

# DIVA ECOENERGY door

Sliding door with **T**hermal **B**ridge **B**reak



- **Performance and thermal comfort**
- **New design with pure lines**
- **Thermal conductivity<sup>(1)</sup>  $U_w$  : 2 W/m<sup>2</sup>.K**
- **Insulation glazing up to 1 4"**

**DIVA ECOENERGY** is a Thermal Break automatic door. Combining superior performance and style, it provides:

- improved thermal comfort in buildings in winter and summer.
- accentuates the contribution made by natural light to reduce lighting needs (energy-saving).
- reduces energy consumption for heating and air conditioning systems.

<sup>(1)</sup>Thermal conductivity on a bay Thermal conductivity of a bay H106 3" x W164.9" (opening H98.4" x W78 7" | Low emissivity glazing | calculation according to the EN14351 standard.

## DIVA ECOENERGY In summer and winter, you benefit from optimal comfort from natural light and energy savings.



The improvement of a building's energy performance enlightens consideration of all of the elements of a façade. If glass illustrates trends in current buildings, on the inside as well as the outside, glazed façade as automatic doors must, more than ever, meet two objectives : allow maximum light to pass (sunlight) while optimizing and noise insulation.

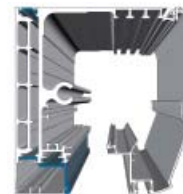


**DIVA ECOENERGY** is the first Thermal Break automatic door. Its thermal performance is based on a combination of three essential components: a Thermal Break casing and frame, a low emissivity insulated glazing.

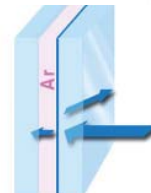
- The G50 Thermal Break range is conceived with subdivisions made of nylon bars increasing the thermal break between the inside and outside. Each profile in the G50 TBB range has been designed in this way with a view to its thermal performance, for both configurations (Surface applied or between walls).
- 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 creating the thermal bridge with the structure.
- In order to improve the energy performance of any building, the use of insulated 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



Insulated glazing

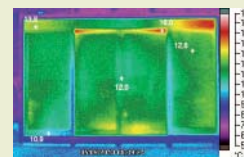


### What more relevant than a photo for highlighting the thermal behaviour of two types of doors?

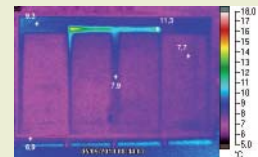
A map of the surface temperatures can be made using infra-red thermography. The study conducted was purely for educational and demonstration purposes but the result is eloquent.

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

(1) Thermal conductivity of a bay H106 3" x W164.9" (opening H98.4" x W78 7"



Standard aluminium frame and 44/2 glazing\*



DIVA ECOENERGY\*

\*Tests carried out independent Alldiag38 laboratory  
Test conditions : Temp. in 77°F/out 46°F.



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 (RT2012).

### 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 pressure on the floor when the door closes and prevents the inside / outside air exchanges.
- For optimum security, various equipment is proposed:
  - Automatic locking, that can be ordered from a transmitter key or standard key, to allow the door to close easily.
  - A panic bolt, integrated into the leaf, ensures top and bottom door locking.



Automatic retractable plinth



### Controls and detection

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

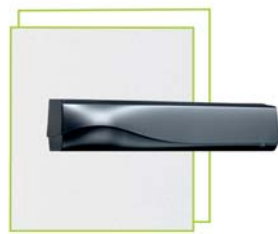
- Standard controls to ensure fluidity and safety of passage.
- Specific controls for customized access control.
- Controls for disabled people with reduced mobility.



NAVIBLU



VISIOBLU and S Remote control



Active infrared



IR key



Hyperfrequency detection



## Specifications

### MECHANICS

### DIVA ECOENERGY - G50 TBB

Installation	Surface applied / Between walls / Against posts
Structure	Aluminium
Reinforced casing (H x D)	7.8" x 7.8" mm
Self supporting casing up to	283.4"
Passage width min/max	
- 1 leaf	29.5" / 70.8"
- 2 leaves	35.4" / 114.1"
Max. passage height	122"
Max. glazing	1.4"

### PERFORMANCES

Thermal transmission coefficient U <sup>(1)</sup>	2 W/m <sup>2</sup> .K
Max leaf weight	1 x 308 lbs / 2 x 308 lbs
with IME/ for Emergency exit	1 x 275 lbs - 2 x 220 lbs
Opening speed per leaf	1 leaf: 4 to 39 in/s - 2 leaves: 7 to 78 in/s
Closing speed per leaf	1 leaf: 4 to 23 in/s - 2 leaves: 7 to 47 in/s
Holding open time	1 to 15 s
Opening force	44 to 185 ft.lbs
Closing force	44 to 110 ft.lbs

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

### ELECTRICAL ENVIRONMENT

Power supply	Mains 50-60 Hz, 230V +10% with earth
Average absorbed power	50W
Motor voltage / Emergency battery	40 Vdc / 12 Vdc
Relativity humidity	10% to 93% without condensation
Opening temperature	-68°F / +140°F - Emergency exit door according EN16005 : +41°F / +104°F

### STANDARDS

ANSI 156.10	Full energy power operators
UL 325	Power door operators
NFPA 101	Life Safety Code
FCC part 15	Unintentional radiators

## Equipments / Options

Panic bolt (european cylinder)	○
Key bolt (european cylinder)	○
Retractable ground plinth 0-0.63"	○
Outside safety unlocking	○

● Standard ○ Option

\* others standards equipments : see DIVA brochure



Certified management system



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