**HIGH-SPEED TURBO DOOR, type “EFA-STT®-L ACS-DS”**  
  
Manufacture, delivery and installation of:  
  
High-speed turbo door, type “EFA-STT®-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 door leaf consists of laths with a frame made of anodised aluminium as well as transparent infill made of single-walled acrylic glass. The visible surface of the door leaf must be at least 70%, and optical clarity must be ensured permanently.  
  
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. 2.0 m/s  
Max. DOOR LEAF SPEED: up to approx. 2.5 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;  
Airborne sound insulation in accordance with DIN EN 7171, up to 18 dB(A)  
(values dependant on the door size and equipment)  
  
for clear passage opening dimensions  
  
Width = ............... mm x Height = ............... mm

**OPTIONS for high-speed turbo door “EFA-STT®-L ACS-DS”:**  
Surface  
Powder coating of all visible, galvanised steel parts in RAL \_\_\_\_\_\_\_\_\_\_ (metallic colours are not available)  
  
Powder coating of the lath posts in a colour according to RAL \_\_\_\_\_\_\_  
  
If steel parts as well as lath 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.  
  
**Door blade design:**  
Surcharge for door leaf filling of single-walled, non-transparent plastic (colour: aluminium-grey).  
  
Surcharge for transparent fillings made from scratch-proof coated polycarbonate  
  
Surcharge for ventilation laths made from single-pane aluminium