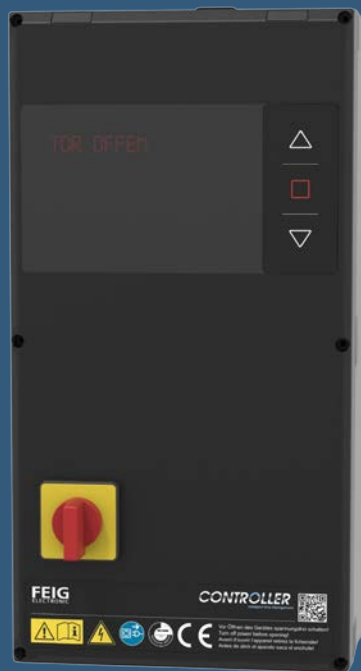


TRICON

TST FU3F-AH/-CH/-FH

Door control unit with integrated frequency converter (2.2 kW, 4 kW, 5 kW) for all door types



SPECIAL FEATURES

- In large plastic housing (IP65) or as board available
- Electronics on change frame for variable mounting in various housings (e.g. stainless steel housing for food industry)
- Easy installation in each housing by constant connection diagram (Plug & Play)
- 2 slots for radio and loop detector
- Safe 24 V brake control with monitoring according to EN 13849
- Suitable for all door types
- Operation of AC motors up to 5 kW





ADDITIONAL FUNCTIONALITY

- Voltage range 3~ 200 V_{AC}...480 V_{AC} +/-10%
- Conformity to latest standards (TÜV, CE)
- 24 V safety low voltage according to EN 60335-1
- ESD resistance up to 25 kV
- 2 integrated control electronics for several safety edges (1k2 / 8k2 and optical systems)
- 2 slots for 2-channel radio, 2-channel detector or 6-channel safety edge evaluator
- Year time switch with buffer
- Transistor outputs for testing, LEDs and keypad
- LEDs on the inputs (function monitoring)
- USB interface for service purposes (Updates etc.)
- Connection for I/O extension board (for 6 inputs, 7 outputs, 2-channel detector, external display, RS485- and CAN interface)
- Connection for the interface board TST RFUFxCOM for parallel operation of two gates
- Mechanical or electrical limit switch operation
- Inc. CEE plug as main switch
- Colored plug in terminals for all control functions
- Up to 20 (+6) digital inputs and 3 (+6) relay outputs are factory adjusted for standard applications – various special functions can be adjusted by parameter: functionality, operation mode, contact, warning- and hold open time, direction, diagnostic texts for plaintext display,...
- Optimized operation of WiCAB radio safety system
- PC toolbox for advanced configuration and diagnosis

TECHNICAL DATA

Order descriptions

TST FU3F-AH (2.2 kW, 5 A)
TST FU3F-APR (2.2 kW, 5 A, board on change frame)

TST FU3F-CH (4.0 kW, 10 A)
TST FU3F-CPR (4.0 kW, 10 A, board on change frame)

TST FU3F-FH (5.0 kW, 12 A)
TST FU3F-FPR (5.0 kW, 12 A, board on change frame)

Dimensions (W x H x D)	210 x 420 x 200 mm
Housing	Plastic
Power supply	3~200-480 V _{AC} +/-10% / 50-60 Hz
Motor connection	for 3~ asynchronous motors up to 2.2 kW / 5 A resp. 4.0 kW / 10 A resp. 5.0 kW / 12 A, with high overload resistance for doors
Operating frequencies	6-200 Hz (separate adjustable frequency ramps for all door operating modes)
Control voltage / Supply external devices	24 V _{DC} , safe 24 V _{DC} +/-5% / 3.5 A short-circuit-proof
Drive output	

For drives up to 2.2 kW / 4 kW / 5 kW at 3(N)~2~400 V motor current at 100% / 60% duty cycle and 40°C / 50°C environmental temperature: 5 A / 10 A / 12 A

Temperature range	
Operation	-20°C up to 50°C
Storage	-20°C up to 70°C
Humidity	up to 95%, not condensing
Noise emission	< 20 dB (A)
Protection type	IP65 (in housing)
Protection class	Protection class I
Weight	approx. 5 kg

STANDARD CONFORMITY & APPROVALS

Doors	EN 12453 / EN 12978
Voltage	EN 60335 / EN 60335-1
EMC	EN 50081 / EN 50082

TÜV Type examination

FEIG ELECTRONIC reserves the right to change specification without notice at any time. Stand of information: February 2015.

Assembly TST FU3F-AH/-CH/-FH:

I/O extension board (accessories)

- 6+3 digital inputs
- 6 relay outputs
- 1 digital output for safety tests
- 2-channel induction loop evaluator
- Interface for communication with the door

Clear text display

Optional: 4-times 7-segment

- User interface
- Diagnostic, status information
- Parameter adjustment
- Service, cycle counter
- Fault memory

Positioning by

- Mechanical limit-switches
- Absolute encoder
- Incremental encoder

2x integrated Safety edge evaluation

- Resistor systems
- Optic-dynamical edges
- Electrical edges
- Pneumatical edge incl. test

2x 24 V (Transistor) Outputs

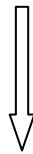
e.g. for testing of light barriers

2x 24 V (Transistor) Outputs

e.g. for controlling of LED lights

USB (Host/Device) for Service purposes

On Board real time clock with year time clock
(Fault memory with date and time)



Plug-in modules (accessories)

- 2-channel radio receiver
- 2-channel induction loop detector or 6-channel safety edge evaluator (8k2)



Motor up to 2.2 kW (-AH) (U, V, W)

Motor up to 4 kW (-CH) (U, V, W)

Motor up to 5 kW (-FH) (U, V, W)

Power supply for external devices

- Line, fused on board
- 24 V safety low voltage (up to 3.5 A, short-circuit-proof)

3x Relay output

(potential free changeover contact)

- Position status
- Warning light / traffic lights
- Fault messages
- Door lock
- Light control
- Brake
- ...

Safe 24 V Brake

With monitoring according to EN 13849



Power supply 200...480 V AC
(L, N, PE)

24 V inputs 1...12 (incl. Diagnostic LED)

Adjustable by parameters, e.g.:

- Ext. Open-, Stop-, Close commands
- Light barriers
- Additional safety commands
- One channel, input series
- Cross traffic control
- Door lock
- Dead man / automatic operation
- Mechanical limit-switches
- ...