**Conveyor Belt Alignment & Rip Detection System**

**APPLICATION**
The Bulldog alignment and rip detection switch is an electro-mechanical system designed to detect dangerous misalignment of the conveyor and also detection of belt tear damage.

**METHOD OF OPERATION**
The switch will detect horizontal misalignment of belts when contact is made with the roller, the roller arm will be forced to pivot by the belt activating a switch at 20° to trigger an alarm, and 35° to trigger a shut down procedure of the conveyor. The sensors are usually installed in pairs on opposite sides of the belt.

A steel flexible wire is set below the running conveyor belt approximately 20-30mm attached by a rare earth magnet at each end. If the belt is ripped or damaged the wire is pulled away releasing the magnet connection which in turn will activate a switch.

**FEATURES**
- ATEX an IECEx Zone 21 Approved
- Easy installation
- No calibration required
- Robust design
- 20° Alarm output
- 35° Stop output

**PART NUMBERS**
- MBA2A - Mechanical Belt Alignment
- MBA2RA - Mechanical Belt Alignment with belt rip
- MBR2A - Mechanical Belt Rip

Detailed specification, wiring diagrams and installation/operating instructions available immediately upon request.

Please refer to instruction manual for correct installation. Information subject to change or correction. Jan 2017.
**Bulldog Alignment & Rip Detection**

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>MBA2A, MBR2A, MBAR2A</th>
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</thead>
<tbody>
<tr>
<td>APPROVALS</td>
<td>ATEX ZONE 21</td>
</tr>
<tr>
<td>SUPPLY</td>
<td>12-24VDC and 110-240VAC</td>
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<tr>
<td>RATING</td>
<td>5 Amps (must be fused externally)</td>
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<tr>
<td>CONTACT ALARM</td>
<td>ALARM: 1 Contact NO; 6 Amps; 240VAC (non inductive)</td>
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<tr>
<td>CONTACT STOP</td>
<td>STOP: 1 Contact NO; 6 Amps; 240VAC (non inductive)</td>
</tr>
<tr>
<td>DIMENSIONS</td>
<td>Height x Length x Width</td>
</tr>
<tr>
<td></td>
<td>88mm x 314mm x 113mm</td>
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<tr>
<td>CABLE ENTRY</td>
<td>1 x M25</td>
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<tr>
<td>WEIGHT</td>
<td>1.2Kg</td>
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**Accessories**

- T500 HOTBUS Site-wide monitoring System
- WDC4 – Watchdog Super Elite
- CBS2V0A – Control unit 110 / 240vac
- MBA2SR – Stainless steel rollers
- BRW – Belt Rip adjustable Wire rope with magnets & I bolts

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