HIGH-SPEED TURBO DOOR, type "EFA-STT®-L N"

Manufacture, delivery and installation of:

High-speed turbo door type "EFA-STT®-L 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 door leaf consists of a frame made of anodised aluminium as well as of a middle area which is made of transparent, single-walled acrylic glass. The visible surface of the door leaf must be at least 70%, and optical clarity must be ensured permanently.

The door guide is designed in such a way that the laths of the door leaf are guided completely without contact and are therefore wear-free and quiet.

Spiral shape: low lintel design

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.

OPENING SPEED:	**Up to approx. 1.5 m/sec.**
Max. DOOR LEAF SPEED:	**Up to approx. 1.8 m/sec.** (depending on door size)
CLOSING SPEED:	**Up to approx. 1.0 m/sec.**

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 4
Thermal insulation according to DIN EN 12428 up to 6.5 W/m²K
Airborne sound insulation according to DIN EN 7171 up to 20 dB(A)
(Values depend on the door size and equipment)

for clear passage opening

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

OPTIONS for High-Speed Turbo Door "EFA-STT®-L N":

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

Powder coating of the slat bars in a colour according to RAL _____

If both steel parts and slat parts are coated in the same RAL colour, slight colour differences can occur which cannot be completely ruled out due to the different surface structures. However, due to the possibilities of influencing the degree of gloss, the supplier must take the greatest possible precautions to keep the colour deviations as small as possible.

Door Leaf Design:
Supplement for door leaf filling made of single-walled, opaque plastic (aluminium-grey).

Supplement for transparent fillings made of scratch-resistant coated polycarbonate

Supplement for ventilation laths made of single leaf aluminium

Burglary Protection:
Allowance for a mechanical locking mechanism. An internal hand lever is used for actuation.

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.