

The PAL 150 SPR high-speed roll-up door is particularly suitable for use in highly automated industrial environments.

It is designed to provide high performance and high protection for personnel working in proximity to automated machinery or automated production lines.



The PAL 150 SPR is specifically designed for integration into automated production systems, with specific safety features and protection of personnel from mechanical hazards (not breakable through).

The PAL 150 SPR allows interfacing with centralised PLC logic for the control and management of openings/closures.

It has a high opening and closing speed, up to 1.5 m/sec, thanks to the use of a 230 V single-phase INVERTER device with absolute multi-turn encoder, which allows adjustment of the opening, closing and door curtain approach speeds.

Product conforms to standards:

UNI EN 13241-1 Industrial and commercial locks; EN ISO 14120 Safety of machinery for the protection of persons against mechanical hazards.









# Specifiche tecniche

### Self-support structure

Made of special galvanised steel profile appropriately sized to guarantee strength and protection in all situations, even in the event of accidental impacts.

# Winding shaft

Flanged and rotating tubular steel with self-aligning ball bearings. self-aligning ball bearings.

Protective casing in galvanised sheet metal.

### **Structure options**

The structure can be made of AISI 304/316 stainless steel or painted galvanised steel (RAL colours).

#### **Drive Motor**

Three-phase self-braking powered at 230/400 Volt with power from 0.75 to 1.5 Kw, equipped with a safety thermal detector. Electromagnetic locking brake.

# **Opening speed**

0.7 to 0.9 m/sec. depending on door size

## Irreversible gear unit

Self-lubricating, variable viscosity, worm gear in direct contact with the winding shaft. Cam limit switch unit.

#### Flexible curtain

Single curtain made of polyester fabric, molded type Trevira, self-extinguishing Class 2 with reinforced cross bars made of tubular steel, inserted in special pockets in the fabric.

Large transparent PVC windows for visibility. Number of rows of windows depending on door size (one row standard). Standard mantle colour Orange, other colours available.

# **Curtain sliding**

Extremely quiet thanks to side guides with double rubber sealing profiles.

### Wind load resistance

According to EN 12424 Class 0/1. On request the resistance can be Class 2.

# Curtain options Bottom reinforcement bar

Made of sturdy aluminium profile with rubber floor seal.

# Safety devices

# **Emergency opening**

In the event of a power failure or breakdown, opening and closing is guaranteed by a special control at man height, with a snap-in on the motor unit. The PAL 200 model is equipped with a counterbalance spring inserted in one of the vertical uprights, which allows the release of the motor brake and the automatic raising of the curtain.

# Safety photocell

A pair of photocells ensures that the descent stops and the door reopens if there are obstacles in the compartment.

### Fall prevention device

In accordance with current regulations, all rapid roll-up doors must be fitted with a device that prevents them from falling in the event of a fault. PAL is equipped with an "anti-fall" system for the door curtain, which is guaranteed by the irreversible gearbox directly connected to the winding shaft.



# Optional safety devices

### Optional 2nd photocell

Can be installed at high profile height.

### Sistema elettrico

### **Electrical system**

Pre-wired with a standard terminal block for connection between control panel and remote uses (motor, photocells, controls, etc). System built in dedicated piping.

## Control panel

COIL door is supplied with an exclusive control unit with electronic management powered at 400V three-phase +N, equipped with electronic limit switches with absolute multi-turn encoder. It also offers the possibility of expansion and connection to external devices (fire safety or emergency systems) and remote control. Equipped with a large and specific display for programming, diagnostics and checking of operating cycles.

Alternatively, the door can be supplied with the exclusive electronic programmer with single-phase 230 V INVERTER, for managing and customising the upward and downward speeds of the door curtain, and for slowing down in the opening and closing limit switch phases.



# Optional partial opening

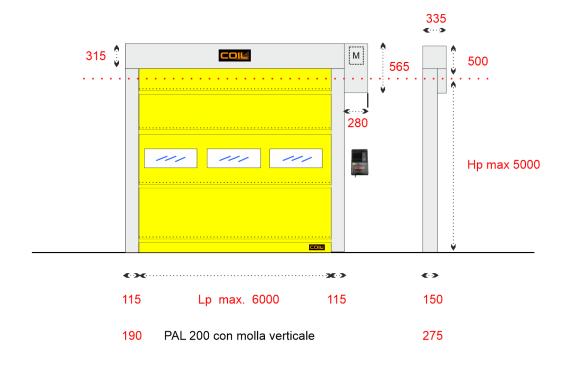
Enables automatic partial lifting of the door to a preselected height.

## **PLC logic**

Allows the door to be connected to a centralized logic of plant management.

## Optional interlocking logic

Enables interfacing of several doors.



### Garanzia

# Warranty

Standard 12 months (upon request 36 months). Manufactured with the best electronic materials and components, PAL 150 SPR doors are tested in the most severe applications in industry and commerce and are covered by a standard 12-month warranty.

### Certificazioni

### Certifications

Product in compliance with the product standard UNI EN 13241:2016 Industrial and commercial closures. All COIL doors are supplied with the original CE certificate.

CE certification ensures that construction and design of the product complies with requirements of the following safety directives:

- UNI EN 13241:2016 Product standard for Industrial and Commercial Closures
- 305/2011 Construction Products Directive
- 2014/35/EU Low Voltage Directive or LVD
- 2014/30/EU Electromagnetic Compatibility Directive or EMC Directive
- 2006/42/EC Machinery Directive
- UNI EN 12604 Mechanical aspects
- UNI EN 12453 Safety in use of motorized doors
- UNI EN 12424 Wind load resistance
- EN ISO 14120 Safety of machinery for the protection of people against mechanical hazards

# For more information:

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