atexSystem

ELECTRICAL SOLUTIONS FOR
HAZARDOUS ATMOSPHERES
PANORAMA PRODUCTS & SOLUTIONS

Oil & Gas

Agro-industry

Aerospace & Defence

Naval

Nuclear

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Ex d ENCLOSURES

TUBING
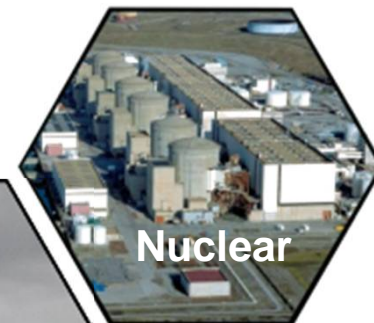
**Aluminium
IIB / IIB+H²**

**AISI 304/316L IIB /
IIB+H²**

**Aluminium
IIC**

Ex e JUNCTION BOXES

High voltage

AISI 304/316L IIC

Our Ex d enclosures:

-Cast aluminium
-Stainless steel
-Cast Iron
-Aluminox (silver ion treatment)
-With or without window
-For Gas and Dust zones
-Certifications ATEX, IEC Ex, GOSTR

Our Ex e junction boxes:

-Certifications ATEX, IECEx, GOSTR
-Instrumentation junction box
-Stainless steel AISI 304, 316L
-Up to 11kV, 630mm² max cable fault
rated to 50kA for 1 sec.
II2G Ex e II – T6 or T4 IP66/67

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Ex p PRESSURIZED

Pressurized cabinet
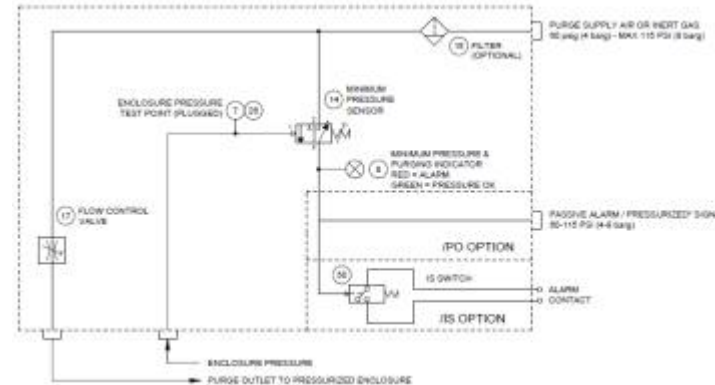**Ex px -** Zone 1

Purge for zone 1 cabinet

Pressurized cabinets
Ex pz - Zone 2

Purge for zone 2

Quick Access:
Easily open purged cabinets for maintenance
in hazardous areas, the power will be switched off
when the door is open.
Controls:
Windows: for viewing displays
HMI units
Operator interfaces: push buttons, switches,
and annunciators.
Ex p can include heating & cooling:
Electric heating, Thermostats
Fan-driven heat exchangers
Vortex coolers

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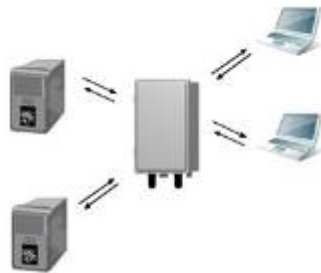# WIRELESS COMMUNICATION

ATEX Certified access point

ATEX MESH Network

ATEX Talkie Walkie

Data Radio DX80 enclosure

FlexPower input options allow for 10 to 24V DC connection.

Serial communication (RS232 or RS485) is user selectable.

Built-in site survey mode enables rapid assessment of a location's RF transmission properties by one person; hands-free operation and rapid display updates enable efficient antenna placement optimization.

Fully symmetric, bidirectional transceivers enable two-way communications and receive acknowledgements.

FHSS radios operate and synchronize automatically; no user setup is required; Selectable network IDs reduce interference from collocated networks.

ATEX Access Point network

ATEX Remote Antenna

ARM-IO Radio Modem 868MHz

SECURITY / SURVEILLANCE / CONTROL

Camera enclosures

- HDTV (Full HD 1080p @ 30fps)
- Intelligent Multi-Profile Sensor Management®
- 3G module, SIM card slot, wireless connectivity
- 1 DI/DO for External Alarm and Sensor Device/ TV out Connector Supported
- PoE (802.3at) / PoE (802.3af) / 12V power supply
- Aluminium alloy or stainless steel housing
- Tempered glass
- Canopy protection

ATEX Access Control

**ATEX Microwave
Doppler Radar
Up to 30m range**

**Explosion-proof camera
housing with windscreen wiper**

**Explosion-proof camera
housing for thermal camera**

**Camera day / night
PTZ**

**Dual vision camera
day / night &
thermal**

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CE Ex IEC IECEx

SOLAR / BATTERIES Ni-Cd / Lead Acid

Battery SAFT Ni-Cd

Solar type Sunica+ 45Ah
to 1110Ah
Type SPH traction battery

Battery lead acid FIAMM, SONNESCHEIN, EXIDE

SAFT

FIAMM

EXIDE
BATTERIES

Sonnenschein
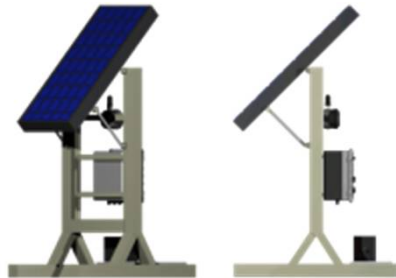
**Solar solutions skid
85 to 1000W/m²**

**Solar panel 85Wp ATEX
17V / 6A**

**Battery Ni-Cd
SAFT Sunica+**

Battery box 18Ah C120

Battery box 400Ah C120

Battery box up to 1500Ah

Battery layout

CERTIFIED ISO 9001 LR cofrac CERTIFICATION DE SYSTEMES DE MANAGEMENT

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CE ⟨Ex⟩ IEC IECEx
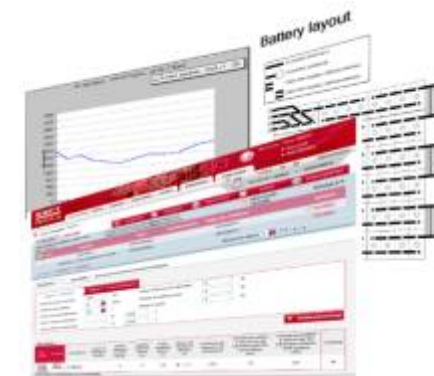
LED

FLUORESCENT

18/48W LED with dimming sensor

Microwave sensor

Helideck LED
ATEX & OACI 30W

Fluorescent Ex e 2GD IIC
2x18W / 2x36W

Light fixture specifications:
ATEX
EX II2GD Ex e IIC
EX II2G Ex d IIC

LED specifications:
5 year warranty
High efficiency
Operating temperature
-40/+55°C
LED lamps, LED spots,
LED floodlights
Certified ATEX, IEC Ex

Dialux Lighting calculation for your project.

LED spot
30/60W

LED floodlight
120/150W

LED LIGHT
20-80W

Emergency light

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CERTIFIED ISO 9001 LR cofrac CERTIFICATION DE SYSTEMES DE MANAGEMENT

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CE Ex IEC IECEx
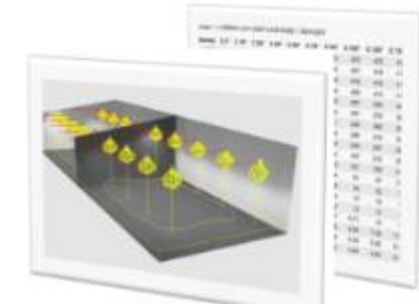
FANS / HEATERS / CONVECTORS

Centrifugal Fan
Gas and Dust IIB IIC

Axial Fan
Gas and Dust IIB IIC

Water Heater Unit
Gas and Dust IIB

Electric Heater Unit
Gas and Dust IIB IIC

Convector T4 / T3
Mono / Tri-phase up to 3000W

AIR CONDITIONERS

Air conditioner
Heater / Cooler
Custom design

BKF Air conditioner
5kW & 7kW / Liquid R22 or R410A
Reversible option possible

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CERTIFIED ISO 9001
cofrac
CERTIFICATION DE SYSTEMES DE MANAGEMENT
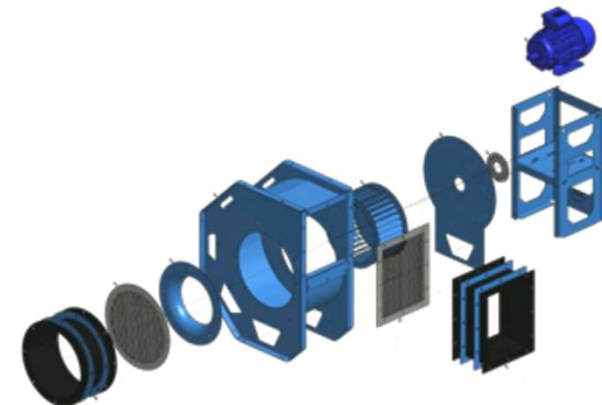
LIMIT SWITCHES

CONTROL BOXES

Limit Switches
Pushbutton roller, spring roll, lengthened roll lever…

Pushbutton series PB
Made of aluminium alloy,
Large choice of control and signalling units.

Components mounted on control box :
- Pushbutton (Green , Blue, Red, Yellow, White, Black)
- Emergency stop
- Emergency stop key lock
- Emergency stop break glass
- Switch 2 positions; Switch 2 positions key lock
- Switch 3 positions ; Switch 3 positions key lock
- LED lamps (Green , Blue, Red, Yellow, White)
- Potentiometer...

Ex d pushbutton series, 1 to 4 elements

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SMARTPHONES / MOBILES / TABLETS

**ATEX Tablet Zones 1/21
Windows**

**ATEX Zones
1/21
Smartphone**

**ATEX Zones 1/21
Mobile phone**

**ATEX Zones 2/22
Mobile phone**

**ATEX Tablet Zones 1/21
Android**

**Head-mounted
display set zone 1/21**

ATEX EXPERTISE

- Assistance with characterisation of ATEX risks related to your flammable materials "Gas, Vapours and Combustible Dusts"

- Identification of locations in which ATEX can occur and assistance in hazardous area classification and zoning

- Selection of new electrical and non electrical equipment ATEX / IEC Ex certified and intended to be used in ATEX areas taking into account the process and working environment (external influences: temperature, vibration, pressure, UV, salted mist...)

- Assessment of electrical and non electrical equipment ATEX / IEC Ex already installed in ATEX areas in view to define the required corrective actions: maintenance plan and revamping budget, report including photos, detailed inspection report

- Identification of ignition sources (electrical electrostatic, mechanical and those issued from process according to normative references)

- Assistance relative to Explosion Protection Document (EPD) and implementation of this document in Hazards list required by the Work code (identification of workplace hazards)

- Action plan definition for explosion prevention in line with risk assessment findings

- Competence assesment of staff subject to ATEX hazards in accordance with legal requirements

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TRAINING PROGRAMS

Atex Level 1 - Beginner

Goals:
To obtain essential knowledge to work safely in hazardous location (ATEX/EX)

Intended public:
Any one

Prerequisite:
None

Contents:
Basic training for staff operating in Ex zone
1. What is an atex
2. When atex is present
3. When an explosion of atex can occur
4. What are the essential flammable data?
5. How to prevent an explosion
6. Ex types of protection (ATEX / IEC Ex)
7. Rules of operations in Hazardous locations

Video, powerpoint, quizz

Atex Level 2 - Knowledge updates

Goals:
To obtain essential and up to date knowledge to safely work where explosive atmospheres are present

Intended public:
Any person, operating in workplaces, on equipment covered by ATEX/ IEC Ex approvals

Prerequisite
Electricity basic knowledge

Contents:
1. Basic rules regarding ATEX (gas and combustible dusts) and hazardous areas
2. The 99/92 Directive regarding European legislation for workers operating in hazardous locations (implemented in work code)
3. The ATEX Directive 1994/9EC or 2014/34UE regarding European legislation for equipment intended to be used in explosive atmospheres. IEC Ex scheme.
4. General overview of electrical types of protection
5. Main rules for maintenance and installation of electrical equipment in hazardous locations
6. Equipment marking

CONTACT US

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