

## WATCHDOG ELITE Bucket Elevator / Conveyor Monitoring System

**WDC3V4CAI** - Watchdog Elite Control Module  
12 to 24 DC  
Ex II 2D T125°C Zone 21

**WDC3V46CAI** - Watchdog Elite Control Module  
Multi-voltage: 95 - 250VAC /12-24 DC  
Ex II 3D T125°C Zone 22

### APPLICATION

The Watchdog Elite is a multi-function hazard monitor for bucket elevators and conveyors that monitors belt & pulley alignment (top and bottom), bearing temperature, belt speed & blockage detection. An LCD screen displays elevator status messages (available in 4 different languages) and a super bright LED display shows belt speed. Calibration and set-up parameters are accessed via password protected front panel touch buttons.

### FEATURES

- ▶ Clear, concise information displayed in a choice of 4 languages
- ▶ Easy set-up & calibration - password-protected
- ▶ Test program and self-diagnostics - no need to stop the elevator
- ▶ IP 66, Nema 12
- ▶ ATEX, IECEX & CSA Approved

### OPTIONS

- ▶ Communication via RS485 or PLC Interface Board
- ▶ F500 Communication Gateway

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




- Belt Speed
- Belt Alignment
- Bearing Temperature
- Pulley Alignment
- Blockage Detection
- Acceleration Monitoring



ATEX Zones 21 & 22

## IECEX



CLASS 2 div. 2  
Groups E,F,G

Please refer to instruction manual for correct installation.  
Information subject to change or correction. May 2007.

**Bearing Temperature Sensor WDB**

Type NTC (continuous temperature) 16 to + 110°C  
 Type PTC (fixed) 80°C standard – other temperatures available upon request  
 Atex-Approved: Ex II 1D T125°C for zones 20, 21 & 22  
 Installation: screw into existing bearing grease nipple


**Chokeswitch - Binswitch BS15V10AI**

Type: capacitive sensor  
 Atex-Approved: Ex II 1D T100°C for zones 20, 21 & 22  
 Power Supply: 24-240 V AC / DC  
 Option: Abrasion Shield BAS2


**Belt misalignment switch Touchswitch**

Atex Approved: Ex II 1D T120°C & Ex II 2DT80°C  
 Zones 20, 21 & 22  
 Power Supply: 24 VDC  
 Can also be used for pulley alignment.


**Belt misalignment switch WDA3V34CAI**

Atex-Approved: Ex II 1D T120°C  
 Zones 20, 21 & 22  
 Power Supply: 12-24 VDC  
 Output: Pulsed and continuous  
 Detection range: 50 - 100 mm depending on target


**Belt misalignment switch BAP21V34CA**

Atex Approved: Ex II 1D T120°C & Ex II 2D T80°C  
 Zones 20, 21 & 22  
 Power Supply: 12-24 VDC  
 Output: Pulsed and continuous  
 Detection range : 25 - 75 mm depending on target


**CONTROL UNIT WATCHDOG ELITE**

Atex certification: Ex II 2D T125°C for zones 21 & 22 for voltage 24 VDC  
 Homologation Atex Ex II 3D T125°C for zone 22 for voltage 115-230 VAC  
 Power Consumption: 12VA / 12 Watts  
 ALARM Relay: normally open 10 A @240 VAC  
 STOP Relay: normally open 10 A @240 VAC  
 Enclosure: Polycarbonate  
 Dimensions: 308 x 241 x 137 mm  
 Weight: 2.8 Kg  
 Entry: 2 holes dia 28 mm  
 Protection IP 66, NEMA 12



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