Airlock management kits : solutions and functions



In clean rooms, in order to respect the pressure conditions between 2 areas of different class and also to respect the safety protocols, it is necessary to manage the doors opening, whether it is for personnel airlock, material airlock or for different doors of a specific area.

Functions

Several functions are available :

Signalling alone without locking :

• the doors are not locking

• the signal lamps inform about the opening possibility of each door depending on the status of the other doors of the airlock or area concerned (green = opening authorized - red = opening no authorized)

- the users have to respect the authorisation
- in the event of simultaneous opening of two doors, buzzer is activated.

Signalling+ locking :

• doors are locked with a suitable device

• the signal lamps inform about the opening authorization or not of each doors depending on the status of the other doors of the airlock or area concerned and the operating mode.

mode doors «free» :

- all the doors are free at the beginning
- the opening of one door is made by pulling or pushing if the other doors are lock. The opening of one door
- locks the other doors.

mode doors «locked» :

• all the doors are locked at the beginning.

• the opening of one door is done on authorization request by pressing the control button. The opening of one door automatically blocks the others

• available choice of the colour of the light at rest (red or green)

Access control :

Some spaces are available only for authorized staff

- Doors are locked and the opening is available only with a recognition system:
- swipe card reader
- digicode
- case of fingerprint recognition...

Functions safety unlocking emergency :

In the event of a power cut, fire or anomaly, one may want that the doors remain locked or not. Requirements must be clearly specified. The unlocking is generated :

- automatically in the event of a power cut.
- automatically in the event of fire
- by pressing on the unlocking button on the control plates (24 V DC circuit)
- by pressing on the emergency release push button, independent cut circuit (mains 110 to 240V AC circuit)

Automatic sliding doors or rolling doors usually include specifics safety devices slaved by motor. When we want, for example in an operating theatre, maintaining closed in the event of a power cut, fire or anomaly, the automatic doors must be equipped by an independent opening safety system (battery release, Intrinsic mechanical energy safety panic system (EMI), ...)

Dagard solutions

Dagard offers different types of kits according to the doors number to slave, the wishes of users ...

- Kit 2 doors with integrated automaton : especially designed for servitude of 2 doors.
- Kit 4 doors with integrated automaton : especially designed for servitude from 3 to 4 doors.
- Specifics kits with automaton integrated for managing a group of more than 4 doors.



