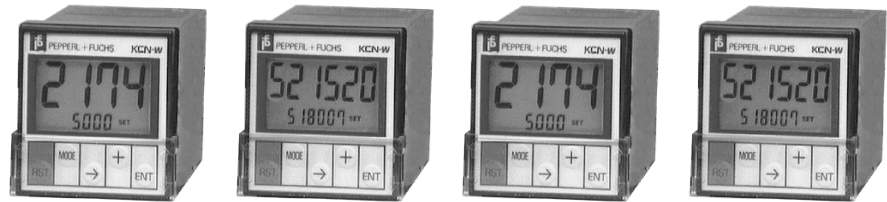


- Addition/subtraction counters
- 2 preselections
- 4 or 6 decade devices
- LCD indicator with background illumination



Order code

KCN-4WR-V
KCN-4WR-C1KCN-6WR-V
KCN-6WR-C1KCN-4WT-V
KCN-4WT-C1KCN-6WT-V
KCN-6WT-C1

Technical data

General data

Preselection
Data storage

Controls and indicators

Type
Number of decade devices
Digit height (numerical value/preselection)
Parameter assignment
Scaling factor
Decimal point
Reset

Inputs

Counting frequency

Input impedance
Input voltage

Operating modes of the inputs

Delay times

External reset (On/Off)
Manual reset
Automatic resetDisconnection time on power failure
Time delay before availability
Counter disable input

Outputs

Output

Delay times at
30 Hz/1 kHz/2 kHz/5 kHz
Output functions

Timer pulse duration

Electrical data

Alternating voltage (KCN-...-V)
Direct voltage (KCN-...-C1)
Power supply for sensor (KCN-...-V)

Ambient conditions

Ambient temperature
Storage temperature
Relative air humidity

Mechanical data

Weight (AC type/DC type)
Dimensions (L x H x D)
AC type
DC typetwo
10 years, EEPROMLCD
4
13 mm/4 mm
via keypad, menu driven
0.001 ... 9.999
freely adjustable
manual30 Hz/1 kHz/
2 kHz/5 kHz
2.2 k Ω (positive logic)
low: 0 ... 6 V DC
high: 16 ... 30 V DC
Addition/subtraction or
90° phase shift5 ms
0.1 s
500 μ s (2.5 ms for 5 kHz
counting frequency)
 ≥ 1 s
 ≤ 1 s
2.5 ms (On/Off delay)2 x relay 220 V AC, 2 A,
(Ohmic load) ≤ 19 ms/ ≤ 6 ms
 ≤ 5.5 ms/ ≤ 7.5 ms
15 operating modes
see graphic page 33
10 ... 9990 ms90 ... 264 V AC, 5 VA
10 ... 28 V DC, 2 W
20 ... 28 V DC, 60 mA-10 ... 50 °C
-25 ... 70 °C
35 ... 85 % (non-
condensing)

220 g/110 g

48 x 48 x 96 mm
48 x 48 x 61 mmtwo
10 years, EEPROMLCD
6
10 mm/4 mm
via keypad, menu driven
0.001 ... 99.999
freely adjustable
manual30 Hz/1 kHz/
2 kHz/5 kHz
2.2 k Ω (positive logic)
low: 0 ... 6 V DC
high: 16 ... 30 V DC
Addition/subtraction or
90° phase shift5 ms
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90° phase shift5 ms
0.1 s
500 μ s (2.5 ms for 5 kHz
counting frequency)
 ≥ 1 s
 ≤ 1 s
2.5 ms (On/Off delay)2 x PNP, normally-
closed collector, 24 V,
15 mA ≤ 14 ms/ ≤ 1 ms
 ≤ 0.5 ms/ ≤ 2.5 ms
15 operating modes
see graphic page 33
10 ... 9990 ms90 ... 264 V AC, 5 VA
10 ... 28 V DC, 2 W
20 ... 28 V DC, 60 mA-10 ... 50 °C
-25 ... 70 °C
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see graphic page 33
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35 ... 85 % (non-
condensing)

220 g/110 g

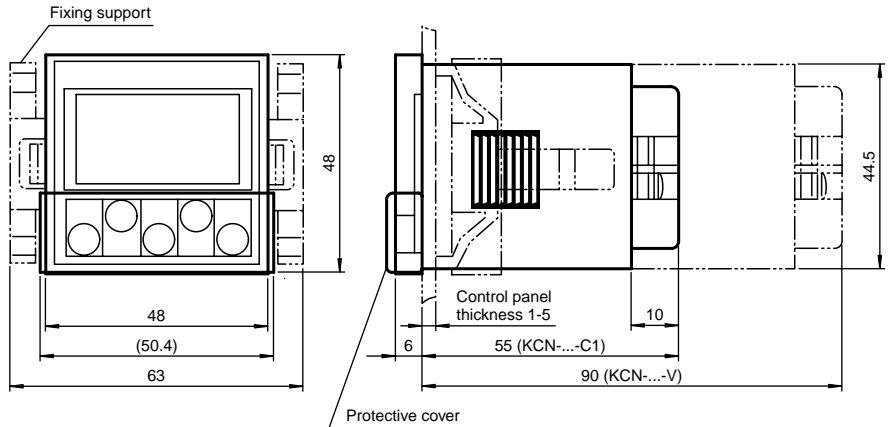
48 x 48 x 96 mm
48 x 48 x 61 mm

Connection
Maximum permissible core cross-section

KCN-4WR-V KCN-4WR-C1	KCN-6WR-V KCN-6WR-C1	KCN-4WT-V KCN-4WT-C1	KCN-6WT-V KCN-6WT-C1
Screw terminals	Screw terminals	Screw terminals	Screw terminals
0.34 ... 1.5 mm ²	0.34 ... 1.5 mm ²	0.34 ... 1.5 mm ²	0.34 ... 1.5 mm ²

KCN-4WR-V
KCN-4WR-C1
KCN-6WR-V
KCN-6WR-C1
KCN-4WT-V
KCN-4WT-C1
KCN-6WT-V
KCN-6WT-C1

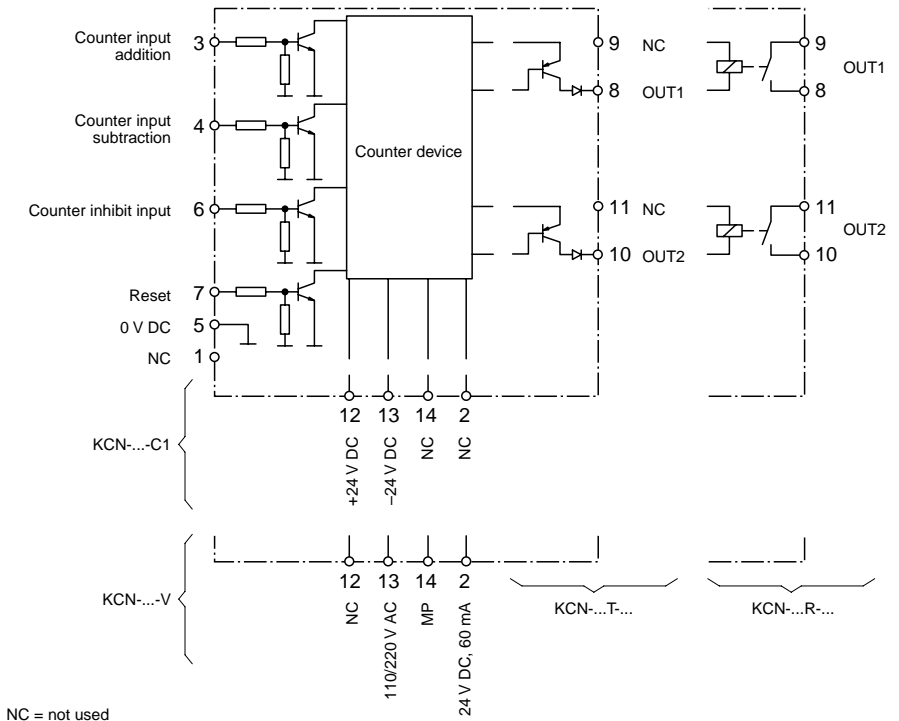
Dimensions



Additional features

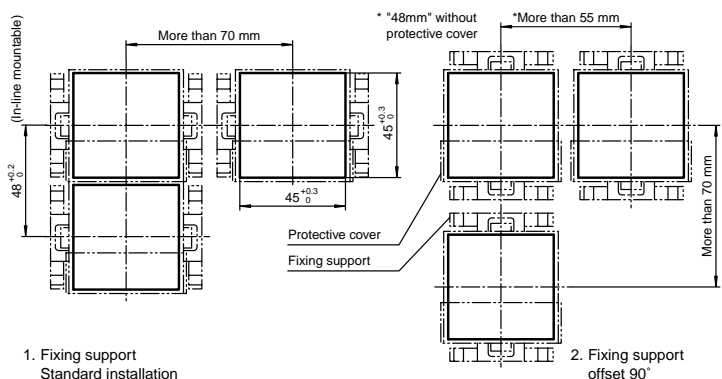
- Counting frequency up to 5 kHz
- Power supply for pulse counter
- Display storage
- Menu driven programming
- Transistor or relay output
- Power supply for sensors (only KCN-...-V)
- Protection class IP64 in accordance with DIN EN 60529 (front only)
- Shock resistance in accordance with DIN EN 60068-2-27
- Vibration resistance in accordance with DIN EN 60068-2-6

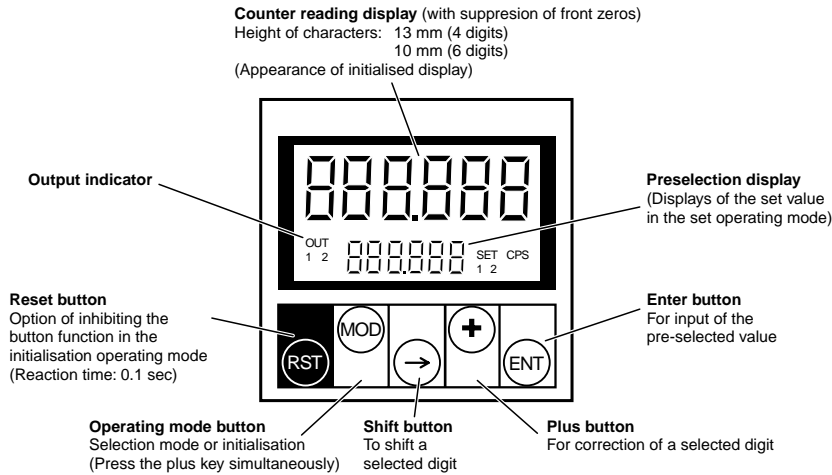
Electrical connection



NC = not used

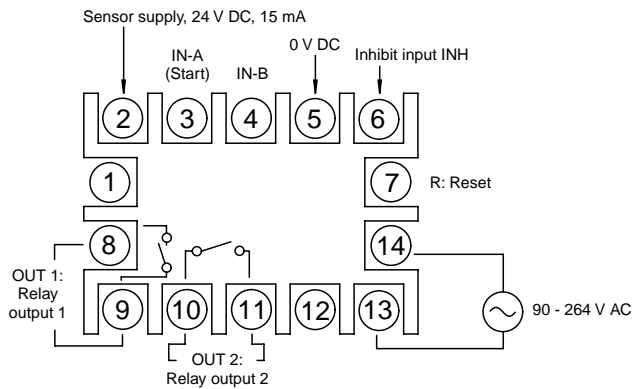
Installed dimensions



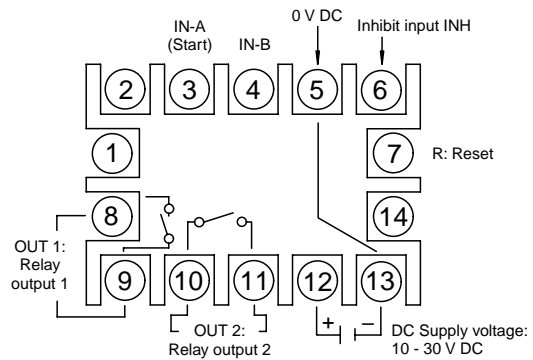


Terminal assignment

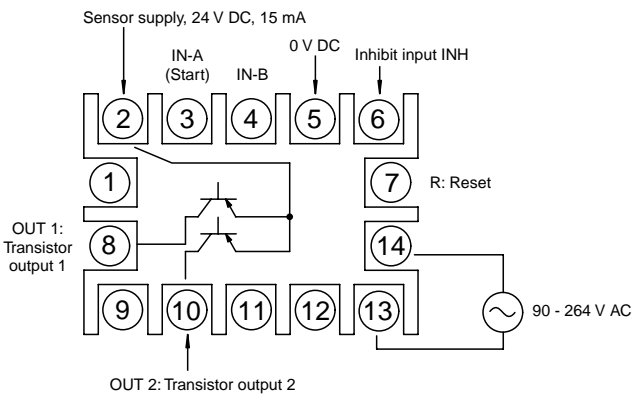
KCN-4/6WR-V



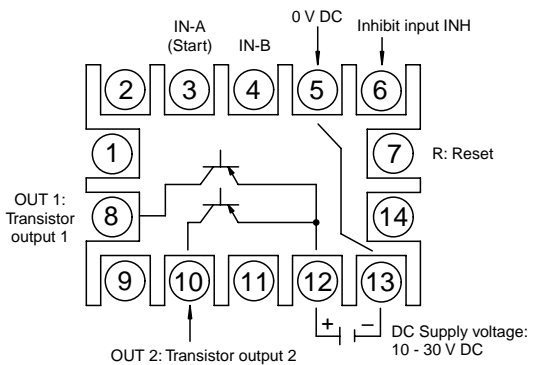
KCN-4/6WR-C1



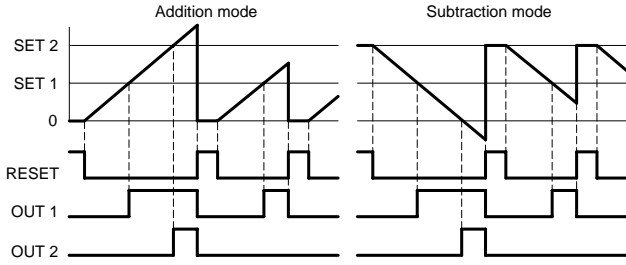
KCN-4/6WT-V



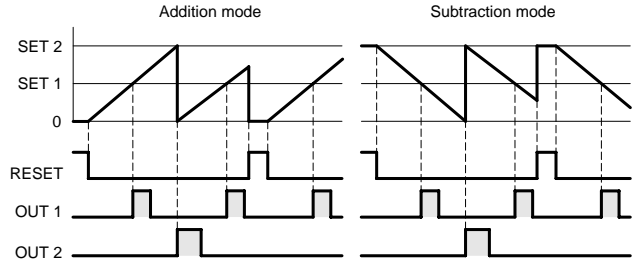
KCN-4/6WT-C1



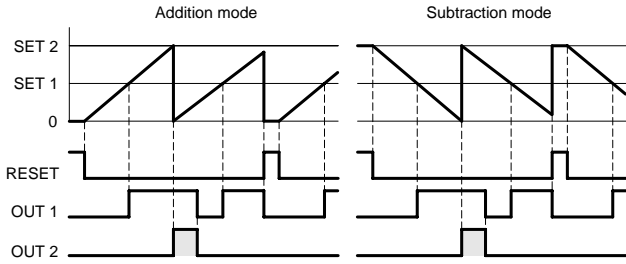
Mode 1 OUT 2 Permanent output/counter advance
OUT 1 Permanent output



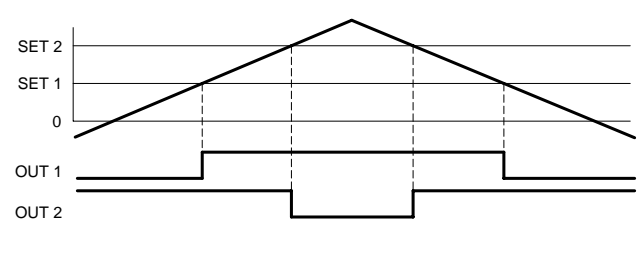
Mode 6 OUT 2 Momentary impulse output/counter reset
OUT 1 Momentary impulse output



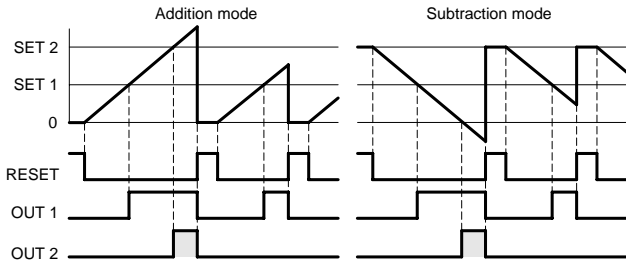
Mode 2 OUT 2 Momentary impulse output/counter reset
OUT 1 Permanent output



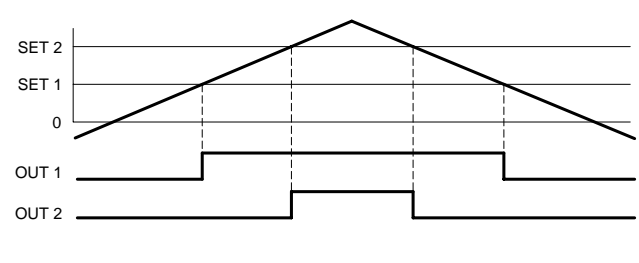
Mode 7 OUT 2 Counter value ≤ SET 2
OUT 1 Counter value ≥ SET 1



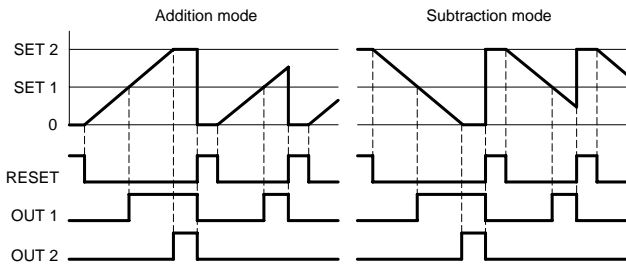
Mode 3 OUT 2 Momentary impulse output/counter advance
OUT 1 Permanent output



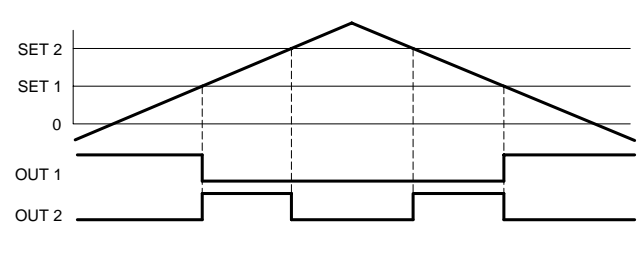
Mode 8 OUT 2 Counter value ≥ SET 2
OUT 1 Counter value ≥ SET 1



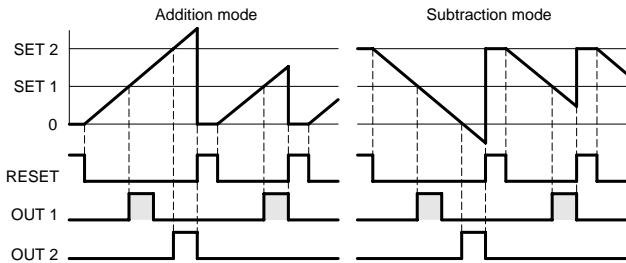
Mode 4 OUT 2 Permanent output/counter inhibit
OUT 1 Permanent output




Mode 9 OUT 2 SET 1 ≤ counter value ≤ SET 2
OUT 1 Counter value < SET 1



Mode 5 OUT 2 Permanent output/counter advance
OUT 1 Momentary impulse output



Important:

- SET 1 and OUT 1 are only effective for dual setting
-  indicates "Momentary impulse output" (10 ms to 9.99 sec)
- In modes 2 and 6 only counting rates of 30 Hz or 2 kHz are possible (Even if 5 kHz is selected, the 2 kHz setting becomes effective).