

## SLE CONVEYOR CONTROL RELAY

### Monitoring and Control

#### Description

The SLE Signal Line Relay is designed to control conveyors in industrial and mining applications.

#### Features

- Electronic design
- Accurate testing of signal line loop resistance and leakage between conductors.
- LED indication to aid in fault finding
- Simple diode or PTB module termination

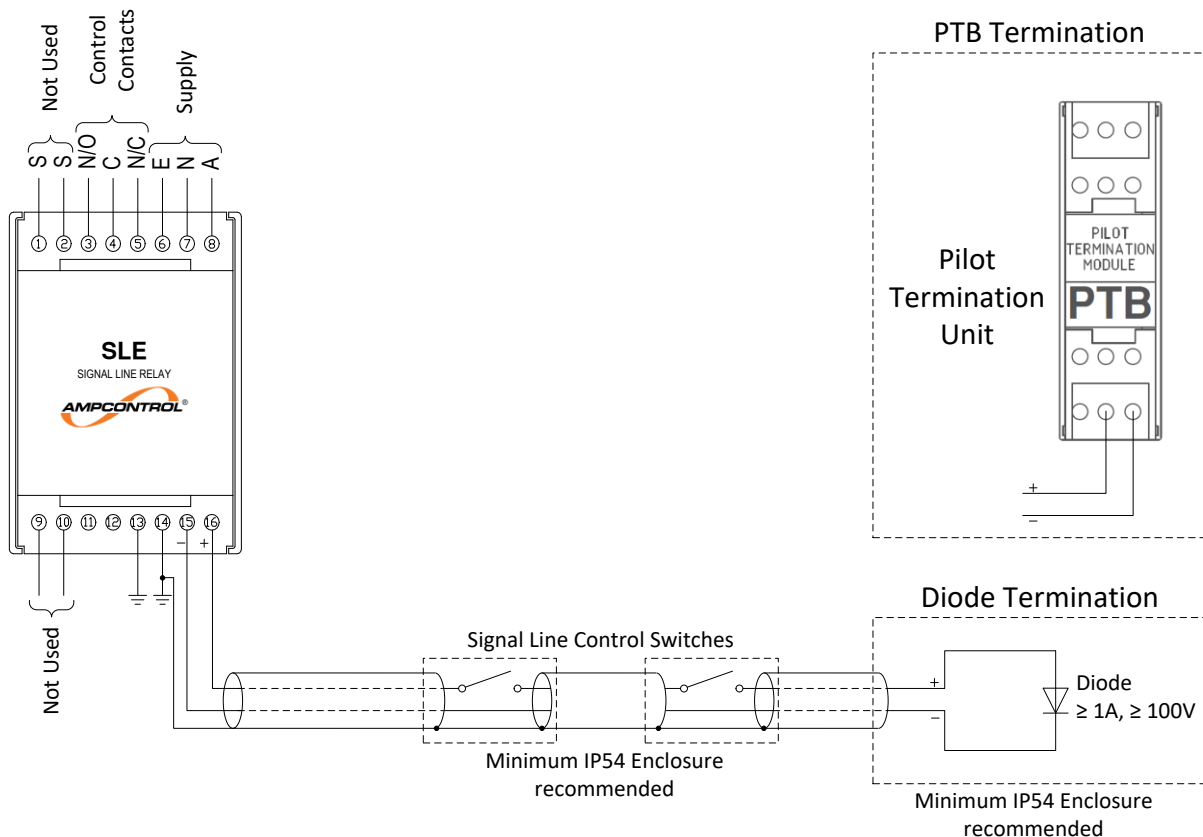
#### Conveyor Control

The SLE Signal Line Relay is normally installed in the conveyor starter panel. The signal line is connected between the + and – Terminals of the Relay. The – Terminal is internally connected to the Earth Terminal. **It is important that control switches are only connected to the + Signal Line.**

#### System Operation

The SLE Signal Line Relay monitors the signal line and provided all control switches are closed, the loop resistance is less than 250 ohms and the leakage between the signal lines is greater than 1000 ohms the relay will energise allowing the conveyor to start. Operation of any of the control switches connected in the signal line will stop the conveyor.

#### Diagram



| LED Indication |   |
|----------------|---|
| LED            | Description   |
| POWER          | The LED is illuminated when power is applied to the relay.  |
| RELAY IN       | When the loop resistance is less than 250 ohms and the signal line shunt resistance is greater than 1000 ohms the LED on the front of the module will be illuminated. This indicates a healthy signal line circuit. |
| OPEN CCT       | The LED is illuminated to indicate an open circuit due to the operation of a control switch or a broken signal line.  |
| SHORT CCT      | The LED is illuminated to indicate a short circuit condition due to leakage of less than 1000 ohms between the signal line conductors.  |

| Specifications  |  |
|---|--|
| <b>Mechanical</b>   |  |
| Dimensions  | 75mm (Height) x 55mm (Width) x 110mm (Depth) |
| Weight  | 0.24kg                                       |
| <b>Environmental</b>  |  |
| IP Rating   | IP20   |
| <b>Power Supply</b>   |  |
| Voltage   | 110VAC 50/60 Hz $\pm$ 20% (<15VA)            |
| <b>Operating Parameters</b>   |  |
| Pick up if loop resistance is   | < 250 ohms                                   |
| Drop out if shunt resistance is   | < 1000 ohms                                  |
| <b>Relay Contact</b>  |  |
| Control   | 1 C/O  |
| Rating  | 5A 240VAC<br>5A 30VDC                        |
| <b>Find Out More</b>  |  |
| For more information on this product, contact Ampcontrol Customer Service on +61 1300 267 373 or <a href="mailto:customerservice@ampcontrolgroup.com">customerservice@ampcontrolgroup.com</a> or visit the Ampcontrol website: <a href="http://www.ampcontrolgroup.com">www.ampcontrolgroup.com</a> |  |

| Equipment List |                              |
|----------------|------------------------------|
| Part Number    | Description                  |
| 176480         | RELAY SLE SIGNAL LINE DRIVER |
| 115119         | PILOT TERMINATION MODULE     |
| 117023         | DIODE 1N5404 3A              |

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