

# STI-N118

SIMPACT II

- ▣ pulse rate / period meter
- ▣ rotational / linear speed control
- ▣ revolution / movement period control
- ▣ 0 or 2 relay (or OC) outputs
- ▣ power supply output 24V DC
- ▣ RS-485 / Modbus RTU



**STI-N118** ratemeters in tight, wall mounted case (IP 65), are designed to control rotational speed (from 1,5 to 50000 rev/min) or its inversion (revolution period). Available parameters of divider and multiplier enable flexible scaling of measure and transformation into linear speed. On top of that, they enable operation in the frequency and period meter mode, what allows to show e.g. material linear speed, baking time, drying time, revolution period. The ratemeters may have 2 relay (or OC) outputs, programmable depending on the instantaneous rotational speed / period.

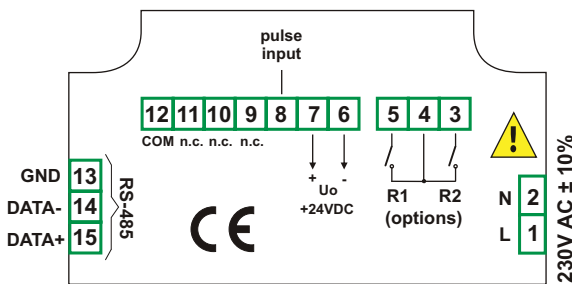
- password protection,
- "over" signalling when the measuring range is exceeded,
- setting the rotational speed units,
- settable delay time of control outputs: up to 99 sec. or min.,
- settable maximum waiting time for the next rotation,
- threshold hysteresis setting,
- ACCESS option - easy threshold modification,
- versions available with AC and DC power supply.

## Typical applications

1. Measuring the rotational speed of crankshaft.
2. Measuring of baking time in continuous oven.
3. Measuring the speed of the material being wound, featuring alarm signalling and drive system control.



## Exemplary pin assignment



## Ordering

STI-N118-14XX-1-X-XX1

- options:**  
**00** : no options  
**08** : operating temp. -20°C + +50°C
- power supply:**  
**1** : 24V DC  
**2** : 230V AC  
**8** : 110V AC
- number of outputs:**  
**0**  
**2**
- type of outputs:**  
**0** : no output  
**1** : REL  
**2** : OC

## Technical data

- Power supply:** 230V AC ± 10% separated, 110V AC ± 5% separated or 24V DC ± 15% not separated  
**Power consumption:** for 230V AC and 110V AC: max. 2,6 VA; for 24V DC: max. 4,5 W  
**Display:** LED, 6 x 13 mm high, red (green - on request), brightness adjustable in 8 steps  
**Inputs:** pulse, fully isolated, with debouncing filter and pulse width control, max. input frequency 50.0 kHz  
**Displayed values range:** 0 + 999999 + decimal point  
**Frequency measurement accuracy:** ± 0.02% (full temperature range)  
**Rotational speed accuracy:** selected in the range 0 + 0,00000  
**Rotational speed unit:** revolutions per second (rps), per minute (rpm), per hour (rph)  
**Pulse waiting time:** settable from 0,1 to 39,9 seconds  
**Outputs:** 0 or 2; relays 1A/250V AC (cosφ=1) or the OC 30mA/30VDC/100mW  
**Transducer power supply output:** 24V DC, non-stabilized, not insulated from measuring inputs; for 230V and 110V AC power supply: ± 3V max. 25 mA; for 24V DC power supply: ± 15% max. 100 mA  
**Communication interface:** RS-485, 8N1 and 8N2, 1200 bit/s + 115200 bit/s, Modbus RTU (not galvanically insulated)  
**Data memory:** non-volatile memory, EEPROM type  
**Operating temperature:** 0°C + +50°C (standard), -20°C + +50°C (option)  
**Storage temperature:** -10°C + +70°C (standard), -20°C + +70°C (with option 08)  
**Protection class:** IP 65  
**Case:** wall-mounted  
**Case material:** ABS + fibreglass  
**Case dimensions:** without glands: 110 x 80 x 67 mm; with glands: 110 x 105 x 67 mm