



### Model Number

KCT1-6ST-V

### Features

- Counter/Timer/Tachometer
- Counter frequency up to 20 kHz
- 6-digit LED indicator, red
- 1 Pre-selection
- Status LED indication for output an preselection value
- Display range and preselection range from -199999 up to 999999  
Overflow will be evaluated correctly up to 1 decade
- Programmable functionality as pulse counter, frequency counter, timer or
- 1 potential-free optocoupler output
- Adding/subtracting via 2 separate inputs
- 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

#### Functional safety related parameters

MTTF <sub>d</sub>	590 a
Mission Time (T <sub>M</sub> )	10 a
Diagnostic Coverage (DC)	0 %

#### Indicators/operating means

Type	7-segment LED display, red
Number of digits	6
Display value	digit height 8 mm
Pre-selection	switchable
Key interlock	with "high"-level at terminal "KEY"
Display interval	-99999 ... 999999
Decimal point	0 to max 3 fractional digits
Scale factor	0.0001 ... 99.9999
Reset	manually or external

#### Electrical specifications

Operating voltage	U <sub>B</sub>	90 ... 250 V AC
Power consumption	P <sub>0</sub>	max. 7 VA

#### Input

Counting frequency	20 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 ... 28 V DC, 100 mA
Response time	approx. 2 ms
Optocoupler	30 V DC, 15 mA

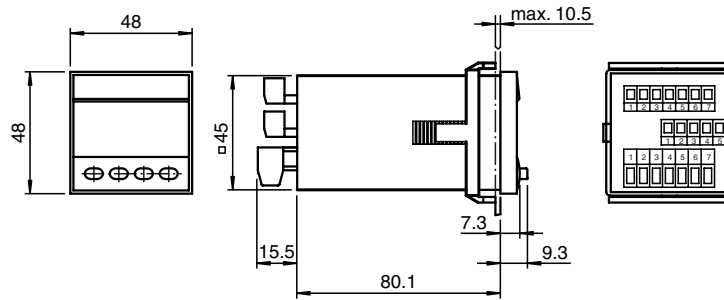
#### Ambient conditions

Ambient temperature	-10 ... 50 °C (14 ... 122 °F)
Storage temperature	-25 ... 70 °C (-13 ... 158 °F)
Relative humidity	≤ 80 % (noncondensing)

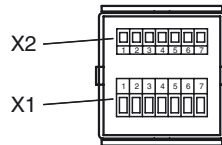
#### Mechanical specifications

Connection	2 plug-in 7-pin screw terminals max. core cross-section 0.34 ... 1.5 mm <sup>2</sup>
Mass	approx. 200 g
Dimensions	48 mm x 48 mm x 106 mm
Mounting	latch fastener (dimension 50.5 mm x 54.5 mm)

Dimensions



Electrical connection



Connector assignment X1  
supply voltage and outputs

Terminal No.	AC version	10 ... 30 V DC version
1	Optocoupler output 1 collector	
2	Optocoupler output 1 emitter	
3	Optocoupler output 2 emitter	
4	n.c.	
5	Optocoupler output 2 collector	
6	supply voltage 90 ... 250 V AC	operating voltage 10 ... 30 V DC
7	supply voltage 90 ... 250 V AC	0 V DC (GND)

Connector assignment X2  
inputs

Terminal No.	Name	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 circuit	
7	KEY	Input for key locking	

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 2 collector
5	n.c.

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