

Security is a combination of many factors

The role of PIN code as an effective security method

Concerns related to security of access control systems have been increasing worldwide. Security product and system providers and above all security product users are facing the common challenge: what is secure enough? The good thing is that at the same time this challenges security product and security system providers to focus on improvements. The following article gives a short introduction to PIN code as a security method.

Security is not dependent on one factor alone

When speaking about all identification technologies that are used in the world in general, more focus should be put on the available system improvements and on the use of a sufficient security level in relation to the type of protected assets. Security is generated by a series of security improvements on all levels. When evaluating the security level of a system one should also remember that breaking a security system must be profitable enough in relation to the efforts. This is why the security level of a certain system or technology may be sufficient in one application but it is not that in another. Security in general does not depend only on identification technologies, but is negatively or positively affected also by other factors, like the whole system's security, communication protocols between access control readers and the system controller, data encryption and, last but not least, human related factors.

Security methods on three levels

Security and integrity, and the assurance of that only authorized persons can access the premises protected by an access control system can be guaranteed by security methods on three levels : 1. The person allowed to access possesses something unique that others don't have (a unique access control card), 2. The person allowed to access is recognized of her individual personal characteristics (iris, fingerprint, photograph), 3. The person knows something that the others don't know (PIN code, password). If an access control card gets lost, it is very easy to protect the system by cancelling the access rights of that card. Personal characteristics are practically impossible to steal which makes this method very reliable, but the disadvantage of systems built on these identification methods are higher costs. In addition these identification technologies are not often suitable for any conditions or users. PIN code, which is known only by one person, is a very effective method of maintaining security. Getting to know someone's PIN code requires practically activity from the one who possesses the PIN code. PIN code with a suitable identification technology and with an appropriate system structure is a simple and cost effective way to reach a very reliable security level.

PIN code

The advantages of a PIN code are significant, as PIN code is a very simple means to take into use and it results in a very reliable security level. Personal pin codes prevent using access control cards which for some reason or other are in wrong hands. Also, if someone should manage to copy an access control card, which is used in a system protected by PIN code identification, the card is and remains useless if the PIN code is not known. Even the latest identification technologies with the latest security improvements can be made more reliable with PIN code identification.

The security of PIN code is based on the fact that the PIN code is not encoded in the card itself. The system which accepts both the card and the personal PIN code compares the card data and the PIN data, so the card does not contain anything related to the PIN code. One example of the effect of PIN code is the magnet stripe technology. Despite of the magnet stripe's security defects, it is still widely used even in credit cards. The security of credit cards with a magnet stripe has been improved to a sustainable level by PIN code identification.

It is more than reasonable to protect environments with high security requirements like banks, power plants, government buildings etc. by using a combination of an ID card and a personal pin code in their access control systems.

PIN code readers

It is easy to enhance the security level of an access control system by PIN code readers. The readers are simple to use and install and when chosen right they can be placed also in harsh environments where they must withstand moisture, temperature changes and dirt. PIN pad readers with traditional keypads may collect dirt or moisture between the buttons which may cause harm to the reader. Traditional buttons may also get broken which often requires the replacement of the whole reader. Idesco's PIN pad readers do not contain any moving parts, which is essential when the readers are used in harsh conditions. The PIN pad presses are registered on the surface of the housing which makes the reader very robust.

Idesco also provides PIN pad readers with an illuminated keypad. A PIN pad reader with a lighted keypad is a user-friendly choice for environments without a light source. The keypad area of the reader is visible only after activation by a contactless RFID transponder, or, by keypad presses. The keypad is not lighted all the time, so the reader does not attract unnecessary attention. Also PIN pad readers for socket installations belong to Idesco's product range. Despite of the robustness and durability of these PIN readers Idesco has not compromised on the elegant reader design which is typical for all Idesco's reader products.

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Idesco provides secure and scalable identification solutions that are designed to meet the business demands of our customers. We offer solutions for access control, automated vehicle identification and other industrial and logistics applications.

Founded in 1989, Idesco is one of the oldest and most experienced companies in the field of RFID technology. Over the years, Idesco has become known as a pioneering provider of innovative technological alternatives and multiple technologies to different application areas.