# SIRC

### **BIPOLAR SIGNAL ISOLATOR**

for use with the KBRC-240D Full-Wave 4-Quadrant Regenerative Drive

Provides isolation between non-isolated signal sources and the KBRC-240D

(€



SIRC (Part No. 8842)

### STANDARD FEATURES

- Isolated Switching: Provides isolation for PLC open collector or contact switching.
- Isolated +15V Power Supply: Used to power a transducer or to supply voltage for potentiometer operation.
- Enable: Used to start and stop the control electronically with a contact closure.
- Accepts a Wide Range of Voltage Input Signals.
- Power On LED.

### **TRIMPOT ADJUSTMENTS (Multi-Turn)**

Maximum Speed (MAX)
Offset (OFFSET)

### **OPTIONAL ACCESSORY**

 Auto/Manual Switch (Part No. 9487): Selects a signal input from either the SIRC Signal Isolator or the Main Speed Potentiometer.

### **GENERAL PERFORMANCE SPECIFICATIONS**

| Parameter  | Specification                    |
|--|----------------------------------|
| Input Voltage Range (Volts DC) <sup>1</sup>  | 0 - ±10 thru ±25                 |
| Maximum Speed Trimpot (MAX) Range (with 10 Volts DC Input) (% Base Speed) <sup>2</sup> | 70 - 110                         |
| Offset Trimpot (OFFSET) Range<br>(with 0 Volts DC Input) (% Base Speed) <sup>3</sup>   | 0 - ±50                          |
| Forward and Reverse Input Switch Types   | Dry Contact or<br>Open Collector |
| Power Supply (±15V) Maximum Load<br>Current Rating (milliamps DC)                      | 25                               |
| Potentiometer Operation (k $\Omega$ )  | 5                                |
| Input/Output Linearity (%)   | 0.1                              |
| Thermal Drift (millivolts per °C)  | 0.15                             |
| Operating Temperature Range (°C)   | 0 - 45                           |

Note: (Factory Settings): (1) 0 - 10, (2) 100, (3) 0

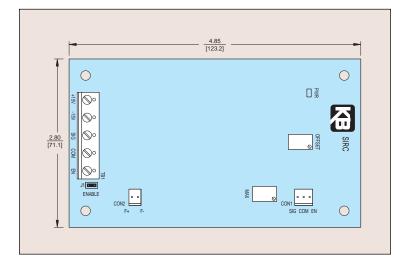
### **DESCRIPTION**

The SIRC (Part No. 8842) is used with the KBRC-240D Full-Wave 4-Quadrant Regenerative Drive to isolate, amplify and condition DC voltage 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 SIRC installs easily on the inside front cover and is wired with quick-connect terminals.

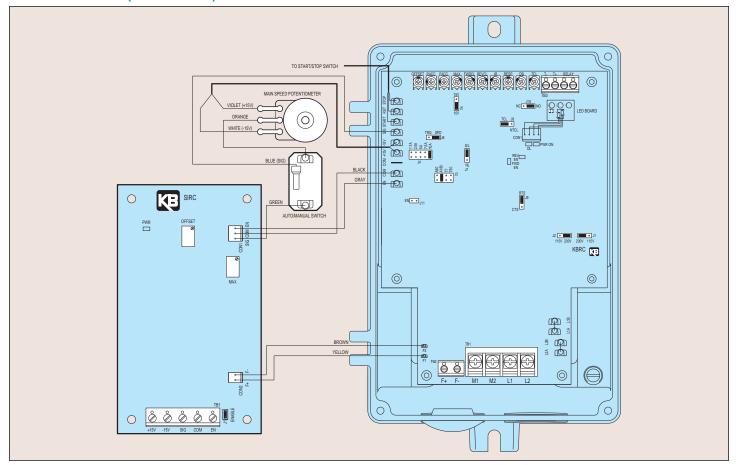
The SIRC features include a power on LED, barrier terminal block to facilitate wiring, adjustable multi-turn trimpots (MAX, OFFSET) and an enable circuit to start and stop the control electronically with a contact closure.

An optional accessory for use with the SIRC and KBRC-240D is an Auto/Manual Switch (Part No. 9487) which selects a signal input from either the SIRC Signal Isolator or the Main Speed Potentiometer.

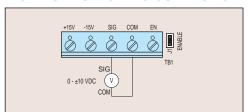
# MECHANICAL SPECIFICATIONS (Inches / [mm]) and CONTROL LAYOUT



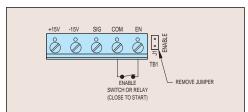
### SIRC (Part No. 8842) & KBRC-240D WITH AUTO/MANUAL SWITCH CONNECTION DIAGRAM



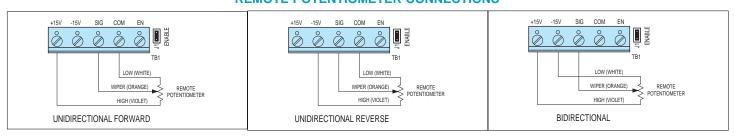
### **VOLTAGE FOLLOWING CONNECTION**



### **ENABLE CIRCUIT CONNECTION**



## REMOTE POTENTIOMETER CONNECTIONS



# **REVERSING CONTACT CONNECTIONS**

