

## **HIGH-SPEED TURBO ROLL-UP DOOR, type "EFA-STR®-S N"**

Manufacture, delivery and installation of:

High-speed turbo roller door type "EFA-STR®-S N", with electro-mechanical high-performance door drive for continuous industrial use.

The door system primarily consists of:

Self-supporting steel side frames, steel parts (which are generally galvanised) and spiral-shaped door-leaf attachments.

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 leaf 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.

The flexible DOOR LEAF is generally made of non-wearing, single-walled PVC fabric and is moved up and down with a non-positive fit. Four standardized segment fields are connected to individual modules that can be exchanged quickly and easily. Available curtain colours: blue, red, yellow and grey. A transparent field of view with a nominal height of approx. 900 mm can be supplied on request at no extra cost. The curtain is precisely guided laterally so that lengthening is excluded. Anodized aluminium bars reinforce the door leaf. The modular design ensures that individual sections can be replaced quickly and inexpensively.

The SPIRAL BODY is designed in such a way that the laths of the door leaf are guided past each other completely without contact and therefore without wear and tear.

Spiral shape: low fall

The DOOR DRIVE is carried out by means of a geared brake motor, which is to be designed as a high-frequency motor. The door positions are permanently recorded using non-wearing, inductive proximity switches, with the end positions being determined electronically. Electromechanical limit switches are not permitted for this.

<b>OPENING SPEED:</b>	<b>Up to approx. 2.2 m/sec.</b>
<b>Max. DOOR LEAF SPEED:</b>	<b>Up to approx. 2.5 m/sec.</b> (depending on door size)
<b>CLOSING SPEED:</b>	<b>Up to approx. 1.0 m/sec.</b>

The MICROPROCESSOR CONTROL is installed together with the integrated frequency converter in a separate plastic switch cabinet, protection Class IP 65. Connection to electricity 230V, 50 Hz on site.

The scope of delivery includes an electrical safety contact edge according to DIN EN12453, self-monitoring: the supply cable must be routed in a protected energy chain within the door frame.

Regulations according to DIN EN 13241-1 are fulfilled;  
Resistance to wind load according to DIN EN 12424 up to Class 3  
Airborne sound insulation according to DIN EN 7171 up to 12 dB(A)  
(Values depend on the door size and equipment)

for clear passage opening

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

### **OPTIONS for High-Speed Turbo Roll-Up Door "EFA-STR®-S N":**

#### **Surface**

Powder coating of all galvanised steel parts in a colour according to RAL \_\_\_\_\_ (metallic colours are not available)

Stainless steel version (V2A) of all visible steel parts, visible surface ground, grit 220, incl. control cabinet made of V2A, incl. guide rollers with V2A bearings, e.g. for wet operation

#### **Default Speed:**

Reduced price for version with standard speed:

**OPENING SPEED:** Up to approx. 1.6 m/sec.

**Max. DOOR LEAF SPEED:** Up to approx. 2.0 m/sec.  
(depending on the lifting height)

**CLOSING SPEED:** Up to approx. 1.0 m/sec.

#### **Alternative Security System:**

Supplement for self-monitoring, TÜV-tested DOOR LIGHT GRID (EFA-TLG®), fully protected and integrated in the side frames of the door. The light curtain acts directly on the door closing level and creates an almost full-surface infrared light curtain up to a height of 2.5 m. Obstacles are detected without contact. The closing movement then stops immediately. This means that reverse operation can be initiated at a much earlier point in time. Contact edge and/or light barrier(s) are omitted.