

RINGLINE 6 CH TRANSMITTER RLTX6P



Features

- Intrinsically safe for hazardous applications
- Built in surge / lightning protection
- Programmable
- Easy connection
- Increased functionality equals lowered component count / cost per installation.
- Reduced quiescent current loading for systems with high channel counts.

Detailed information

The Ringline six channel digital transmitter is encapsulated in a foot mounted plastic housing with flying leads for circuit connection. RLTX6P is a microprocessor-based unit with electrically programmable addressing. The Ringline system has typically 64 or 96 addresses. Each address has an 'A' and a 'B' channel. Each RLTX6P transmitter has a pair of wires (blue & white) to connect it to the Ringline field bus and nine wires that can be used monitor six switch interlocks. There is an additional wire (green) to facilitate the programmable addressing process. The 6 channels are grouped as three pairs and each pair may be programmed to any Ringline A/B address. The transmitter receives operating power from the Ringline field bus and at the same time it encodes the status of the interlocks that it is monitoring back onto the bus. Contact interlocks being monitored should be high quality – preferably gold plated.

Regulations require a minimum housing protection of IP54 and monitoring interlock isolation from earth of 500V for intrinsically safe applications.

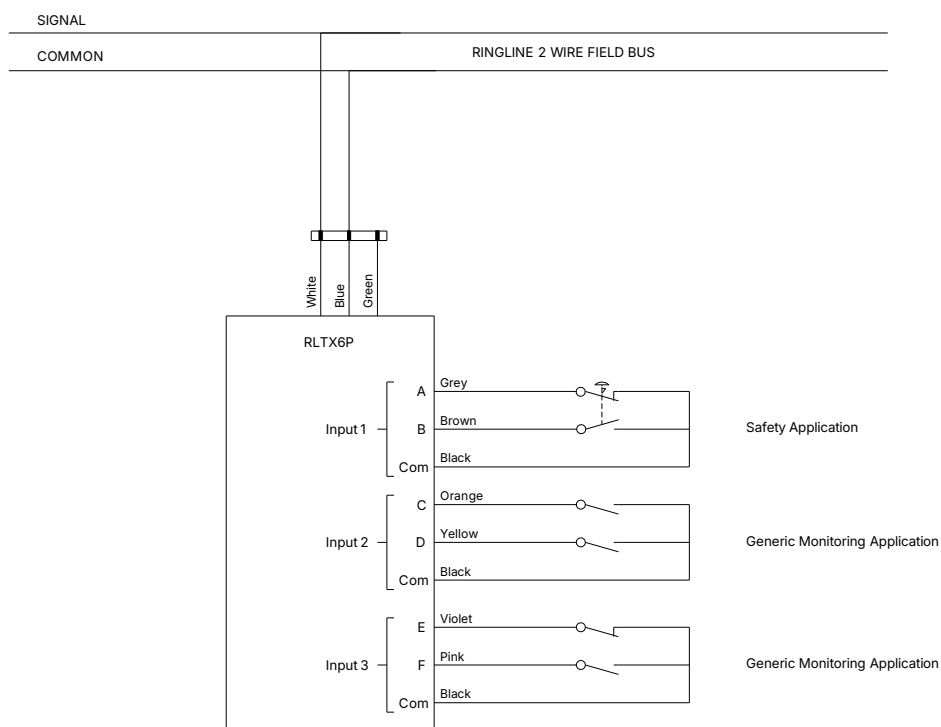
Applications

Transmitters are used in conjunction with the Ringline contact status monitoring and distributed emergency stopping system. This transmitter was specifically developed to allow emergency stopping, remote isolation and remote circuit breaker re-close (or other function) in the one transmitter. One channel pair is used to instigate a trip in the contactor circuit back at the drive controller via the emergency stop lanyard switch (emergency stop). Another pair is used to maintain / trip the drive controller circuit breaker via a separate remote isolation switch (remote isolation). In this process the emergency stop function is always performed before the remote isolation and both are maintained together to provide two breaks in the main power circuit of the drive controller. The third pair can be used to provide a re-close and or re-start command back to the drive controller via other switch elements after the other switches have been reset. If voice communications are installed a channel may be used to provide a system interrogation command. When monitoring non-critical functions (e.g. for indication only), the six channels may be used independently.

Technical Specifications

Power supply	7.4V RMS from the Ringline field bus
Input	6 x voltage free contacts
Isolation from Ringline Field Bus	5000 volts for 1 min
Addressing	Electronic transfer via Ringline Programmer
Output	Encoded onto the Ringline field bus, 6 channels
Dimensions	70 (w tabs) / 50 (w body) x 30(h) x 25(d) mm Ø3mm mounting holes - 60mm apart
Operating Temperature Range	-30 — +75 °C
I.S. Certification	Ex ia – IECEx TSA 08.0031X

Diagram



Note: Each set of inputs can independently be used as a Safety or Generic type input