

# SIAC

## SIGNAL ISOLATOR

For all KBAC Series Inverters

### Signal Isolator

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

### Isolated +5V Power Supply

Used to power a transducer or to supply voltage for potentiometer operation.



SIAC (Part No. 9600)

### STANDARD FEATURES

- Multi-Turn trimpots for MIN & MAX Speed Adjustments.
- Accepts a wide range of Voltage Input Signals.
- Jumper Selection for Voltage or Current Input Signal.
- Barrier Terminal Block Facilitates Wiring.
- Power On LED.

### OPTIONAL FEATURES

- Second and third isolated signal inputs (Part No. 9755).
- Analog signal output (Part No. 9756).

### DESCRIPTION

The SIAC is used to isolate, amplify, and condition DC voltage and current signals from any source (power supplies, motors, tachometer generators, transducers, and potentiometers). It also provides isolated inputs to control motor direction and an isolated power supply for transducer or potentiometer operation. All input connections are isolated from the AC line and motor wiring. The SIAC installs easily into the drive with a snap-in mounting base and an interconnecting ribbon cable.

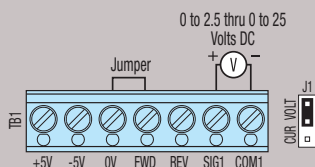
The main features of the SIAC include voltage (0 – 5 VDC), current (4 – 20 mA DC), or a potentiometer (5 k $\Omega$ ) signal inputs. The SIAC has a jumper selectable feature for signal input type (VOLT, CUR).

Other features of the SIAC include a power on LED, barrier terminal block to facilitate signal input wiring, and multi-turn trimpots (MAX1, OFFSET) to readjust the SIAC for use with 0 – 2.5 thru 0 – 25 VDC signal input voltages for specific applications.

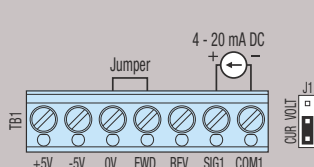
Optional features of the SIAC are a second and third isolated signal input (with a barrier terminal block and MAX2 and MAX3 adjustment trimpots or SIG2 and SIG3) or an analog signal output (with a barrier terminal block for Vout).

An optional accessory for use with the SIAC and KBAC is an Auto/Manual Switch (Part No. 9481) which selects a signal input from either the SIAC Signal Isolator or the Main Speed Potentiometer.

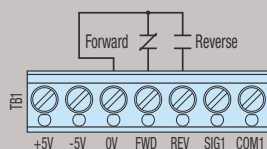
#### Voltage Following (Forward) Signal Input Connection (J1 Installed in "VOLT" Position)



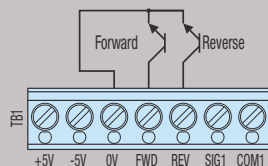
#### Current Following (Forward) Signal Input Connection (J1 Installed in "CUR" Position)



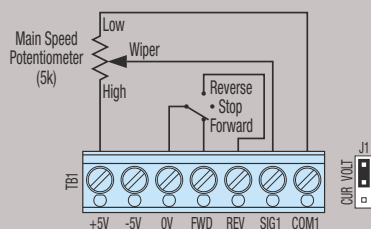
#### Form "C" Contact or Relay Forward-Stop-Reverse Connection



#### Open Collector Forward-Stop-Reverse Connection



#### Unidirectional Main Speed Potentiometer and Forward-Stop-Reverse Switch Connections (J1 Installed in "VOLT" Position)



### GENERAL PERFORMANCE SPECIFICATIONS

Description	Specification	Factory Setting
Voltage Following Input Range at SIG1 (MAX1 Trimpot) (Volts DC)	0 – 2.5 thru 0 – 25	0 – 5
Current Following Input Range at SIG1 (OFFSET Trimpot) (mA DC)	4 – 20	—
Potentiometer Operation (k $\Omega$ )	5	—
FWD and REV Input Switch Types	Dry Contact or Open Collector	—
+5V and -5V Power Supply Maximum Load Current Rating (mA DC)	5	—
Input/Output Linearity (%)	0.5	—
Thermal Drift (mV/°C)	1.0	—
Operating Temperature Range (°C/°F)	0 – 45 / 0 – 113	—



