



HIGH
SPEED
DOORS

Dear Sir/Madame,

Thank you for downloading the documentation for our DynamicRoll® AIR: the complete high-speed door for the outer shell of your refrigeration cell. In this accompanying letter, we would like to briefly inform you about the door. More importantly, we want to let you know that you can contact us to obtain a customized specification if it does not meet your requirements.

The Dynamicroll® AIR features integrated airflow within the door columns. When the high-speed door is opened, this airflow is activated, creating an air barrier in the opening, thereby reducing air transport through the opening and preventing condensation formation. Additionally, it is fully self-repairing and equipped with a flexible bottom bar. Its performance in terms of air permeability, thermal insulation, and durability is high.

This makes the total cost of ownership of this door very low.

The door is equipped with a photocell and anti-roll protection device. The fabric is available in sixteen colors. The control panel features a control button, emergency button, and main switch. A push button for the opposite side is also provided.

The attached specification text describes a standard refrigeration cell door. Of course, there are many options available. Therefore, we refer you to the attached options sheet. Please contact us to obtain a customized specification text.

Best regards,
BMP HIGH SPEED DOORS

The team

All our deliveries/services are subject to the General Terms and Conditions of Sale. The General Terms and Conditions have been filed with the Chamber of Commerce and are available at our office upon request.



Standards and Classifications

Applicable Regulations and Essential Characteristics:

- EN 13241 Standard
- Machinery Directive 2006/42/EC
- EMC Directive 2014/30/EC
- Low Voltage Directive 2014/35/EU

Water tightness class 1 compliant with EN 12425 standard, tested according to EN 12489.

Wind load resistance, dependent on dimensions, up to class 4 compliant with EN 12424 standard, tested according to EN 12444.

Thermal transmittance coefficient $U = W/m^2.K$: 5.01, according to EN 12428 standard.

Air permeability class 1 compliant with EN 12426 standard, tested according to EN 12427.

Safety of openings during vertical movement compliant with EN 12453 standard, tested according to EN 12445.

Mechanical aspects - Requirements and test methods compliant with EN 12604 standard, tested according to EN 12605.

Mechanical reliability according to EN 12604 standard: 1,000,000 cycles, tested according to EN 12605.



30.63.11 FLEXIBLE DOOR.

Manufacturer: BMP HIGH SPEED DOORS.

Model: DynamicRoll AIR rapid door.

Position: Internal door, door for refrigeration cells.

A rapid door with integrated air curtain and insulated fabric. As soon as the door opens, an air barrier is created in the opening.

- Opening speed: adjustable, maximum 2.0 m/s.
- Closing speed: adjustable, 0.8 m/s.
- Resistant to overpressure and under pressure.
- Width (mm): as indicated in the specification drawings.
- Height (mm): as indicated in the specification drawings.

Door leaf

- Anti-condensation fabric, opaque, 7 mm: $U = 5.01 \text{ W/m}^2\text{K}$, in RAL (see options sheet)

Windows

- Transparent PVC, with rounded corners, 1200x300 mm or 850x300 mm, depending on the daylight width, two rows.

Door frame

- Galvanized base frame;
- Covers on rollers, motor, and posts, galvanized.

Guides

- Reinforced polyethylene, PEHD 500;
- Self-lubricating (do not contain lubricants).

Motor shaft

- Aluminum.

Anti-crash

- Flexible and soft bottom bar;
- Hinge mounting;
- Reintroduction grooves in the guides.

Operation

- Automatic opening, electrically operated;
- Automatic closing, gravity.

Operation

- With 1 button on the control box, plus 1 push button (opposite side).

Safety

- Photocell safety device, built into the door posts;
- Anti-roll protection device..

**Guide**

- Electric motor with adjustable frequency and reducer, specifically designed for this type of door, speed, and dimensions;
- Soft start and stop.

Control

- Powder-coated steel control box, RAL 7016, IP54;
- Frequency controller;
- Main switch;
- Emergency stop;
- Adjustable time setting before automatic closing;
- Interlocking function between two doors.

Accessories

- Air curtain integrated into the door posts;
- Wiring;
- Absolute encoder;
- Emergency control via crank.

Wind resistance

- < L 2900 mm x H 2900 mm class 4, EN 12424;
- < L 4700 mm x H 4700 mm class 3, EN 12424;
- < L 5700 mm x H 5700 mm class 2, EN 12424.

Air permeability

- Class 1, EN 12426.

Expected service life

- 1.000.000 cycles, EN 12604.

Options Sheet

If you wish to implement any options, please contact us to obtain a customized technical data sheet:

[Contact | BMP HIGH SPEED DOORS](#)

Possible door colors, at no additional cost, approximate:

- | | | |
|--|---|---|
|  RAL 1003 (signal yellow) |  RAL 3002 (ermine red) |  RAL 7035 (light grey) |
|  RAL 2004 (pure orange) |  RAL 5002 (ultramarine blue) |  RAL 9010 (pure white) |

Windows:

- Transparent PVC, with rounded corners, 1200x300 mm or 850x300 mm, .. panels.

Controls:

- Stainless steel 304 control box, IP66;

Control Components:

- Via radar impulse, BEA Falcon type, double or single-sided.
- Via radar impulse, BEA Condor type (with stop detection), double or single-sided.
- Via pull switch, including 4-meter cable, double or single-sided.
- Via spot Tof radar, (6m action radius), double or single-sided.
- 1-channel transmitter, button type, including receiver for remote control.
- 2-channel transmitter, including receiver for remote control.
- 4-channel transmitter, including receiver for remote control.

Frame:

- Galvanized base frame, covers coated in a non-standard RAL color: RAL
- Base frame and covers coated in a non-standard RAL color: RAL
- Stainless steel 441, including covers for roller, motor, and posts.
- Stainless steel 304, including covers for roller, motor, and posts.
- Stainless steel 316, including covers for roller, motor, and posts.

Safety Components:

- Safety light curtain, built into the door posts crossing the door panel;
- Safety light curtain, built into the door posts crossing the door panel with anti-roll protection device.



Other stainless steel components:

- Winding shaft, in stainless steel 304.
- Brake, in stainless steel 304.

Emergency Control:

- Emergency control via UPS, including batteries.