Maximum Protection with Minimum Fuss

Competition rages in the optical sensor safety division of the elevator industry. This is good news for elevator manufacturers who are able to demand top-notch optical sensor products at increasingly lower prices. In order for optical sensor companies to stand out, they need to continuously develop new features using the latest technologies available. Luckily, research and development has always been at the foundation of CEDES’ market strategy. With the introduction of the new MiniMax door edge, CEDES proves it’s still pushing the frontiers of the safety industry to new levels.

Back in 1997, elevator door safety was revolutionized by the emergence of the CEDES cegard/Max door edge. Due to its simple mounting, reliability and flexibility, it blew everything else away that was on the market at the time. Even today, CEDES’ cegard/Max light curtain is still available on the market. Thanks to its flexible and reliable features, it remains very competitive. In the last 24 months, around 80,000 cegard/Max light curtains have been sold, with a return rate due to faulty components of only 0.2%. This gives the door edge a theoretical lifetime of about 200 years. That is 800% better than the industry average!

On that note, CEDES introduces to the industry the fruit of it’s labours for the last 2 years: the brand-new MiniMax light curtain. MiniMax does not need a controller since all control circuits, electronics and optics are integrated into the door edge. CEDES’ vision was to take advantage of the world’s newest technologies with MiniMax and at the same time for it to be the one of the lowest priced products available, so that it is ideal for new installations and OEM customers. The MiniMax light curtain also has exactly the same mechanical dimensions as its predecessor, the cegard/Max, which means that it is backward compatible.

CEDES is very confident that it will be able to achieve similar, if not more success with the new MiniMax light curtain than previously with the cegard/Max. The main reason for these expectations is the price, which is one of the lowest available on the world market today. “The main advantages of the MiniMax is not all about the price-tag,” explains Beat De Coi, CEDES CEO and manager of the Elevator division at CEDES, Switzerland. “The MiniMax light curtain has features...
which are unrivalled on the market today. These are the real selling points for MiniMax."

As already stated, the MiniMax door edge does not need a controller as everything has been ‘shoe-horned’ into the edge itself. It is backwards compatible, as has already been said, as it has the exact same mechanical dimensions as the cegard/Max light curtain. When compared to the cegard/Max, which is still ideal for modernization thanks to it’s relay output and integrated universal power supply, the MiniMax uses a fully protected semiconductor output circuit which is often requested for new installations and by OEM customers. The semiconductor output is preferred because it has no mechanical parts to wear out and produces no irritating clicking noise when relays are triggered.

One of the MiniMax’s advantages is thanks to the painstaking technological research that has gone into the optics of MiniMax. The vertical aperture angle of the beams of standard light curtains is not large enough to maintain dense criss-cross protection when the elevator doors approach total closure - which is obviously when the most protection is required. Most standard door edges fall short during this situation and the light beams will actually revert to simply horizontal beams for protection. The light beams on MiniMax have a horizontal angle of 20° and a vertical angle of over 90°. This means that as the doors are closing, the protection field actually increases in density the closer together the edges are. This feature makes MiniMax ideal for dynamic applications and also offers a much better level of protection for static applications than standard door edges.

These new optical refinements not only increase protection density but also aid installation. Thanks to the development of the optics, the optical alignment is incredibly tolerant and reduces installation time dramatically. And because the MiniMax system needs no controller, it can be installed in a matter of minutes using a couple of simple screws or specially designed clips. There really is nothing more user-friendly available on the market.

But the question on everyone’s lips, is: how can CEDES offer such new technology for a price that is well below the market average? "The secret is the number of individual parts which make up the light curtain, and the unique design which our R&D department achieved", explains Beat De Coi. "Compared to the cegard/Max, the number of individual components in MiniMax has decreased by as much as 40%, which obviously goes a long way in allowing us to offer MiniMax for such a low price". Because there are fewer parts and the incredibly simple installation, CEDES believes that it will also reduce the return rate compared to that standard light curtains. The vertical aperture angle of the beams of standard light curtains is not good enough to maintain dense criss-cross protection while the elevator doors are closing - which is obviously when the most protection is required. Most standard door edges fall short during this situation and the light beams will actually revert to simply horizontal beams for protection. The light beams on MiniMax have a horizontal angle of 20° and a vertical angle of 90°. This means that as the doors are closing, the protection field actually increases in density the closer together the edges are. This feature makes MiniMax ideal for dynamic applications and also offers a much better level of protection for static applications than standard door edges.
of cegard/Max (which incidentally is an incredible 0.14% of systems sold!). This is why CEDES is unique in giving a 5 year limited warranty with all its elevator products. Quite simply, because CEDES has complete faith in the reliability of its products. MiniMax has been essentially been developed for OEM customers, and for this reason it comes with a protection height of 6 feet (1800 mm) only, unlike the cegard/Max whose protection height can be specifically stated at order.
CEDES will be exhibiting the MiniMax light curtain along with its other new innovations at the Interlift tradeshow in Augsburg, Germany between the 14th and 17th October at Hall 3, Stand 336.

For more information about international CEDES sales companies and distributors, visit them online:
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A MiniMax light curtain with integrated controller and LED indicators.

The MiniMax light curtain is very robust and flexible and is designed for a lifetime of over 20 years.

A standard light curtain is unable to maintain total coverage through closure of the elevator doors.

Due to some intensive research & development, the new MiniMax light curtain protects passengers until the completely closed position.