

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.

Supplied by Blanes Pressure Solutions
Tel. 011-422-1749; Fax 011-421-5379
169 Elston Ave, Benoni 1501
www.pressuresolutions.co.za



- 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

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

