



### Product description:

The Tünkers handheld module (THM) is used to open or close a connected electrical clamping device manually.

In position "Load Accu" the internal battery is charged by means of the connected charger.

In position "Operate" the device is ready for operation.

### Status display

LED - green – operating display  
LED - yellow – display Open  
LED - red – display Close

### Technical data:

#### Input data :

Input voltage: min. 24V DC  $\pm 10\%$ , max. 7.2 VA  
Charging current battery: max. 300 mA

#### Output da:

Output voltage: min. 24V DC  $+20\%$ , max. 24V DC  $-30\%$   
Power: min.: 100 W cont., max. / 250 W peak  
PWM normal mode: max. 100 %  
Settings PWM: step 75 %., step 50 %  
PWM minimum mode: min.: 25 %

### Standards and directive conformity

EN 61326-1:2013 " Electrical equipment for measurement, control and laboratory use, EMC requirements - part 1: General requirements (IEC 61326-1:2012)"

EN 55011:2009 + A1:2010 " Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement (IEC/CISPR 11:2009, modified + A1:2010)"

### Error messages

1x Error in „open“ movement	the end position "closed" remains even 1.5 seconds after the drive has been started
2x Error in „close“ movement	the end position "open" remains even 1.5 seconds after the drive has been started
3x Error in „open“ movement	the end position "open" is not reached
4x Error in „close“ movement	the end position "closed" is not reached
5x Error motor driver	the internal motor driver reports an error due to thermal or electrical overload
6x Error Klixon contact	the thermal switch (Klixon) in the clamp motor has actuated due to high temperature
7x Error AD transformation	the internal analog to digital conversion has produced an error

## Connection diagram

# THM V1.1

