

Specifications



DIVA ECOENERGY - G50 TBB

MECHANICS

Installation	Surface applied / Between walls / Against posts
Structure	Aluminium
Reinforced casing (H x D)	7.8" x 7.8"
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 ⁽¹⁾	2 W/m ² .K
Leaf weight	1 x 330 lbs / 2x 220 lbs
Opening speed per leaf	4 to 39 in/s
Closing speed per leaf	4 to 23 in/s
Hold 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 H106.3"x W164.9" (passage H98.4"x W78.7") /low emissivity glazing / calculation according to the EN14351 standard

ELECTRICAL ENVIRONMENT

Power supply	120 VAC - 60Hz
Maximum / Average absorbed power	500W / 40W
Motor voltage / Emergency battery	40 Vcc / 12 Vcc
Relative humidity	10% to 93% without condensation
Operating temperature	-4 °F / +140 °F

STANDARDS

EN14351, RT2005, project RT 2010 project	Thermal directives
EC	Complies with European directives for electrical security, EMC, construction products, machines
EN 60 335-1	Electrical security
EN 61 000 - 6-3	EMC: emission for residential, commercial and light-industrial environments
EN 61 000 - 6-2	EMC: immunity for industrial environments

Equipments / Options*

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

• Standard o Option

* others standards equipments: see DIVA doc.

DIVA ECOENERGY door

Sliding door with Thermal Bridge Break



- Performance and thermal comfort
- New design with pure lines
- Thermal conductivity ⁽¹⁾ U_w : 2 W/m².K
- Insulation glazing up to 1.4"

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 H106.3"x W164.9" (passage H98.4"x W78.7") / low emissivity glazing / calculation according to the EN14351 standard



PORTALP USA INC.



DIVA ECOENERGY

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.



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 (RT2005, draft RT 2010 project).



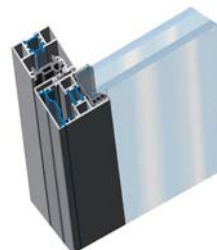
DOUBLE SLIDING



SINGLE SLIDING

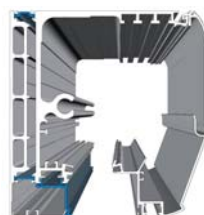
DIVA ECOENERGY is the first Thermal Break automatic door. Its thermal performance is based on a combination of three essential components: a Thermal Break casing and frame, a low emissivity insulation glazing.

- The G50 (1.97") 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).



G50 TBB frame

- 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.



DIVA TBB casing

- 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.



Insulation glazing

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 closing and prevents the inside / outside air exchanges.



Automatic retractable plinth

- 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.



NAVIBLU



Active infrared security



IR key



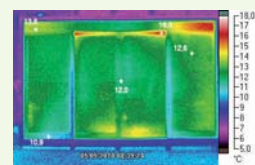
Hyperfrequency detection

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

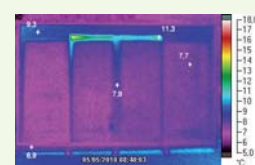
A map of the surface temperatures can be made using infra-red thermography. The study conducted was purely for educational and demonstration purposes but the result is eloquent.

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

⁽¹⁾ Thermal conductivity of a bay H106.3"x W164.9" (that is an 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 58°F/out 18°F.