



### Model Number

KCN1-6ST-V

### Features

- Counter/Timer/Tachometer
- Adding/subtracting via 2 separate inputs
- Batch controller with 1 pre-selection
- 1 potential-free optocoupler output
- Easy-to-read, 2-line LCD display with symbols for indicated pre-selection and output status
- Display range and preselection range from -999999 up to 999999  
Overflow will be evaluated correctly up to 1 decade
- PNP and NPN sensors can be connected
- Protection degree IP65 (front only)

### Technical data

#### General specifications

Pre-selection	single
Data storage	10 <sup>6</sup> storage cycles or 10 years
Programming	keypad-driven menu and programming switch

#### Functional safety related parameters

MTTF <sub>d</sub>	980 a
Mission Time (T <sub>M</sub> )	10 a
Diagnostic Coverage (DC)	0 %

#### Indicators/operating means

Type	2-line, 7-segment LC display with signs
Number of digits	6
Display value	digit height 9 mm
Pre-selection	digit height 7 mm
Key interlock	with "high"-level at terminal "KEY"
Display interval	-999999 ... 999999
Decimal point	0 to max 3 fractional digits
Scale factor	0.0001 ... 9.9999
Reset	manually or external

#### Electrical specifications

Operating voltage	U <sub>B</sub>	90 ... 260 V AC
Power consumption	P <sub>0</sub>	max. 4 VA

#### Input

Counting frequency	30 Hz / 10 kHz
Minimum pulse duration	5 ms
Impedance	approx. 10 kOhm
Voltage	low: 0 ... 4 V DC high: 12 ... 30 V DC
Counting method	adding or subtracting

#### Output

Sensor supply	14.4 ... 27.6 V DC, 80 mA
Response time	approx. 1 ms
Optocoupler	30 V DC, 15 mA

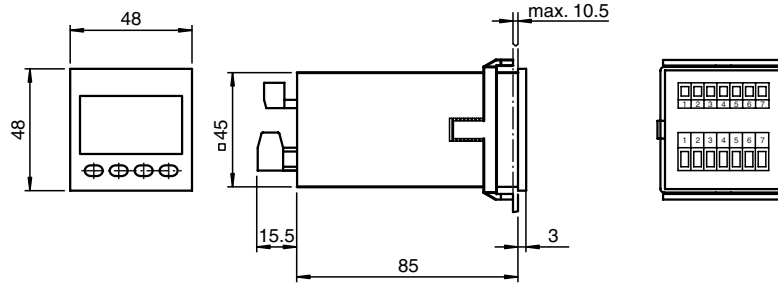
#### Ambient conditions

Ambient temperature	0 ... 50 °C (273 ... 323 K)
Storage temperature	-25 ... 70 °C (248 ... 343 K)
Relative humidity	≤ 80 % (non-condensing)

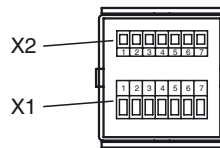
#### Mechanical specifications

Mass	approx. 240 g
Dimensions	48 mm x 48 mm x 110 mm

Dimensions



Electrical connection



Connection assignment X1

Supply voltage and outputs

Terminal No.	AC version	DC version
1	n.c.	
2	n.c.	
3	Optocoupler output emitter	
4	n.c.	
5	Optocoupler output collector	
6	Power supply 230 V AC	Operating voltage 11 ... 30 V DC
7	Power supply 230 V AC	0 V DC (GND)

Connection assignment X2

Inputs

Terminal No.	Name	230 V AC version	10 ... 30 V DC version
1	+24 VDC	Sensor supply voltage	n.c.
2	0 VDC (GND)	Reference voltage	n.c.
3	INP A	Counter input A	
4	INP B	Counter input B	
5	RESET	Reset input	
6	GATE	Gate input	
7	KEY	Input of push-button lock	

Attention

In the case of selection of  $\neg$  and  $\neg$  (inverted optocoupler control) the connections of terminals 4 and 5 are changed:

Terminal No.	AC and DC versions
4	Optocoupler output collector
5	n.c.

Release date: 2010-03-01 12:15 Date of issue: 2010-03-01 110341\_ENG.xml