

# SIAC-PS

## Signal Isolator with Power Supply



### For all USAC (2G) Series Inverters

#### Signal Isolator

Provides isolation between non-isolated signal sources and the drive.

#### Isolated 5V Power Supply

For potentiometer operation.

#### Isolated 24V Power Supply

To power transducers or auxiliary equipment.

#### Standard Features

**Isolated Switching:** Provides isolation for PLC open collector or contact switching.

**Trimpot Adjustments (Multi-Turn):** Maximum Speed (MAX1) and Signal Offset (OFFSET).

**Power On LED:** Provides indication that power is applied.

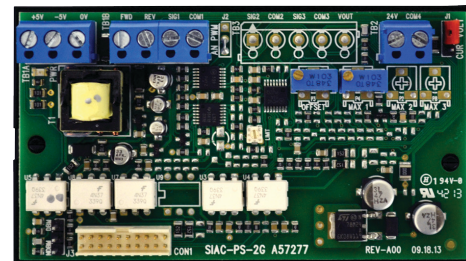
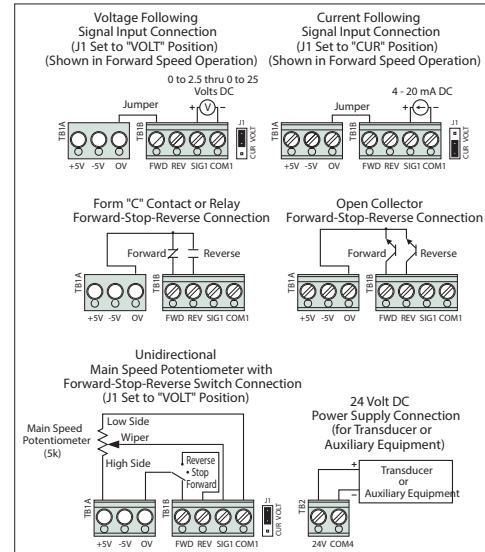
**Signal Input Selection (Jumper J1):** Selects voltage or current signal inputs.

**Easy Installation:** A snap-in mounting base and interconnecting ribbon cable are provided for easy installation into the drive.

**Optional Accessory:** Auto/Manual Switch (Part No. 9481) selects a signal input from either the SIAC-PS or the Main Speed Potentiometer.

#### Optional Features

Second and third isolated signal inputs • Analog signal output



SIAC-PS (Part No. 9600C)

### Description

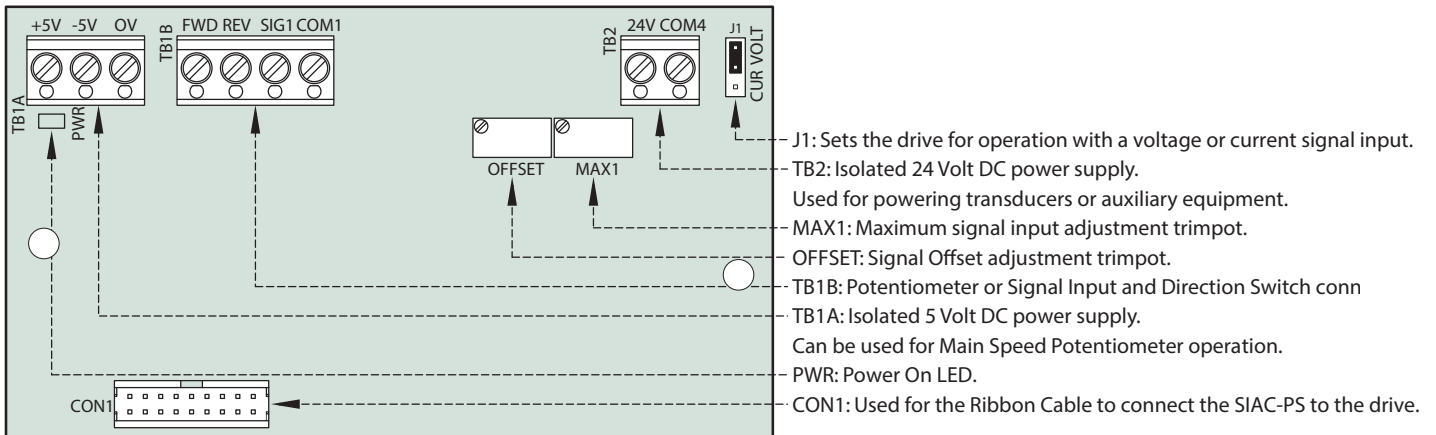
The SIAC-PS Signal Isolator with Power Supply provides an isolated interface between non-isolated signal sources and the drive. It is used with the USAC 2G Series Drives to isolate, amplify, and condition DC voltage and current signals from any source (tach-generators, transducers, PLCs, and potentiometers). It provides an isolated input to control motor direction and an isolated 5 Volt DC power supply for potentiometer operation. In addition, this updated model contains an isolated 24 Volt DC power supply for transducers or auxiliary equipment. All input connections and power supplies are isolated from the AC line and motor wiring. It installs easily into the drive with a snap-in mounting base and is wired with a connector.

Main features include voltage or current signal inputs. Other features include a power on LED, barrier terminal blocks to facilitate wiring, multi-turn trimpots (MAX1, OFFSET), and a jumper for voltage or current signal input selection. An optional accessory for use with the SIAC-PS is the Auto/Manual Switch (Part No. 9481) to select a signal input from either the SIAC-PS or the Main Speed Potentiometer of the drive.

### General Performance Specifications

Description	Specifications	Factory Settings
Maximum Speed Trimpot (MAX1) Input Voltage Range (Volts DC)	0 to 2.5 thru 0 to 25	0 to 5
Offset Trimpot (OFFSET) Range (% of MAX1 Trimpot Setting)	0 – ±50	0
Input Current Range (milliamps DC)	4 – 20	—
Forward and Reverse Input Switch Types	Dry Contact or Open Collector	—
5 Volt DC Power Supply Maximum Load Current Rating (milliamps DC)	25	—
24 Volt DC Power Supply Maximum Load Current Rating (milliamps DC)	50	—
Potentiometer Operation (kΩ)	5	—
Input/Output Linearity (%)	0.1	—
Thermal Drift (millivolts per °C)	0.4	—
Operating Temperature Range (°C / °F)	0 – 40 / 32 – 104	—
Operating Humidity Range (% Relative, Non-Condensing)	0 – 95	—
Storage Temperature (°C / °F)	-25 – +85 / -13 – +185	—

## SIAC-PS LAYOUT



## USAC with SIAC-PS and OPTIONAL AUTO/MANUAL SWITCH CONNECTION DIAGRAM\*

