



ERIEZ ATEX METALARM

HAZARDOUS AREA METAL DETECTORS

EX3000-3500-3600 SERIES



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ERIEZ

METALARM

EX3000-3500-3600 SERIES



Eriez MetAlarm Metal Detectors protect a wide range of machinery from costly damage caused by tramp metal in plants all around the world.

The MetAlarm EX range has been developed for use in hazardous environments, particularly in environments where potentially explosive dusts may be present. Eriez custom made sensor coils are configured to suit specific conveyor systems to optimise detection sensitivity performance and ensure systems offer a practical and efficient solution.

FEATURES

- ATEX Zone 21 & 22 Dust compliant
- Detect all types of metals
- Fit all sizes of belt and vibratory conveyors
- Belt clip detector for use with metal repair clips or belt splices on EX2 and EX3600 models
- Signal monitoring and self-checking facility

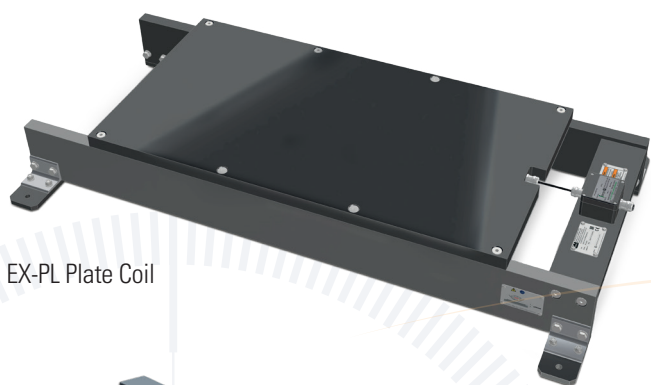
OPTIONAL EXTRAS

A wide range of optional extras are available including:

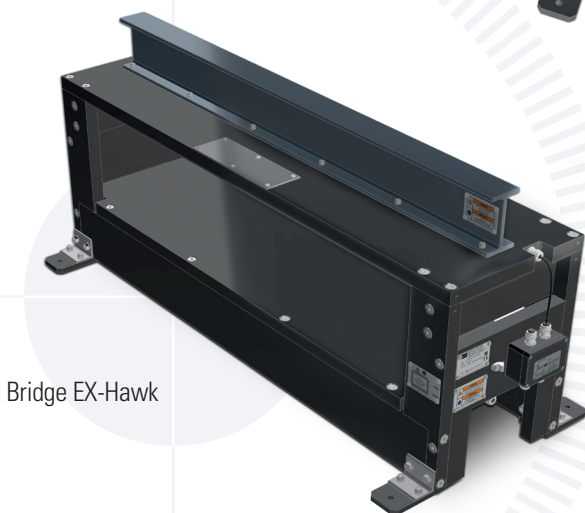
- Audible and visual exterior alarms
- Lockable isolator switch
- External reset switch with enclosure
- BYPASS/ONLINE selector switch
- POWER ON signal
- Remote PLC control functions: Mains Power ON/OFF
RESET BYPASS/ONLINE
- Shaft Encoder for variable belt speeds – EX3600 only

APPLICATIONS

- Power generation & coal handling
- Paper / Pulp
- Wood processing
- Recycling
- Plastics, rubber and packaging
- Quarrying
- Biomass
- Pellets



EX-PL Plate Coil



Bridge EX-Hawk

SENSOR COILS

EX-PL Plate Coil

- For flat conveyor belts and non-mineralised low burden depths.

Bridge Coil Model EX-BR (Standard & Hi-Power)

- Dual sensor coil which can be adjusted to ignore smaller pieces of metal thereby avoiding nuisance trips.
- Suitable for detecting metal contamination in heavily mineralised / conductive materials on troughed conveyor belts.

Bridge Coil Model EX-BR-10

- Larger coil for applications with high product burdens requiring large aperture heights.

Vibratory Trough Coil - Model EX-VC

- For direct installation into vibratory conveyors or into the base of 'U' section conveyors without the need for a large metal free area.

Bridge EX-Hawk

- Dual coil offering high sensitivity detection at fast belt speeds. Suitable for non-mineralised materials and used with the EX3600 control panel.

EX3000-3500-3600 SERIES – CONTROL UNITS



MECHANICAL

- IP66 rated 304 grade stainless steel enclosure (stainless steel grade 316 optional)
- Dimensions H500mm x W400mm x D200mm
- Weight 32kg
- Wall mounting
- Tool restricted access
- Pad lockable
- Atex labelling

ELECTRICAL

- Voltage supply: 115 or 230V AC, 50 or 60Hz single phase supply, 30W
- Anti-condensation heater, 40W
- Thermostat

SIGNAL OUTPUTS:

- Detect: 1 x NO/NC change over contact set for alarm device
- Detect: 1 x NO/NC change over, voltage free contact set
- Fault: 1 x NO/NC change over, voltage free contact set
- Control voltage for optional remote control functions is 24V DC

EQUIPMENT RATINGS

All variations of control panels and metal detector coils are rated to the following protection levels:



Control Unit

ZONE	PRODUCT MARKING
21:	Ex II 2D - Ex tb IIIC T60°C Db
22:	Ex II 3D - Ex tc IIIC T60°C Dc
AMBIENT TEMPERATURE RANGE	-20°C ≤ Ta ≤ +40°C (-4°F ≤ Ta ≤ +104°F)
INGRESS PROTECTION:	IP66
MAXIMUM ALTITUDE	<2000m
RELATIVE HUMIDITY:	<95% @ +25°C (+77°F)
POLLUTION DEGREE	4
COMPLIANCE	EMC Directive 2014/30/EU; LV DIRECTIVE 2014/35/EU ATEX DIRECTIVE 2014/34/EU
NOTIFIED BODY	SGS Baseefa
NOTIFIED BODY No.	1180
EU - TYPE EXAMINATION CERTIFICATE No.	Baseefa16ATEX0143X

CONTROL UNIT MODELS

The EX range of Eriez Metalarm metal detectors employs 'Pulse Induction' technology with proven reliability across a wide range of applications.

The internal components are maintenance free and following commissioning require no further operator intervention.

The externally mounted panel controls are rated for the hazardous zone and include power & detect indicators and a reset push button as standard.

DETECTION SENSITIVITY

Sensitivity is determined by adjusting the electronic settings and is influenced by the width of the search coil, the nature of the product, the height of the product burden and the type and size of the metal that needs to be detected.

Contact Eriez with application details for a performance estimate.

MODEL	BELT CLIP DETECTION	VARIABLE BELT SPEED
EX3000	✗	✗
EX23000	✓	✗
EX3500	✗	✗
EX23500	✓	✗
EX3600	✓	✓



ERIEZ' WORLDWIDE NETWORK OF MANUFACTURING, SALES & SERVICE



Manufacturing Affiliates in: Australia, Brazil, Canada, China, India, Japan, Mexico, South Africa, United Kingdom, USA



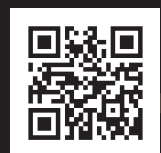
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