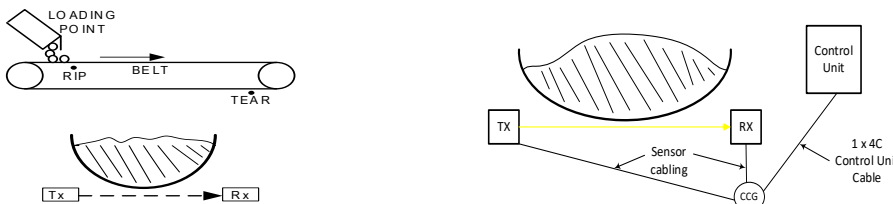


# Conveyor Belt Rip/Tear

Visual/Self Diagnostics/EtherNet IP/Modbus

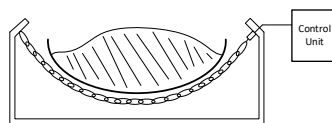
## CS-BRT20 Overview:

The Belt Rip/Tear detector unit provides a highly effective means of detecting **Rip and Tear conditions on conveyor belts**. The primary belt rip detection is provided by means of a photoelectric beam that is aligned beneath the belt. Should this beam be broken by torn belting or falling debris/material, the unit will operate and trip the belt. When placed after the material loading and offloading points on a belt, the units detect most rip/tear conditions and **significantly reduce the length of damaged belt**.



The BRT units are housed in robust polycarbonate enclosures to ensure maximum resilience in the harsh and damp conditions around conveyor belting. Each unit consists of two small sensor housings (emitter and receiver) and one main control housing. The emitter and receiver housings are compact units and are positioned on either side of the belt. These units connect to main control unit which can be mounted in a more accessible location. All enclosures have an ingress protection of **IP66 and an IK10** impact rating (Equivalent to impact of 5kg mass dropped from 400 mm above impacted surface).

In addition to the photoelectric sensor, there is also **optional additional** belt rip detection available in the form of a chain that is suspended just below the belt and detects torn pieces of belt that hang below the standard belt profile. This option offers detection of torn belting along the entire profile of the belt and is integrated into the same control unit.



## FEATURES

- **EtherNet IP comms**
- **Modbus TCP comms**
- **Robust - IK10 impact**
- **Standalone operation**
- **Dual supply voltage (24VDC & 110VAC)**
- **Internal diagnostics**
- **Automatic testing of rip/tear sensors**
- **Anti-sabotage logic**
- **Easy setup**



# Conveyor Belt Rip/Tear

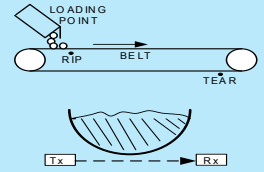
Visual/Self Diagnostics/EtherNet IP/Modbus

## Specifications:

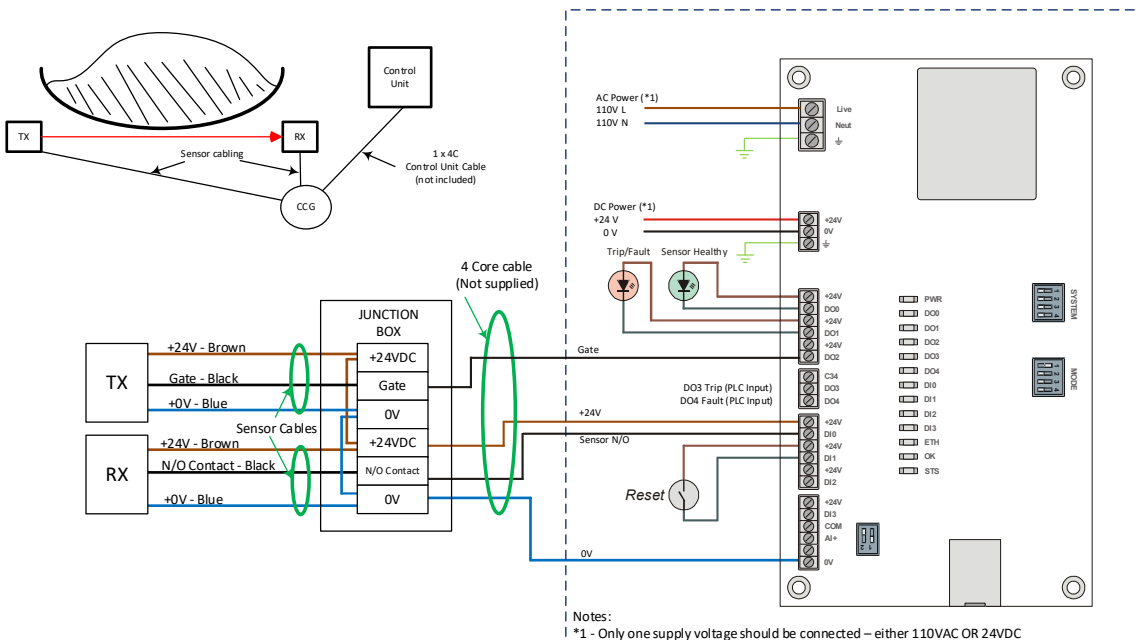
Parameter	Rating
Dimensions	260 (l) x 180 (w) x 100 (d) - Control Unit 200 (l) x 120 (w) x 100 (d) - Emitter Unit 200 (l) x 120 (w) x 100 (d) - Receiver Unit
Enclosure	Polycarbonate/DMC IP66 (Stainless Steel on request)
Impact	IK10
Sensor:	Sensing range up to 16m Response time <1ms
Power supply	110VAC/24VDC or 220VAC/ 24VDC
Comms:	EtherNet/IP, Modbus TCP (Standard on all modules)
Output Relays	Configurable n/o or n/c. 60VDC, 400mA

## Models:

Product	Description
CS-BRT20A1	Belt Rip/Tear, Dual <b>110VAC/24VDC</b> , 24VDC Sensor and receiver included, EtherNet/IP, Modbus TCP
CS-BRT20A2	Belt Rip/Tear, Dual <b>220VAC/24VDC</b> , 24VDC Sensor and receiver included, EtherNet/IP, Modbus TCP



- **Easy setup**
- **Easily integrated with Pre-Start Warning CS-PSW20 for visual and audible alarm**
- **Configurable outputs**



## Typical Wiring/Installation