



HIGH
SPEED
DOORS

Dear Sir/Madam,

Thank you for downloading the documentation for our **Dynamicroll Frigo 2 AIR**, the complete high-speed door for the exterior shell of the refrigerated cell. With this accompanying letter, we wish to briefly inform you about the door. Additionally, we want to let you know that you can contact us for a customized specification if it does not meet your needs.

The Dynamicroll Frigo 2 AIR is suitable for internal use, within the outer shell of a refrigerated cell, where both positive and negative temperatures are encountered. This door prevents ice formation on the fabric thanks to a double sheet with a 200mm spacing, through which warm air circulates. When the high-speed door is opened, the air tensioner comes into operation. From the door pillars, an air barrier is created at the opening of the opening, limiting the transfer of heat and the influx of humid air. This prevents ice formation, slippery floors, and maintenance, especially of the refrigerants of the refrigerated cell. Additionally, it is fully self-sanitizing and equipped with a flexible skirting. The 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 photoelectric sensor and an anti-pinch device. The fabric is available in sixteen colors. The electrical panel includes a control button, an emergency stop button, and a main switch. A knob for the opposite side is included.

The attached specification text describes a door for standard refrigerated cells. Of course, many options are available. For these, we refer to the attached options sheet. Please contact us for a customized specification.

Best Regards,
BMP HIGH SPEED DOORS

The team

All our deliveries/services are subject to our General Terms and Conditions of Sale. These 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/EC

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

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

Thermal transmittance coefficient $U = W/m^2.K$: 2.2, according to EN 12428 standard.

Air permeability class 4 compliant with EN 12426 standard, tested according to EN 12427 standard.

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

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

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



30.63.11 FLEXIBLE DOOR.

Manufacturer: BMP HIGH SPEED DOORS.

Model: Dynamicroll Frigo 2 AIR rapid door

Position: Internal door, outer shell of the refrigeration cell..

A rapid door with two PVC curtains, separated by a space of approximately 20 cm. A hot air blower circulates air between the curtains to prevent condensation and ice formation. As soon as the door opens, an air barrier is created in the opening, thanks to an air tensioner integrated into both door pillars.

- Opening speed: adjustable, maximum 1.8 m/s.
- Closing speed: adjustable, 0.8 m/s.
- Resistant to overpressure and underpressure.
- Width (mm): as indicated in the specification drawings.
- Height (mm): as indicated in the design drawings.

Door leaf

- Two PVC curtains, opaque, 900 grams/m² in RAL color (see options sheet);
- Internal space of 200 mm.

Windows

- No windows.

Door frame

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

Guides

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

Motor shaft

- 2 shafts, aluminum.

Anti-crash

- Flexible and soft bottom bar;
- Zipper hinge attachment;
- Reintroduction grooves in the guides.

Operation

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

Operativity

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

Safety

- Photocells, crossing the door leaf, incorporated into the frame;
- Winding sensor..



Guide

- Adjustable frequency electric motor with reducer, specific for this type of door, speed, and dimensions;
- Chain transmission;
- Gradual start and stop.

Control

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

Accessories

- Air blower (air circulation in the internal space);
- Heating element;
- Air tensioner integrated into the door pillars;
- Wiring;
- Absolute encoder;;
- Emergency manual crank operation.

Wind resistance

- < L 2850 mm x H 2850 mm class 4, 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 receive a personalized technical data sheet:

[Contact | BMP HIGH SPEED DOORS](#)

Possible door colors, at no additional cost, approximate:

RAL 1003 (signal yellow)	RAL 5012 (light blue)	RAL 7042 (traffic grey A)
RAL 1015 (light ivory)	RAL 6018 (yellow green)	RAL 8017 (chocolate brown)
RAL 2004 (pure orange)	RAL 6026 (opal green)	RAL 9005 (jet black)
RAL 3002 (ermine red)	RAL 7016 (anthracite grey)	RAL 9010 (pure white)
RAL 5002 (ultramarine blue)	RAL 7035 (light grey)	
RAL 5010 (gentian blue)	RAL 7037 (dust grey)	

Air Permeability:

- Class 4, EN 12426.

Controls:

- Stainless steel 304 control box, IP66;

Control Components:

- Via radar impulse, BEA Falcon type, bi-directional or uni-directional.
- Via radar impulse, BEA Condor type (with stop detection), bi-directional or uni-directional.
- Via pull switch, with 4-meter cord, bi-directional or uni-directional.
- Via Tof-spot radar, (6m1 range), bi-directional or uni-directional.
- Single-function transmitter, button-type, including remote control receiver.
- Two-channel manual transmitter, including remote control receiver.
- TFour-channel manual transmitter, including remote control receiver.

Frame:

- Galvanized base frame, covers painted in a non-standard RAL color: RAL
- Base frame and covers painted in a non-standard RAL color: RAL
- In stainless steel 441, including covers on rollers, motor, and pillars.
- In stainless steel 304, including covers on rollers, motor, and pillars.
- In stainless steel 316, including covers on rollers, motor, and pillars.

**Safety Components:**

- Light barrier, integrated into the door pillars, crossing the door leaf;
- Light barrier, integrated into the door pillars, crossing the door leaf along with the winding sensor

Other stainless steel components:

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

Emergency Control:

- Emergency control via UPS, including batteries.