

# Volo, Onda

ENG Automation for curved sliding doors



Advanced entrance technology

## Freedom to create for architects and designers

Designing buildings with high-tech frontages is becoming increasingly widespread. Clearly, automatic doors must meet both quality and aesthetic requirements, to integrate seamlessly into these high-tech structures.

Volo is the new, reduced-height automation from DITEC for curved sliding automatic doors, specially designed to fulfil the latest architectural requirements.

With Volo and Onda, architects and designers can design their own “ad hoc” curved automatic doors that integrate fully and effectively with the existing building.

### The models at a glance

| Description                                | ONDA  | VOLO                                    |
|--|---|---|
| Door set type                              | DITEC PAM 35<br>Glass wings                             | DITEC PAM 30                            |
| Set of 1 wing + 1 fixed                    | YES   | NO                                      |
| Set of 2 wings only                        | NO  | YES                                     |
| Set of 2 wings + 2 fixed                   | YES   | YES                                     |
| Method of fixing to the installation space | Excellent perimeter finishing<br>(supplied as standard) | Uprights to be fitted<br>(not supplied) |
| Additional reinforcing structure           | Not provided  | As per table of dimensions              |
| Ceiling panel                              | Included  | Not provided                            |
| Rainproof roof                             | Optional  | Not provided                            |
| Size limits                                | See predefined tables of dimensions                     | Wide range of construction scenarios    |
| Redundant automation for emergency exits   | NO  | Optional                                |





# Volo

## Quiet and reliable.

Volo boasts reliability, ensured by its proven DITEC electrical and mechanical components, quiet operation, with its toothed drive belt in synthetic material and nylon wheels, and safety, through its microprocessor-based control panel. The automation easily accommodates itself to the passageway area by using all available space. Volo has a complete set of safety, control and monitoring accessories that comply with all current standards.

### PLUS

*Automation height: only 10 cm, or 18 cm for larger applications*

### Distinctive features

- Tried and tested, reliable components, already used on other DITEC automations
- Can be combined with Pam DITEC profiles or any type of wing
- Very quiet operation ensured by the toothed drive belts and nylon wheel rollers that move the wings
- Optional redundant automation
- TÜV certified
- Max automation curve angle 240°



# Onda

**Created today, designed for tomorrow.**

Onda moves through a semicircular curve angle and comprises a load-bearing structure in an closed arch that is easy to install without the need for special supporting structures. It combines beautifully with any kind of generic curved wing, but it can also be supplied as an automation complete with DITEC Pam door sets, with or without safety glass.

Onda is reliable in use and quick and easy to install, with a full range of high-performance accessories like the new ultrasound security sensors for the passageway area. Its safety features and superior performance ensure continual operation and make it ideally suited to the demands of civil or commercial premises.

## PLUS



*Tested for 3 million movements*

### Distinctive features



- Proven and reliable latest-generation components
- May be used with DITEC Pam profiles or generic wings
- Version with glass wings available
- Very quiet operation ensured by runners made of special combinations of self-cleaning and self-lubricating materials
- TÜV certified
- Max. automation curve angle 180°
- Automation with closed arch supporting structure, easy to fix to the entrance without the use of supporting structures
- Easy to maintain via the openable hinged ceiling panel and easy-to-reach components
- Optional spotlight kits



## Technical features

|                             | ONDA  | VOLO  |
|-----------------------------|---|---|
| Description                 | automation for curved sliding doors   | automation for curved sliding doors   |
| Travel control              | encoder   | encoder   |
| Capacity                    | 200 kg (2 wings)  | 160 kg (2 wings)  |
| Duty Class                  | 6 - continuous  | 5 - highly intensive  |
| Intermittent Operation      | S3 = 100%   | S3 = 100%   |
| Power Supply                |  230 V~ / 50-60 Hz |  230 V~ / 50-60 Hz |
| Input                       | 1 A   | 1 A   |
| Maximum Opening Speed       | 1.2 m/s (2 wings)   | 1.2 m/s (2 wings)   |
| Maximum Closing Speed       | 0.8 m/s (2 wings)   | 0.8 m/s (2 wings)   |
| Release for manual opening  | with handle   | with handle   |
| Operating temperature       | -20°C / +55°C (-10°C / +50°C with batteries)  | -20°C / +55°C (-10°C / +50°C with batteries)  |
| Degree of protection        | IP 20 - IP 24 (with cover)  | IP 20 - IP 24 (with cover)  |
| Automation height           | 190   | 100 / 180 (with reinforcement)  |
| Standard radius             | 900 ÷ 2000 mm   | 900 ÷ 2000 mm   |
| Maximum achievable radius   | 10 metres   | 20 metres   |
| Maximum achievable angle    | 180°  | 240°  |
| Automation arch             | min. 2700 - max. 6000 mm  | min. 2000 - max. 6000 mm  |
| PH passage height, standard | 2200 mm   | 2200 mm   |
| PH passage height, maximum  | 2700 mm   | 2700 mm   |
| Total door height           | 2390 - 2890 mm  | 2300 - 2800 mm<br>(2380 - 2880 mm with reinforcement)   |
| Control panel               | EL20A (incorporated)  | EL20A (incorporated)  |

## System functions

| Control panel   | EL20A   |
|---|---|
| Description   | for 1 motor 24 V=   |
| Mains power supply  |  230 V~ / 50-60 Hz |
| Batteries (allowing operation in the event of a power failure)                                    | ■ (optional)  |
| Energy saving  | reduced consumption during use  |
| Number of motors  | 1   |
| Motor power supply  | 24 V= / 10 A  |
| Accessories power supply  | 24 V= / 0,5 A   |
| Electrolock   | 24 V= / 1 A   |
| Courtesy light  | ■ (with MP1)  |
| Encoder speed and deceleration control  | ■   |
| Force adjustment  | electronic  |
| ODS - obstacle detection<br>halts or reverses movement if an obstacle is detected                 | ■   |
| Speed adjustment, opening   | ■   |
| Speed adjustment, closing   | ■   |
| Braking / Deceleration for optimal closing  | ■   |
| Open Command  | ■   |
| Push opening  | ■   |
| Partial Opening Command   | ■   |
| Close Command   | ■ (with MP1)  |
| Automatic Timed Closure   | ■   |
| Stop Safety Device  | ■   |
| Reverse Operation Safety Device   | ■   |
| Safety Test and safety monitoring function  | ■   |





When building the system, only use DITEC accessories and safety devices.

DITEC automations all feature CE marking and are designed and built in compliance with the safety requirements of the Machinery Directive (2006/42/EC), of the Electromagnetic Compatibility Directive (2004/108/EC) and of the Low Voltage Directive (2006/95/EC) and of other Directives, laws, specific standards for special products and situations.

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Further information can be found in the Technical Manuals available at the website: [www.ditec.it](http://www.ditec.it)



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