## TST FUF2-AH/-CH/-FH

Door control unit with integrated frequency converter (0.75 kW, 1.5 kW, 2.2 kW) for all door types



## ADDITIONAL FUNCTIONALITY

- Voltage range 1~ $110 \mathrm{~V}_{\mathrm{AC}} \ldots 240 \mathrm{~V}_{\mathrm{AC}}+/-10 \%$
- 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 electronical 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:
funktionality, 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 FUF2-AH ( $0.75 \mathrm{~kW}, 5 \mathrm{~A}$ )
TST FUF2-APR ( $0.75 \mathrm{~kW}, 5 \mathrm{~A}$, board on change frame)

## TST FUF2-CH (1.5 kW, 8 A)

TST FUF2-CPR ( $1.5 \mathrm{~kW}, 8 \mathrm{~A}$, board on change frame)
TST FUF2-FH ( $2.2 \mathrm{~kW}, 10 \mathrm{~A}$ )
TST FUF2-FPR ( $2.2 \mathrm{~kW}, 10 \mathrm{~A}$, board on change frame)
Dimensions (W x H x D) $210 \times 420 \times 200 \mathrm{~mm}$

Housing
Power supply
Motor connection

## Operating frequencies

Control voltage /
Supply external devices
Drive output

Plastic
$1 \sim 110-240 \mathrm{~V}_{\mathrm{AC}}+/-10 \% / 50-60 \mathrm{~Hz}$
for 1~ asynchronous motors up to 0.75 kW / 5 A resp. 1.5 kW / 8 A resp. 2.2 kW / 120 , with high overload resistance for doors
$6-200 \mathrm{~Hz}$ (separate adjustable frequency ramps for all door operating modes)
$24 \mathrm{~V}_{\mathrm{DC}}$, safe $24 \mathrm{~V}_{\mathrm{DC}}+/-5 \% / 3.5 \mathrm{~A}$ short-circuit-proof

For drives up to $0.75 \mathrm{~kW} / 1.5 \mathrm{~kW} / 2.2 \mathrm{~kW}$ at 230 V motor current at $100 \% / 60 \%$ duty cycle and $40^{\circ} \mathrm{C} / 50^{\circ} \mathrm{C}$ environmental temperature: $5 \mathrm{~A} / 8 \mathrm{~A} / 10 \mathrm{~A}$

Temperature range

Operation
Storage
Humidity
Noise emission
Protection type
Protection class
Weight
$-20^{\circ} \mathrm{C}$ up to $50^{\circ} \mathrm{C}$
$-20^{\circ} \mathrm{C}$ up to $70^{\circ} \mathrm{C}$
up to $95 \%$, not condensing
$<20 \mathrm{~dB}(\mathrm{~A})$
IP65 (in housing)
Protection class I
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.

Intelligent Door Management

## Assembly TST FUF2-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


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


## $2 x$ 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

$\square$
 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)

| $\longrightarrow$ | Motor up to 0.75 kW (-AH) ( $\mathrm{U}, \mathrm{V}, \mathrm{W}$ ) |
| :---: | :---: |
|  | Motor up to 1.5 kW (-CH) (U, V, W) |
|  | Motor up to $2.2 \mathrm{~kW}(-\mathrm{FH})(\mathrm{U}, \mathrm{V}, \mathrm{W})$ |
| $\rightarrow$ | Power supply for external devices <br> - Line, fused on board <br> - 24 V safety low voltage (up to 3.5 A, short-circuit-proof) |
| $>$ | 3x Relay output (potential free changeover contact) <br> - Position status <br> - Warning light / traffic lights <br> - Fault messages <br> - Door lock <br> - Light control <br> - Brake <br> - ... |
| $\underset{\sim}{3}$ | Safe 24 V Brake <br> With monitoring according to EN 13849 |

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
- ...

