HIGH-SPEED TURBO ROLL-UP DOOR, type "EFA-STR®-L ACS-DS"

Manufacture, delivery and installation of:

high-speed turbo roll-up door, type "EFA-STR®-L ACS-DS", with electro-mechanical high-performance door drive for permanent industrial applications

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.

Crash version:
Door system with "ACS-DS" (Active Crash System), consisting of 900 mm hinge strips, which are connected to and can be detached from one another. Power transmission through direct synchronous drive and two linear moving pistons. Crash recognition through inductive proximity switches integrated on both sides of the end profile. Optional restarting of the door through:
fully automatic retraction, manual retraction using the membrane keyboard or key switch

The flexible DOOR LEAF is generally made of wear-free, single-walled PVC fibre and is moved upwards and/or downwards in a force-closed manner. Four standardised segment fields are connected to form individual modules each, which can be exchanged easily and quickly. Curtain colours available: blue, red, yellow and grey. Upon request, a transparent window with a nominal height of about 900 mm is available without surcharge. The curtain is laterally guided in a manner so that linear expansion is ruled out. Anodised aluminium posts reinforce the door leaf. The modular structure ensures a quick and low-cost exchange of individual sections.

The SPIRAL BODY is designed to guide the laths of the door leaf entirely without contact, and therefore without wear, and with best noise reduction possible.
Spiral form: Round spiral
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. 3.6 m/s**
Max. DOOR LEAF SPEED: **up to approx. 4.0 m/s**
(depending on the door size)
CLOSING SPEED: **up to approx. 1.0 m/s**

The **MICROPROCESSOR CONTROL** is installed along with the integrated frequency converter in a separate plastic switch cabinet, protection class IP 65. Connection to 230V / 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;
Resistance to wind load in accordance with DIN EN 12424, up to class 3
Airborne sound insulation in accordance with DIN EN 7171, up to 12 dB(A)

(values dependant on the door size and equipment)

for clear passage opening dimensions
Width = ... mm x Height = ... mm

<u>OPTIONS for high-speed turbo roll-up door, type “EFA-STR®-L ACS-DS”:</u>

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 polished, grain size 220, incl. switch cabinet made of V2A, incl. guide rollers with V2A bearings, e.g. for wet operations

Standard speed:
Reduced price for version with standard speed:
OPENING SPEED: up to approx. 1.6 m/s
Max. DOOR LEAF SPEED: up to approx. 2.0 m/s
(depending on the lifting height)
CLOSING SPEED: up to approx. 1.0 m/s