DIVA ECO ENERGY Sliding door with Thermal Bridge Break



Performance and thermal comfort

New design with pure lines

Thermal conductivity(1) Uw: 2 W/m2.K

Insulation glazing up to 36 mm

DIVA ECOENERGY is the first Thermal Break automatic door. Combining technical performance and style, it contributes to:

- improving thermal comfort in buildings in winter as in summer
- facilitating the contribution made by natural light to reduce lighting needs (energy-saving)
- acting on energy consumption in terms of heating and air conditioning systems.

(1) Thermal conductivity on a bay H2700 x W4190 (passage H2500 x W2000 mm) / low emissivity glazing / calculation according to the EN14351 standard







In summer as in winter, you benefit from optimal comfort guaranteeing natural light and energy savings



The improvement of a building's energy performance implies consideration of all the elements of a façade.

If glass illustrates trends in current buildings, on the inside as well as the outside, glazed façades as automatic doors must, more than ever, meet two objectives: allow maximum light to pass (sunlight) while optimizing heat and phonic insulation.

The DIVA ECOENERGY thermal performance is based on a combination of three essential components: a Thermal Break casing and frame, a low emissivity insulation glazing.

- The G50 Thermal Break range is conceived with subdivisions made
 of nylon bars increasing the thermal break between the inside and
 outside. Each profile in the G50 TBB range has been designed in
 this way with a view to its thermal performance, whatever is the
 installed configuration (Surface applied or between walls).
- The DIVA operator is fitted with a new articulated cover with soft and contemporary lines. With the same conception, the casing is equipped with polyamide bars mending the thermal bridge with the structure.
- In order to improve the energy performance of any building, the use of insulation double glazing is essential. The range of G50 TBB profiles is combined with low emissivity double glazing with "Argon" gas filling, the low thermal conductivity of which results in its high insulation capacity.



G50 TBB frame



DIVA TBB casing

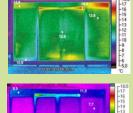


Insulation glazing

What more relevant than a photo for highlighting the thermal behaviour of two types of doors?

A map of the surface temperatures can be made using infra-red thermography. The study conducted was purely for educational and demonstration purposes but the result is eloquent.

 $U^{(1)} = 2 W/m^2.K$



Standard aluminium frame and 44/2 glazing*



DIVA ECOENERGY*

*Tests carried out independent Alldiag38 laboratory / Test conditions: Temp. in 25°C/out 8°C.



Energy saving is now at the heart of people's concerns.

In a sector that is changing and in which new construction rules are being imposed in order to improve the energy performance of buildings, Portalp is relying on its know-how and expertise to offer an innovative solution of automatic doors meeting the highest thermal requirements.

Thermal comfort and security

Proposed with a wide choice of finishes, DIVA ECOENERGY is definitely part of a sustainable energy approach, improving comfort and well-being in buildings.

 An automatic retractable plinth is proposed to insure a perfect airtightness on the ground. This cold-free floor device puts a pressure on the floor during door

Automatic retractable plinth

closing and prevents the inside / outside air exchanges.

For optimum security, various equipments are proposed:

- An automatic locking, that can be ordered from a transmitter key or standard key, allow to close the door easily
- A panic bolt, integrated into the leaf, ensures a high and low door locking



Controls and detection

To provide your project with the best solution, a wide range of controls and detection mechanisms are offered.

- Standard controls to ensure fluidity and safety of passage
- Specific controls for customized access control
- Controls for disabled people with reduced mobility

A complete equipment provides all the comfort and safety of operation for the user.



Naviblu



Visioblu and S remote control



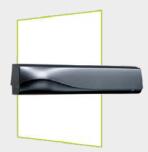
Console 4T



80 mm 6-position key selector



40 mm 6-position key selector



Hyperfrequency detection and active Infrared security

| MECHANICS | | DIVA ECOENERGY SLIDING - G50RPT |
|-----------------------|-----------------------|---|
| Installation | | Surface applied / Between walls / Against posts |
| Structure | | Aluminium |
| Casing (H x P) | Applied | 200 mm x 200 mm |
| | Self supporting up to | 7 200 mm |
| Passage width min/max | 1 leaf | 750 / 1 800 mm |
| | 2 leaves | 900 / 2 900 mm |
| Max. passage height | | 3 100 mm |
| Max. glazing | | 36 mm |
| PERFORMANCES | | |

| PERFORMANCES | |
|---|---|
| Thermal transmission coefficient U ⁽¹⁾ | 2 W/m².K |
| Max leaf weight | $1 \times 140 \text{ kg} / 2 \times 140 \text{ kg}$ |
| with IME / for Emergency exit | 1 x 125 kg / 2 x 100 kg |
| Opening speed per leaf | 1 leaf : 10 to 100 cm/s - 2 leaves : 20 to 200 cm/s |
| Closing speed per leaf | 1 leaf : 10 to 60 cm/s - 2 leaves : 20 to 120 cm/s |
| Hold open time | 1 to 15 s |
| Opening force | 6 to 25 daN |
| Closing force | 6 to 25 daN |
| | |

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ELECTRICAL ENVIRONMENT

| Power supply | Mains 50-60 Hz, 230V +10% with earth |
|-----------------------------------|---|
| Average absorbed power | 50 W |
| Motor voltage / Emergency battery | 40 Vcc / 12 Vcc |
| Relative humidity | 10% to 93% without condensation |
| Operating temperature | -20°C / +60°C - Emergency exit door according to EN16005 : +5°C / +40°C |

NORMES

| EN 14351, RT2012 | Thermal directives |
|--------------------|---|
| EC | Electromagnetic compatibility: 2004/108/CE directive, Electrical security - Low voltage : 2006/95/CE, Machines:2006/42/CE directive |
| EN 60 335-1/-2-103 | Safety of household and similar electrical appliances |
| EN 61000-6-3 | EMC: emission for residential, commercial and light-industrial environments |
| EN 61000-6-2 | EMC: immunity for industrial environments |
| EN 16005 | Power operated pedestrian doors : safety in the use |

EQUIPMENTS / OPTIONS*

| EQUIPMENTS / OF HONS | |
|----------------------------------|---|
| Panic bolt (european cylinder) | • |
| Key bolt (european cylinder) | 0 |
| Retractable ground plinth 0-16mm | 0 |
| Outside safety unlocking | 0 |
| Built-in rail | 0 |

• Standard O Option





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