

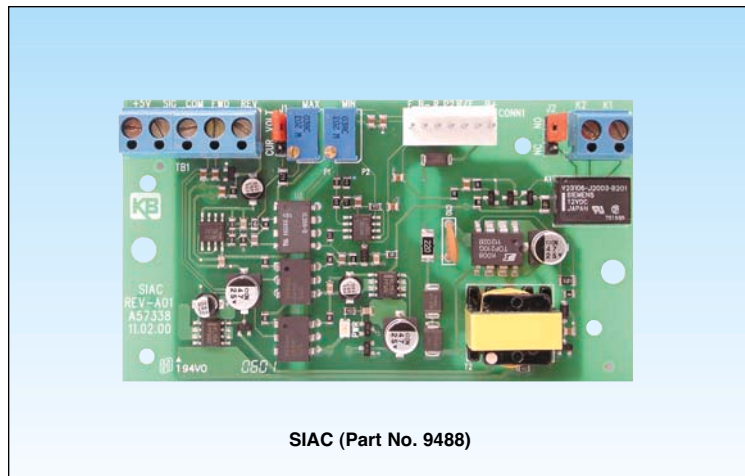
SIAC

SIGNAL ISOLATOR / RUN RELAY

for use with the
KBAC Series Inverters

Signal Isolator: Provides isolation between non-isolated signal sources and the KBAC

Run Relay: Used to turn on or off equipment or signal a warning if a fault has occurred



SIAC (Part No. 9488)

STANDARD FEATURES

- **Isolated Switching:** Provides isolation for PLC open collector or contact switching.
- **Isolated +5V Power Supply:** Used to power a transducer or to supply voltage for potentiometer operation.
- **Power On LED.**

TRIMPOT ADJUSTMENTS (Multi-Turn)

- **Maximum Speed (MAX)** • **Minimum Speed (MIN)**

JUMPER SELECTABLE FEATURES

- **J1 (VOLT/CUR):** Selects voltage or current signal input.
- **J2 (NO/NC):** Selects normally open or normally closed relay contacts at Terminal Block TB2.

OPTIONAL ACCESSORY

- **Auto/Manual Switch (Part No. 9481):** Selects a signal input from either the SIAC Signal Isolator or the Main Speed Potentiometer.

DESCRIPTION

The SIAC is used with the KBAC series inverters to isolate, amplify and condition DC voltage and current signals from any source (tach-generators, transducers, PLCs and potentiometers). It also provides an isolated input 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 KBAC with a snap-in mounting base and is wired with quick-connect terminals.

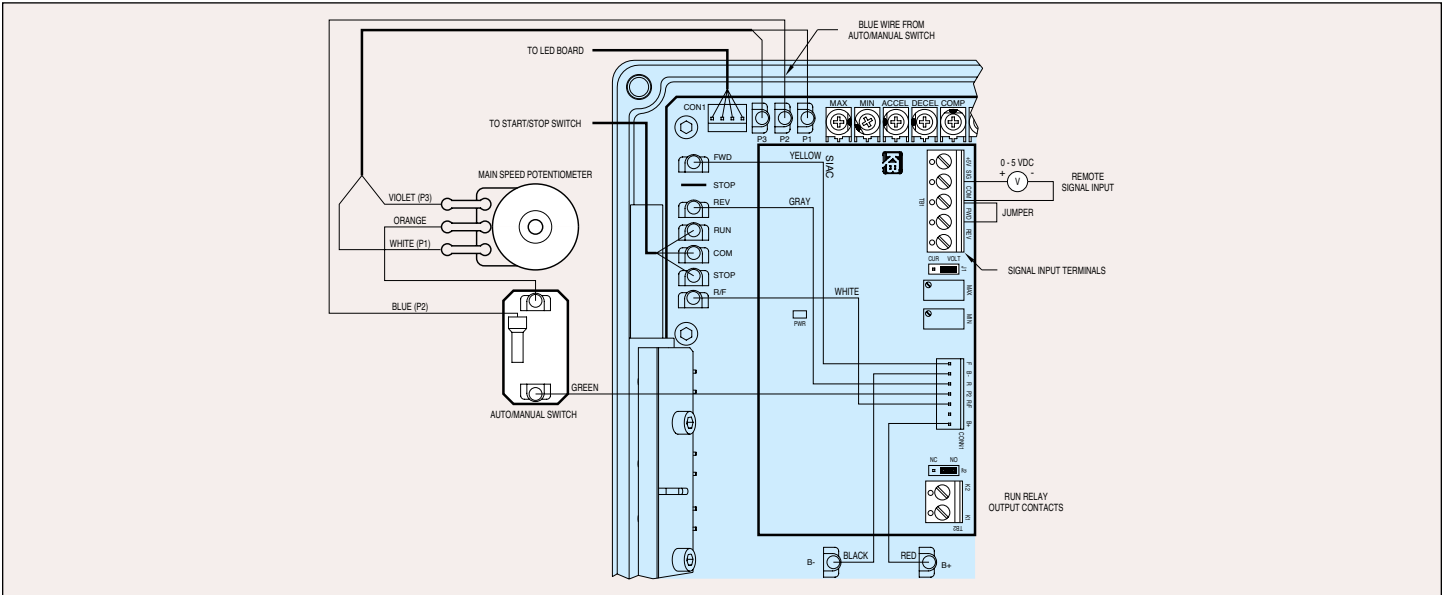
The main features of the SIAC include voltage or current signal inputs and a Run Relay which is used to turn on or off equipment or signal a warning if a fault has occurred.

Other features of the SIAC include a power on LED, barrier terminal blocks to facilitate wiring, multi-turn trimpots (MAX, MIN) and selectable jumpers for signal input selection and Run Relay output contacts. 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.

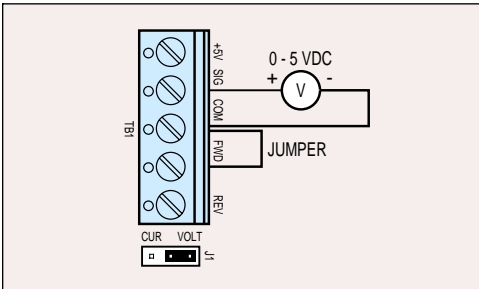
GENERAL PERFORMANCE SPECIFICATIONS

Parameter	Specification	Factory Setting
Input Voltage Range (Volts DC)	0 - 2.5 thru 25	0 - 5
Input Current Range (milliamps DC)	4 - 20	—
Maximum Speed Trimpot (MAX) Range (with 5 Volts DC Input) (% Base Speed)	70 - 110	100
Minimum Speed Trimpot (MIN) Range (with 0 Volts DC Input) (% Base Speed)	0 - 40	0
FWD and REV Input Switch Types	Dry Contact or Open Collector	—
+5V Power Supply Maximum Load Current Rating (milliamps DC)	25	—
Run Relay Output Contact Ratings (Amps at 30 Volts DC, 125 Volts AC)	1, 0.5	—
Potentiometer Operation (kΩ)	5	—
Input/Output Linearity (%)	0.1	—
Thermal Drift (millivolts per °C)	0.4	—
Operating Temperature Range (°C)	0 - 45	—

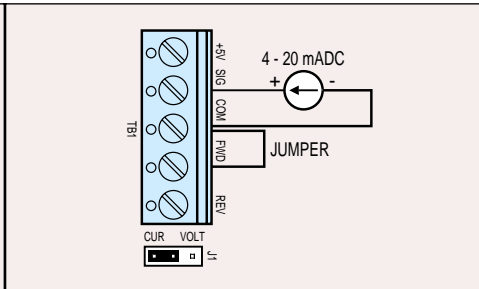
SIAC (Part No. 9488) & KBAC WITH AUTO/MANUAL SWITCH CONNECTION DIAGRAM



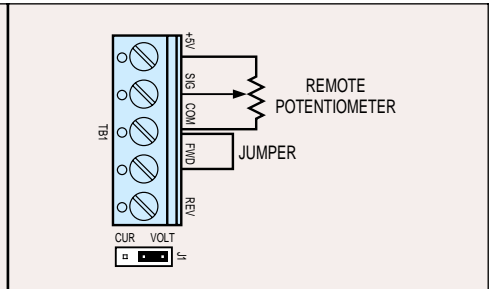
VOLTAGE FOLLOWING CONNECTION



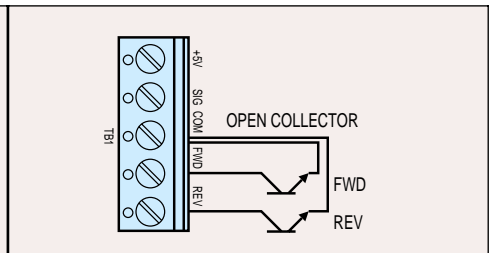
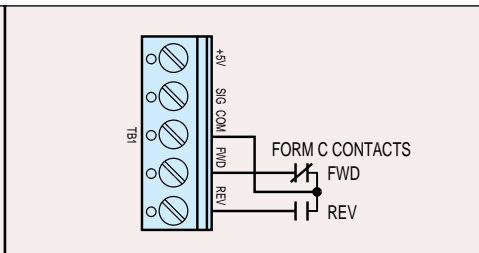
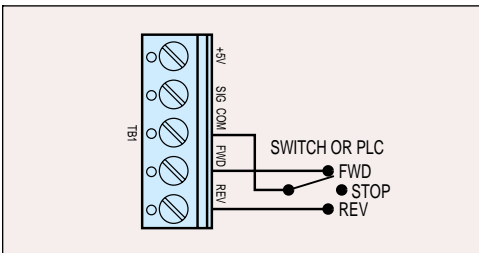
CURRENT FOLLOWING CONNECTION



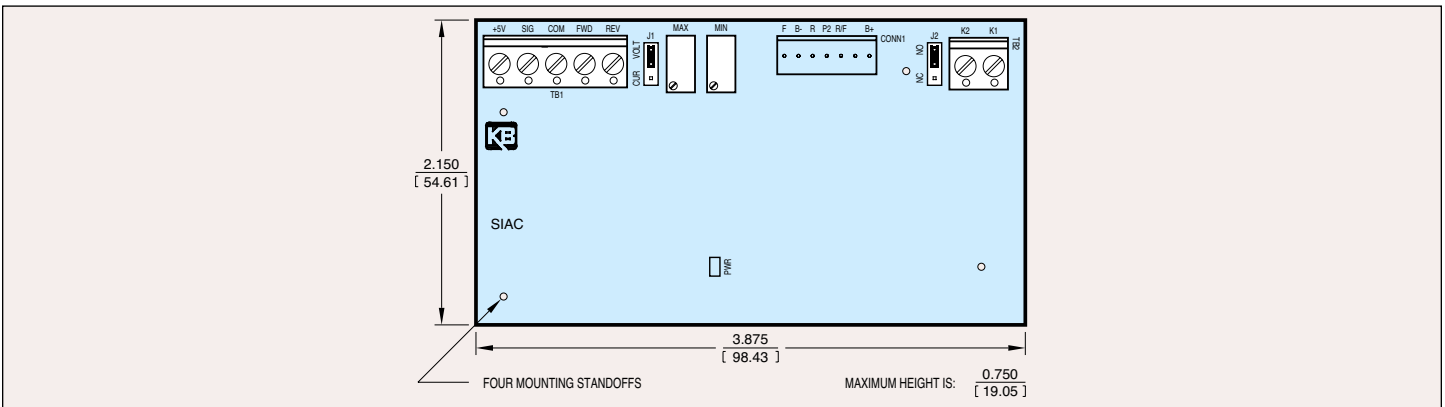
REMOTE POTENTIOMETER CONNECTION



REVERSING CONTACT CONNECTIONS



CONTROL LAYOUT & MECHANICAL SPECIFICATIONS (Inches / [mm])



KB ELECTRONICS, INC.

12095 NW 39th Street, Coral Springs, FL 33065-2516 • (954) 346-4900 • Fax (954) 346-3377

Outside Florida Call **TOLL FREE** (800) 221-6570 • **E-mail** – info@kbelectronics.com

www.kbelectronics.com