

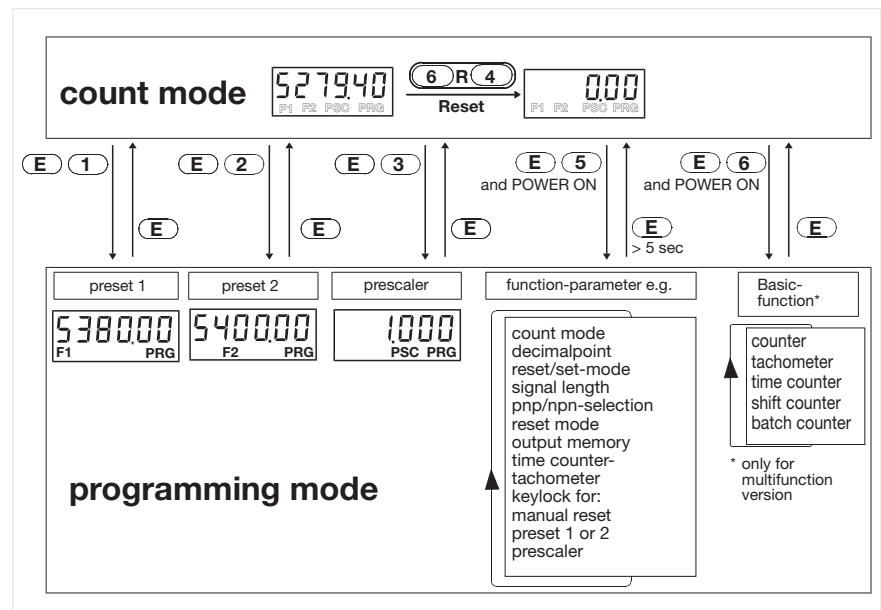
Multifunctional Counter – tico 732

Bi-directional



- high-contrast LED or LCD-Display, 6 digits
- small and compact DIN dimensions 48 x 48 mm
- easy operation by one key per digit
- direct access to parameters
- available with 1 or 2 presets
- transistor and relay with changeover contact, for each preset
- with integrated separate totalizer
- 5 basic functions easily programmable: counter, tachometer, time counter, shift counter and batch counter
- display range from – 99999 to 999999

PROGRAMMING



The important values, preset 1, preset 2, prescaler and separate totalizer can be directly selected. It is necessary only to press the relevant button and the E-button together. To make the operation still more easy, access to those values can be locked separately.

All other system parameters like operation and count modes are laid down in a common operation level. These parameters are usually programmed once only during the first initiation.

TECHNICAL DATA

General

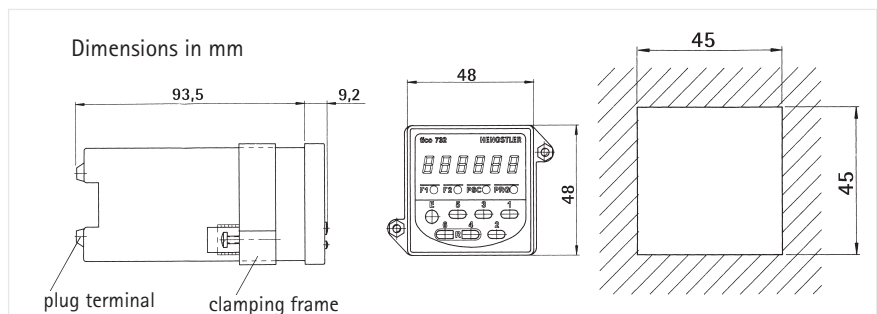
| | |
|----------------------------|---|
| Display | LED or LCD, 6 digits, leading zero suppression, decimal point |
| Digit height | LED 7.6 mm; LCD 9 mm |
| Supply voltage | 12...24 VDC; 24 VAC; 115 VAC; 230 VAC; 50/60 Hz, depending on version |
| Current consumption | 12...24 VDC < 150 mA 100/115/230 VAC < 50 mA; including sensor supply |
| Sensor supply | only when AC operated: 12 ... 30 VDC, max 50 mA |
| Data retention | non-volatile memory > 10 years |
| Operating temperature | 0 ... +50 °C |
| Storage temperature | - 20 ... + 70 °C |
| Electrical connection | screw terminals |
| Mounting | with clamping frame |
| Protection class (IEC 144) | front side IP 65, terminals IP 20 |
| Vibro stability | 10 m/s ² (10...150 Hz) according to IEC 68-T2-6 |
| Shock stability | 100 m/s ² (18 ms) according to IEC 68-T2-27 |
| General design | according to VDE 0411, DIN 57411, protection class II |
| Approvals | UL + CUL E 96337 |
| Amplitude thresholds | < 2 V and > 8 V or < 2 V and > 3.8 V with TTL level, max 40 VDC |
| Active edge | programmable; positive with pnp input; negative with npn input |
| Pulse shape | any (squarewave 1:1 for max. frequency) |
| Input resistance | approx. 5 kOhm (static) |
| Counting frequency | max. 5 kHz (2.5 kHz bi-directional) |
| Prescaler | programmable from 0.001 to 9.999 (999.999) |
| Count inputs A, B | - phase discriminator with single evaluation - differential mode (add/sub) - count direction mode - totalizing mode (add/add) |
| Pulse length min. | 17 ms (30 Hz), 100 µs (5 kHz) |
| Control input C | - manual reset possible - external reset, static or dynamic, programmable, pulse length > 5 ms - automatic reset when main preset has been reached (programmable) |
| Relay | changeover contact max. 250 VAC / 30 VDC, min. 5 V AC/DC max. 1 A, min. 10 mA, delay < 5 ms |
| Transistor | pnp output 12...24 VDC max 10 mA of DC-supply; 12...30 VDC max. 10 mA of AC-supply |
| Tacho | |
| Method | time interval (1/Tau) |
| Display range | 1/min or 1/sec |
| Min input frequency | 0.125 Hz = 8 sec |
| Alarms | 2 alarms with programmable start-up-suppression |
| Time bases | programmable; sec, min., h or hh.mm.ss |
| Resolution | programmable 1; 0.1; 0.01; 0.001 |
| Function | single pulse measurement (short time meter) or cumulated counting (hour meter) |
| Count mode | pulse width or period measurement (start-stop) |

Counter

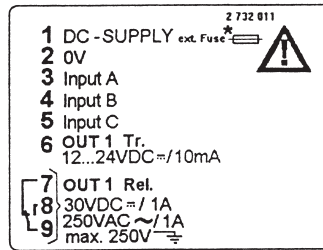
Tacho

Time-counter

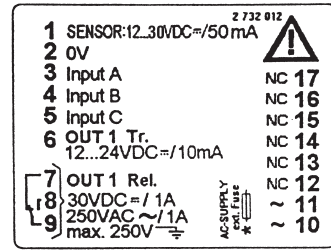
DIMENSIONS



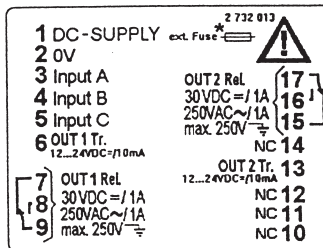
DIMENSIONS



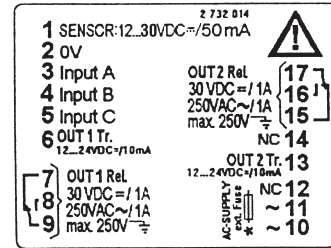
VDC 1 Rel/1 Trans



VAC 1 Rel/1 Trans



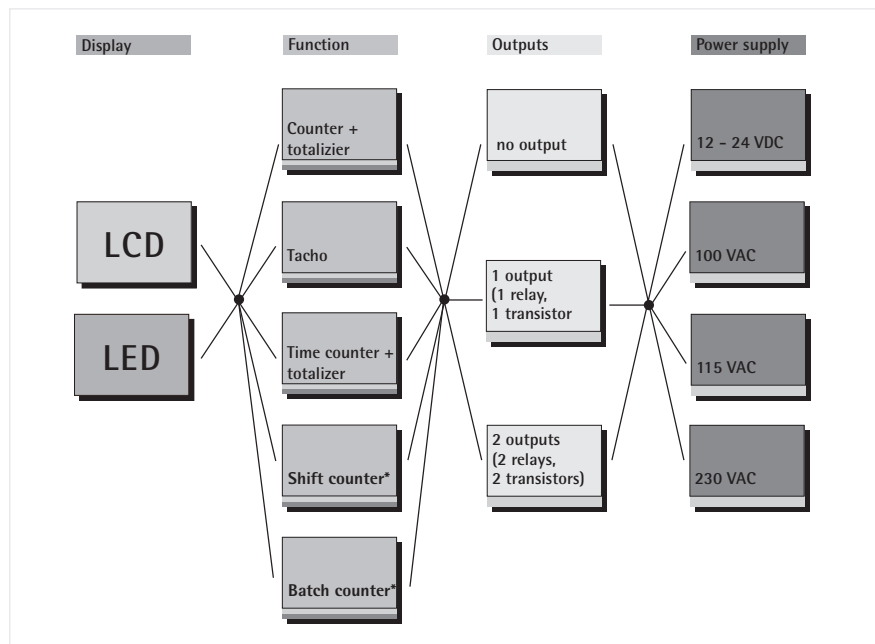
VDC 2 Rel/2 Trans



VAC 2 Rel/2 Trans

For versions with no output, pins 7-9 and 15-17 are not connected.

POSSIBLE VARIANTS



ORDER INFORMATION

| Display | Preset | 12-24 VDC | 24 VAC | 115 VAC | 230 VAC |
|---------|--------|-----------|------------------------|-----------|-----------|
| LCD | - | 0 732 000 | 0 732 071 | 0 732 037 | 0 732 001 |
| LCD | 1 | 0 732 002 | 0 732 073 | 0 732 039 | 0 732 003 |
| LCD | 2 | 0 732 012 | 0 732 078 | 0 732 049 | 0 732 013 |
| LED | - | 0 732 018 | 0 732 080 | 0 732 055 | 0 732 019 |
| LED | 1 | 0 732 020 | 0 732 082 ¹ | 0 732 057 | 0 732 021 |
| LED | 2 | 0 732 030 | 0 732 087 | 0 732 067 | 0 732 031 |

Important: Only versions with 2 presets or without preset can be used as tachometers.