



SMART ACCESS SOLUTIONS

LOCKEN Launches first contactless access control solution for explosive environments

Access control within explosive environments must meet the requirements of health & safety regulator ATEX. The dangers of 'explosive atmospheres' have led to strict regulations, requiring the use of fully licensed equipment in high-risk areas.

LOCKEN's electronic access control incorporates a new contactless technology patented by its parent company, ISEO, which allows it to meet the new standards for operating within explosive environments. The main areas concerned are the energy sector, notably gas and hydrocarbons, chemicals, timber and household waste. However, agri-food is also an industry requiring ATEX certified access - mainly because of the accumulated wheat dust in the silos.

An explosive atmosphere is formed mainly due to the presence of flammable gases or dust. The explosion can be triggered by a spark, mechanical or electrical, or by a local source, for example due to the friction of two pieces of metal.

An electric power-free opening for ATEX certified access control!

In the case of electronic access control, the danger comes less from the mechanical part of the key than from its electronic component. If the transmission of information between the key and cylinder is carried out through an electric contact, an electric arc can form and a spark will be enough to ignite the surrounding explosive materials.

By incorporating an inductive technology key, LOCKEN is the first to bring a complete access control solution designed for explosive environments.

The intrinsic characteristics of the key (label 'ib of «intrinsic safety»), and its maximum operating temperature (T4), allow it to be used safely in the presence of a gas as highly explosive as ethylene, as well as slightly less dangerous gases such as propane (II B).

SAFETY AND PERFORMANCE

This revolutionary technology has two other major advantages:

1. It allows an almost instantaneous opening, since the exchange of information between the key and cylinder takes place in less than 80 milliseconds.
2. As communication between the key and cylinder is non-contact, it is not disturbed by potential damage, such as oxidation, wear or dust present in the cylinder. It offers unrivalled robustness.

Thanks to its Bluetooth module, the key can communicate with the user's smartphone via the MyLocken app, enabling control and management of access on a case-by-case basis and in real time, an additional guarantee of security, which is usually reserved for online access control.

Led by LOCKEN smart Access management software, the solution provides enhanced access management and perfect traceability.



This state-of-the-art technology has enabled LOCKEN to obtain ATEX certification for its access control solution.

Approved to ATEX II 2 G Ex ib IIB T4, the solution is suitable for gas delivery and regulation stations, specific hydrocarbon processing and distribution infrastructures and chemical factory enclosures. It is also suitable for areas where an explosive mixture of gas, vapour or mist may 'occasionally' occur in 'normal operation'.

The new key transmits the information to the cylinder through an electromagnetic induction coil located at the heart of the key.

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