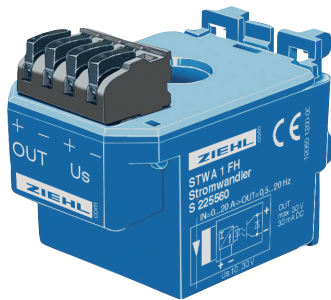


# AC-Electronic Current Transducer STWA1FH

## with frequency output

### STWA1FH

Electronic Current Transformer with current proportional frequency output  
0...20 A - 0,5...20 Hz



Part number: **S225560**

The STWA1FH provides a frequency output with 0.5...20 Hz which corresponds to a current flow of AC 0 - 20 A through the transformer. Multiple loops of the conductor through the transformer reduce the current range correspondingly (e.g. with fourfold looping-through 0 - 5 A correspond to 0.5...20 Hz). For the monitoring of high currents, the STWA1FH is simply looped in the secondary circuit of a large current transformer. Consequently, the frequency output is proportional to the primary current of the transformer, e.g. 0 - 100 A for a transformer with 100/5 A (cable four times through the STWA1F).

The offset of 0.5 Hz at the beginning of the transducing range is for technical reasons. During evaluation, it can be taken into account.

Power supply  $U_s$   
Monitoring range  
Output  
Switching voltage  
Switching current min/max  
Adjustment time  
Error (of scale, above 10%/I rated)  
Temperature coefficient  
Nominal frequency/operating range  
Error

Overload capacity cont./10 s

Testing voltage to supply voltage  
max. ambient temperature

Housing  
Dimensions (h x w x d)  
Diameter for conductor  
Weight

Application: The STWA1FH enables moderately priced detection of the value of an AC-current with a DIGITAL INPUT of a PLC. Costly analogue inputs are no longer necessary.

The STWA1FH is particularly suitable to evaluate the current in electric motors in machines of i.e. saws. The feed can be regulated dependent from the load of the motor of the saw.

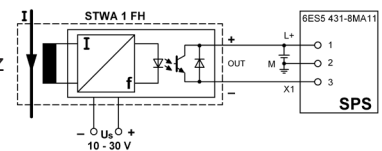
- current-proportional frequency output 0.5 - 20 Hz = AC 0 - 20 A
- output isolated, max DC 30 V/30 mA
- output frequency limited to 30 Hz
- output can be connected to the digital input of a PLC
- incorporated reverse voltage protection diode
- electrical connection via screwless pluggable terminals
- supply voltage DC 10...30 V
- DIN-rail-mount or with screws
- plug-in current transformer ( $\varnothing$  11 mm)
- Options:
  - currents up to 60 A
  - other frequencies

DC 10 - 30 V  
AC 0...20 A  
0,5...20 Hz  
max. DC 30 V  
DC 1 / 30 mA  
< 0,5 s.  
 $\leq 3\%$   
< 0,06%/K  
50 Hz/50...400 Hz  
 $\leq 0,2\%/Hz$

In + 5% / 200 A

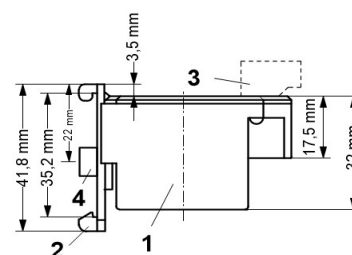
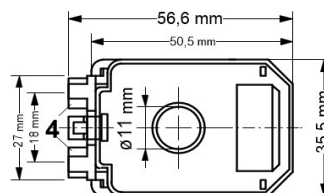
500 V  
0...55°C

Design H  
42 x 36 x 56 mm  
11 mm  
app. 90 g



### Dimension illustrations

Dimensions in mm



- 1 Housing
- 2 Clip for DIN-rail
- 3 Terminal (pluggable)
- 4 Wall-mounting (M4)