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SECIFICATION - Cleanroom

POS.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
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01.01 Cleanroom doors

01.01.0010 HIGH-SPEED TURBO DOOR

Leading Product: **EFAFLEX Typ „EFA-STT® CR“**

Manufacture: **0.000 x 0.000 mm**

Manufacture, delivery and installation of:

High-speed turbo door type 'EFA-STT® CR' with electromechanical high-performance drive for continuous industrial use, preferably in clean rooms up to ISO class 8. This results in an air loss of up to 50 m³/h for air pressure differences of up to 30 Pa (depending on size and installation side).

Self-supporting, lateral steel frames; steel parts galvanised as standard, spiral door leaf mounting and complete cladding (can be folded down for inspection purposes). Force is applied on both sides: a synchronous shaft is installed for this purpose. Precision roller assemblies with ball bearings are used to ensure precise, smooth and quiet guidance of the hinge strips (with special labyrinth seals).

A sufficiently dimensioned tension spring mechanism is also installed in the door frames, which, in accordance with DIN EN 12604, ensures the weight balance of the door leaf and guarantees manual opening of the door (e.g. in the event of a power failure).

Door leaf consisting of two outer rails made of anodised aluminium and a central section made of transparent, single-shell acrylic glass. The visible surface area of the door leaf of at least 70% ensures permanent clarity.

The spiral body is designed so that the slats of the door leaf pass each other completely contact-free and thus wear-free and quietly.

The door is driven by a gear motor brake, which must be designed as a high-frequency motor. The door positions are continuously monitored by an absolute encoder.

The scope of delivery includes a one-way light barrier, which is integrated into the door frame, and an electric safety contact strip in accordance with DIN EN12453, which is self-monitoring. The supply cable must be protected in an energy chain inside the door frame.

An emergency stop switch is fitted as standard on the control cabinet.

The MICROPROCESSOR CONTROL is installed together with the integrated frequency converter in a separate plastic control cabinet, protection class IP 65. Connection to 230V or 400V -50 Hz power supply on site.

All regulations in accordance with DIN EN 13241 are fulfilled. Resistance to wind load in accordance with DIN EN 12424 up to class 4. (The values depend on the door size and equipment)

OPENING SPEED: ca. 2,5 m/sec.
MAX: DOOR LEAF SPEED: bis ca. 3,0 m/sec. (depending on door size)
CLOSING SPEED: ca. 1,0 m/sec.

With functional testing and commissioning for clear opening:

Width = mm x Height = mm

Product offered:

EFAFLEX Typ „EFA-STT® CR“
 (Bidder's specification)

1,000 pieces

01.01.0020	Spiral cover at bottom and front: Galvanised sheet metal, powder-coated or stainless steel (V2A) (Mandatory for door heights below 2,500 mm) 1,000 pieces
01.01.0030	Spiral cover at top as dust cover: Galvanised sheet metal, powder-coated or stainless steel (V2A) (Not available for installation on the cold side) 1,000 pieces
01.01.0040	Infrared presence detector: With active detection of moving AND stationary objects. For personal and gate protection. Various designs: • Above the gate system on the wall. Colour: black or white. 1,000 pieces
01.01.0050	Contactless pulse generator: Type 'Magic Switch Chroma' Various designs: • Surface-mounted on the wall with an installation height of 20 mm • Flush-mounted on the wall with an installation height of 7 mm 1,000 pieces
01.01.0060	Clean room-compatible push buttons: Push button TYPE Jung LS 990 in various designs 1,000 pieces
01.01.0070	Traffic light displays: LED-CR, red/green Various versions: • Flush-mounted, incl. flush-mounted box for wall mounting 1,000 pieces
01.01.0080	Independent power supply UPS-EDO-CR: in separate control cabinet (380x600x210) with plug-in connection, 230 volts / 50 Hz designed for at least one complete gate movement (opening or closing) at reduced running speed (availability: max. 1 hour) Continuous ambient temperature up to max. 25°C Optional: push button for the opposite side, flush-mounted or surface-mounted 1,000 pieces
01.01.0090	Independent power supply UPS-ADO: In separate control cabinet (380x600x210 mm) Ready to plug in, designed for 230 V AC voltage, for at least ten complete gate cycles at regular running speed (availability with active UPS: max. 1 hour), continuous ambient temp. max. +25 °C Standard cable length to door control max. 5 m Optional: Push button for the opposite side, flush-mounted or surface-mounted 1,000 pieces

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GVM control extension:
Mutual interlocking of two
EFAFLEX high-speed doors incl. cabling
up to max. 5 m in on-site cable routing

1,000 pieces

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Control extension for conveyor technology:
Separate terminal area in standard control cabinet
For the following inputs and outputs:
Inputs: Pulse open, pulse closed, emergency stop, interlock
Pulse generator
Outputs: Potential-free signal door open, door closed,
potential-free signal ready/fault
(outputs assignable with max. 24 volts DC)

1,000 pieces

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01.01

CLEAN ROOM DOORS

Total: