0 V AC rms (selectable)
LVDT Excitation Frequencies	2.5kHz 、5kHz、7.5kHz、10kHz(selectable)
LVDT AC Output Range:	50 mVrms to 5.5V rms at LVDT full scale position
Output:	0-5V、0-10V、±5V、±10V、4-20mA（selectable）
Output bandwidth (-3dB):	1Hz、10、100、500 Hz（selectable），500 Hz（Max）
Operating Temperature:	-20℃ to +85℃
Noise and Ripple:	<1 mV rms (voltage output); 10 μA rms (current loop output)

Wiring

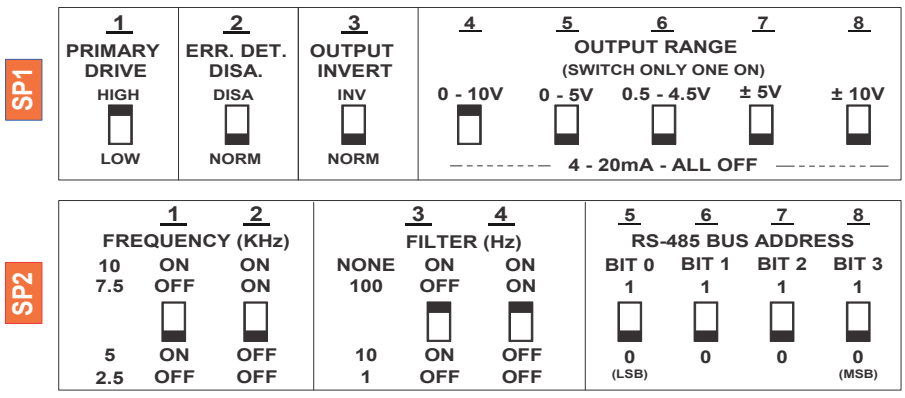
LVDT / RVDT Hookup:



LVRT Half Bridge Hookup:



DIP SWITCH SETTINGS



Switches shown in factory default position.

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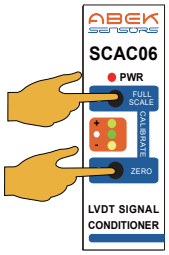
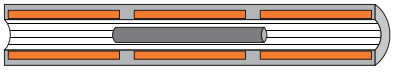
Calibration method

1. Press and hold both buttons for 3 seconds.
   The red PWR LED will begin blinking.

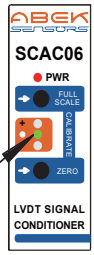


Hold for 3 Seconds

2. Move the LVDT core to NULL position
   by observing the + / N / - LEDs. T
   When the Green N light illuminates, this is
   the center of the LVDTs measuring range.

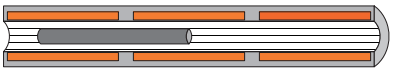


Core at the null point

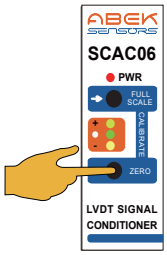


Green light illuminates

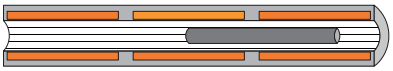
3. Attach the measured object to the core. For
   best accuracy, the center of the object's range
   of motion aligns with the NULL position.
4. Move measured object to its minimum
   position and press the ZERO button
   setting the point of lowest output.



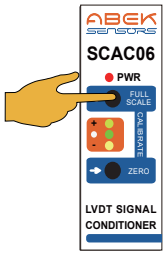
Core at desired ZERO point



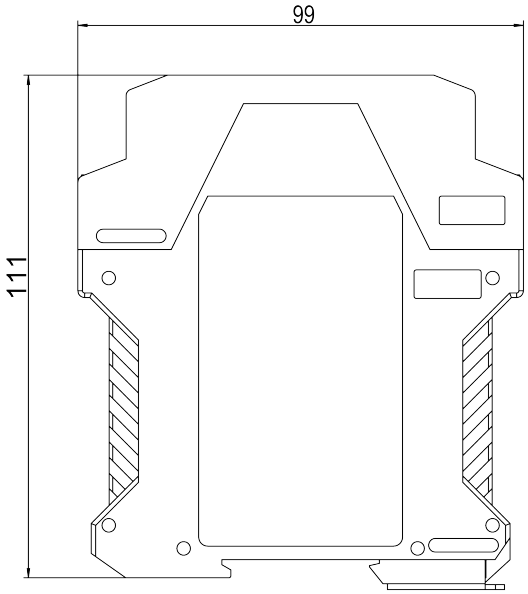
5. Wait for + / N / - LEDs to stop blinking.
6. Move measured object to its maximum
   position and press the FULL SCALE
   button. The PWR LED will
   remain lit. The unit is now
   calibrated.

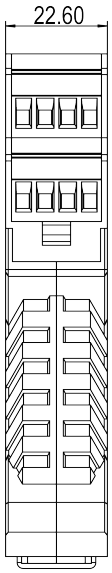


Core at desired FULL SCALE point



Dimensions





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