

## **HIGH-SPEED SPIRAL DOOR, model "EFA-SST®-ÜS Premium"**

Manufacture, delivery and installation of:

High-speed spiral door, model "EFA-SST®-ÜS Premium", with electro-mechanical high-performance door drive for permanent use for the most heavy-duty, industrial applications

The door system primarily consists of:

self-supporting lateral steel frames, steel parts (which are generally galvanized) and spiral-shaped door blade attachment

The force is applied on both sides: To achieve this, a synchronised drive is installed. Ball-bearing precision rolling units have to be used for the precise, smooth and low-noise guidance of the hinge strips. A sufficiently dimensioned tension spring mechanism, ensuring the weight balancing of the door blade and manual opening of the door (e.g. in the case of a power failure), is installed in the door frames, in accordance with DIN EN 12604.

Door blade made from double-walled, thermally separated and insulated EFA-THERM® laths (80 mm), which are fixed onto hinge strips and moved vertically (i.e. up or down), surface finish is a 2-layer coating similar to RAL 9006 (White Aluminium).

The SPIRAL BODY is designed to guide the laths of the door blade entirely without contact, and therefore without wear, and with best noise reduction possible.

Spiral form: Round spiral

The door system is equipped with a locking mechanism. An internal hand lever is used to operate the mechanism.

The DOOR is driven by a gear brake motor, which must be designed as high-frequency motor. The door positions are detected by means of non-wearing, inductive proximity switches, whereby the limits are determined electronically. Electro-mechanical limit switches are not permissible here.

**OPENING SPEED:** up to approx. 1.0 m/s  
**Max. DOOR BLADE SPEED:** up to approx. 1.2 m/s  
(depending on the door size)  
**CLOSING SPEED:** up to approx. 0.8 m/s

The **MICROPROCESSOR CONTROL** is installed along with the integrated frequency converter in a steel switch cabinet, protection class IP 65. Connection to 400V / 50 Hz power supply on-site.

The scope of delivery includes a DOOR LIGHT CURTAIN (EFA-TLG®), TÜV-certified and works precisely in the door closing line: The safety system is completely integrated and protected in the lateral frames and generates a very tight light curtain of infrared beams up to a height of 2.5 metres. Obstructions are detected without contact and the automatic closing movement is stopped immediately.

Regulations pursuant to DIN EN 13241-1 are complied with;

Heat insulation in accordance with DIN EN 12428, up to 0.66 W/m²K

Resistance to wind load in accordance with DIN EN 12424, up to class 4

Airborne sound insulation in accordance with DIN EN 7171, up to 26 dB(A)  
(values dependant on the door size and equipment)

for clear passage opening dimensions

Width = ..... mm x Height = ..... mm

**OPTIONS available for the high-speed spiral door, model “EFA-SST®-ÜS Premium”:**

**Surface**

Powder coating of all visible, galvanised steel parts in RAL \_\_\_\_\_ (metallic colours cannot be used)

Special coating of the laths in RAL \_\_\_\_\_

If steel parts as well as laths parts are coated in the same RAL shade, minor deviations in colour, which cannot be fully avoided, may occur due to the different surface structures of the materials. However, the supplier will do their best to keep deviations in colour to a minimum by altering the amount of gloss.

**Transparency / Door blade design:**

Surcharge for fully transparent, double-walled and thermally separated window inserts made from acrylic glass, with integrated standard laths; number of pieces depends on the width.