CTR54U

Features

- Universal, with dual functions, also suitable as maintenance counter
- 2 pulse or time counters for measuring daily and total values
- Count frequency 60 kHz
- Four dual functions in one device, saves on inventory costs
- Separate multiplication and scaling factor for pulse & frequency counter

Specifications:

**Supply:**
- 10 ... 30 V DC, with reverse polarity protection
- 90 ... 260 V AC

**Current consumption:**
- max. 50 mA, 6 VA

**Display:**
- 6 digit red 7 segment LED display; 14 mm high

**Data backup:**
- EEPROM

**Housing:**
- Dimensions 96 x 48 mm according to DIN 43 700; RAL 7021, grey

**Polarity of Inputs:**
- Programmable, npn or pnp for all inputs

**Input resistance:**
- appr. 5 kΩ

**Counting frequency:**
- 60 kHz, can be damped to 30 Hz depending on operating mode

**Reset time:**
- 5 ms

**Input switching level**

**DC-version:** (standard version):
- Low: 0 ... 0.2 x UB [V DC]
- High: 0.6 x UB ... 30 V DC

**AC-version:**
- Low 0 ... 4 V DC
- High 12 ... 30 V DC

**Input switching level** (5 V version):
- Low 0 ... 2 V DC
- High 4 ... 30 V DC

**Voltage supply for sensors:**
- 24 V DC ±15 %/100 mA at AC versions

**Accuracy:**
- <0.1 % (Frequency display/Rate meter)

**Ambient temperature:**
- –20 ... +65 °C, non-condensing

**Storage temperature:**
- –25 ... +70 °C

**EMC:**
- According to EC EMC directive 89/36/EWG

**Immunity to interference:**
- EN 61000-6-4/EN 55 011 class B

**Emitted interference:**
- EN 61000-6-2

**Protection:**
- IP65 (from front)

**Weight:**
- appr. 150 g

Applications:

- Preset batch counting, length measuring, simple positioning, time control, speed control, rate control.

Operating modes:

- Adding counter and frequency meter, counter with 2 totalizing ranges, totalizer and time meter, time meter with 2 time ranges.

Wiring:

**Connection X2**

<table>
<thead>
<tr>
<th>Pin</th>
<th>AC-Version</th>
<th>DC-Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>90 ... 260 V AC</td>
<td>0 V DC (GND)</td>
</tr>
<tr>
<td>2</td>
<td>90 ... 260 V AC</td>
<td>10 ... 30 V DC</td>
</tr>
</tbody>
</table>

**Connection X1**

<table>
<thead>
<tr>
<th>Pin</th>
<th>AC-Version</th>
<th>DC-Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>n.c.</td>
<td>n.c.</td>
</tr>
<tr>
<td>2</td>
<td>n.c.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Reset</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>INP B</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>INP A</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>GNDout</td>
<td>n.c.</td>
</tr>
<tr>
<td>7</td>
<td>+24Vout</td>
<td>n.c.</td>
</tr>
</tbody>
</table>

Dimensions:

Ordering Information

**Example CTR54U 0 0**

**Series:**

0 = Standard
A = 5V level

**Input Level:**

0 = 90 to 260 VAC
3 = 10 to 30 VDC