



Nature Pure: Using the Power of Pure Natural Fragrances

Location:

Oy-Mittelberg, Germany

Segment:

MOEM

Problem:

To optimally diffuse the right quantity of essential oils into the room for every occasion and in every conceivable place, the diffusion process must be automated as much as possible.

Solution:

easy500 control relay

Results:

The devices are programmed in advance so that the defined values for the fragrance intensity are observed exactly.

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The easy500 control relay is exactly the device that provides every automation requirement for the Arotec dispenser application

*Alexander Lammers,
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Background

Even long ago in advanced ancient cultures fragrances were used for therapeutic and ritual purposes. After all, aromatic fragrances can create extraordinary atmospheres that can increase well-being. Even today, more and more people are enjoying the benefits of the wholesome and relaxing effect of essential oils. However, it is not only in the private sphere that people regularly enjoy the experience of pleasing aromatic fragrances. In business also, a growing number of companies are discovering the possibility of creating a positive mood for customers by using fragrances in conjunction with balanced lighting, such as in showrooms and exhibition rooms. Furthermore, museums, hotels, hospitals and theme parks are also using the power of aromatic fragrances. This is aimed to ensure that the business partners and visitors feel just as well as in their familiar environments, where many customers are already creating relaxing atmospheres

through the use of different fragrances.

However, the professional use of aromatic preparations in commerce, catering and industry is not quite as simple as in the private sphere. New fragrances based on natural essential oils have to be created and introduced directly into large areas in an application-friendly way. This significantly improves the atmosphere of the room and reduces the concentration of bacteria in the respiratory air. To simplify this process as much as possible, it needs to be fully automated, for example, by using the air conditioning system or via a centrally installed AROTEC2 aromatic fragrance dispenser from Primavera Proair GmbH, based in Oy-Mittelberg, Germany. As Oliver Schenkmann, managing director of Primavera, explains, there are now a number of well-known companies such as BMW, Lufthansa or Swarovski that have chosen tailored-made fragrance dispenser solutions from his company.



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Schenkmann is convinced that the professional fragrance enhancement of rooms will in future be increasingly important in the marketing mix of many companies worldwide, in order to create relaxing enhanced moods, as well as ensuring the health and well-being of customers. Primavera Proair is exclusively active in the B2B sector. The company supplies a new and powerful air dispenser which is operated with exchangeable cartridges, thus ensuring optimum operator convenience. The device enables the oils to be diffused into microscopic droplets. Only high quality natural essential oils from Primavera Life are used.

Challenges

From the individual essential oils, fragrance compositions are created that are especially suited to the fragrance enhancement of large areas. In this way, the positive antibacterial effect of essential oils can also be used efficiently in the business sector. The room size "served" by this type of fragrance dispenser can be up to 1,000 square meters. With larger rooms, several devices are used simultaneously as required. Oliver Schenkmann enthusiastically describes the use of the fragrance dispensers

at the Swarovski "Crystal Worlds" in Austria, where twelve devices are used. In his view, the over ten million visitors that come to exhibitions and events each year can't simply be wrong. "We are using our fragrances here just at the perception threshold," Oliver Schenkmann explains. "Although the fragrance is metered very discretely, it is nevertheless perceived by the visitors since a human's nose never stops working. Whilst a visitor can always look away from an unpleasant visual impression, ignoring smells on the other hand is not so possible."

To optimally diffuse the right quantity of essential oils into the room for every occasion and in every conceivable place, the diffusion process must be automated as much as possible. For example, the user has to be notified whether a fragrance cartridge is empty and has to be changed.

Solution

The devices are programmed in advance so that the defined values for the fragrance intensity are observed exactly. If several dispensers are used, the current operating state of the devices can be monitored and changed at any time from a central control unit. The

programming of each individual easy500 control relay at the device thus becomes unnecessary.

Olsberg Hermann Everken GmbH was awarded the contract to build the dispenser devices. When designing the housing, and particularly when planning the processes inside the device, the company chose the easy500 intelligent control relay. easy500 is the smallest member of control relay family from Eaton. According to Alexander Lammers, head of product development at Olsberg, it is not only the size of the automation device that enables it to be integrated optimally in the automatic dispenser. Its simple ease of programming also ensures smooth and continuous operation. It enables, for example, the user to be notified whether a fragrance cartridge is empty and has to be changed. The supplied easySoft software also simplifies the commissioning of the automated devices and systems: A graphical editor displays the required circuit diagram.

Selection menus and drag & drop functions support the sequencing of information and functions in the programs. Any user who is able to read a circuit diagram can work with the easy500 straight away. Furthermore, all circuit diagrams can be entered 1:1 via the display. The device works with N/O contacts, N/C contacts and coils in the same way as is familiar to all users and operators. All basic and special functions can be wired together at the push of a button. In order to ensure that the wiring is correct, the integrated offline simulation tool checks whether the function required is working properly. This enables the user to test the correct functioning of the circuit diagram before commissioning and without the device having to be connected. Simplifying the working with easy even more is the fact that the easy500/700 automation devices come with a total of twelve menu languages, and easy800 even has thirteen.

With Eaton's Labeleditor, the label inscription of the easy500 control relays can be carried out quickly and inexpensively, so that the user can even create company or project specific labels. The display of symbols, images and special characters is also supported. After the customer has designed his individual label "with a few clicks of a mouse", he can send the inscription data to Eaton. The required marking is then laser inscribed directly on the designated fields provided on the front of the devices. In this particular project, the control relay has the logotype "Primavera Proair".

Eaton sales engineer Uwe Fröhlich explains: "We were able here to use the experience we have collected from several solutions, such as in building automation. As in this project, this focuses on the monitoring, control, regulation and optimization of the technical processes." In each automation solution from Eaton, the functional processes are executed automatically, i.e. in accordance with fixed preset parameters. This simplifies operation. The automatic fragrance dispensers are manufactured in Olsberg in the Sauerland region of Germany. The company Olsberg Hermann Everken GmbH, which has been based there for over 400 years, includes the development of complex system components and complete devices in its range of specializations.

Results

Dipl.-Ing. Alexander Lammers, head of product development at Olsberg Hermann Everken GmbH, summed up: "The easy500 control relay is exactly the device that provides every automation requirement for the AROTEC dispenser application. A key factor for choosing easy500 was the possibility to implement changes quickly via the display provided and also the fact that costly system training is not required for operating personnel."