



Model Number

KCN1-6ST-C

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 ⁶ storage cycles or 10 years
Programming	keypad-driven menu and programming switch

Functional safety related parameters

MTTF _d	980 a
Mission Time (T _M)	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 _B	11 ... 30 V DC
Power consumption	P ₀	max. 0.1 VA

Input

Counting frequency	30 Hz / 10 kHz
Minimum pulse duration	5 ms
Impedance	approx. 10 kOhm
Voltage	low: 0 ... 0.2 x U _B high: 0.6 x U _{in} ... 30 V DC
Counting method	adding or subtracting

Output

Response time	approx. 1 ms
Optocoupler	30 V DC, 15 mA

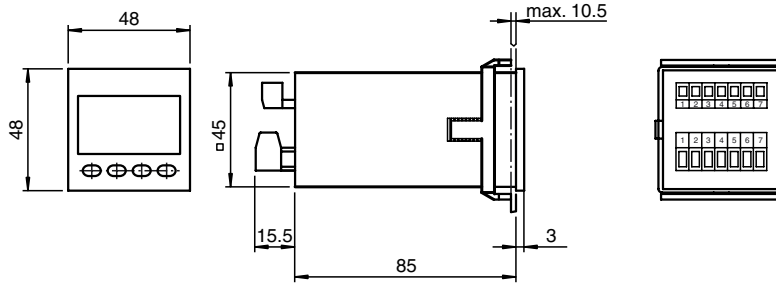
Ambient conditions

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

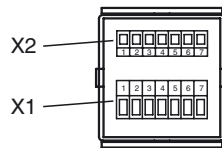
Mechanical specifications

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 12:14 Date of issue: 2010-03-01 110340_ENG.xml