



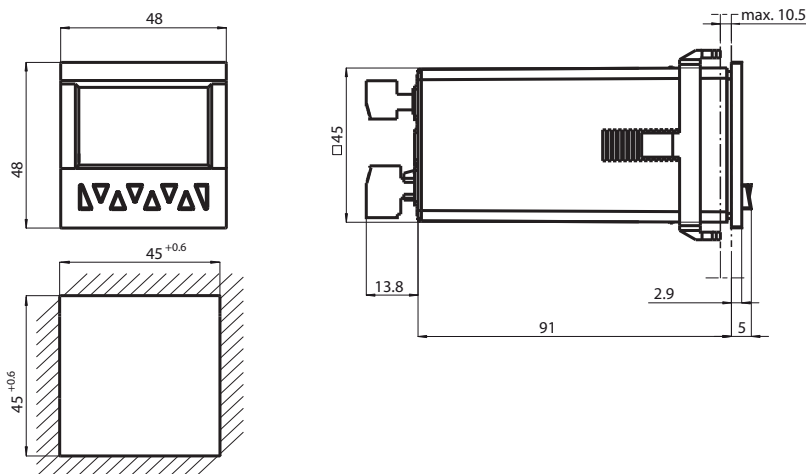
Timer, Counter, Tachometer KC-LCDL-48-2R-24VDC

- Counter/Timer/Tachometer
- Adding/subtracting via 2 separate inputs
- Batch controller with 2 pre-selections
- Easy-to-read backlit 2-line LCD display with icons for the displayed preselection and the status of both outputs
- 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
- Degree of protection IP65 (front only)

LCD batch controller with 2 relay outputs and 24 VDC supply voltage



Dimensions



Technical Data

General specifications

Pre-selection	2-fold
Data storage	> 10 years, EEPROM
Programming	keypad-driven menu

Indicators/operating means

Type	2-line, 2 x 6-digit LC display with leading sign backlighted
Display value	digit height 9 mm
Pre-selection	digit height 7 mm
Key interlock	via "high" potential at "LOCK" input
Decimal point	0 to max 5 fractional digits
Scale factor	0.0001 ... 99.9999
Reset	manually or external

Electrical specifications

Fusing	10 ... 30 V DC: T 0.2 A
Operating voltage	U _B 10 ... 30 V DC
Power consumption	P ₀ max. 1.5 W

Release date: 2023-11-21 Date of issue: 2023-11-21 Filename: 214737_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

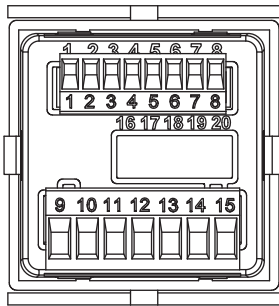
PEPPERL+FUCHS

Technical Data

Input		
Connection		Counter inputs: A and B Control/reset inputs: LOCK, RESET, GATE, MPI
Signal voltage		
High		$0.6 \times U_e \dots 30 \text{ V DC}$
Low		$0 \dots 0.2 \times U_e$
Counting frequency		30 Hz / 55 kHz
Minimum pulse duration		Control/reset inputs: 10 ms / 1 ms
Impedance		5 kOhm
Count modes		
Pulse counter		Counting with counting direction (cnt.dir), difference counting (up.dn), up/down counting (quad), Cumulative counting (up.up), up/down counting x 2 (quad 2), up/down counting x 4 (quad 4), additional functions for counter input A and counter input B: A/B, (A-B)/A x 100%
Frequency counter		functions for input A and input B: A, A-B, A+B quad, A/B, (A-B)/A x 100 %
Timer		Time measurement via GATE input (FrErun), counter input A: Start, counter input B: Stop (InpA.InpB.), counter input B: Start/Stop (InpB.InpB.), time measuring via RESET input (auto)
Output		
Relay		changeover contact , Make contact
Switching voltage		max. 250 V AC / 110 V DC
Switching current		max. 3 A AC/DC, min. 30 mA DC,
Switching power		max. 750 VA / 90 W
Sensor supply		connected power supply is looped through, max. 80 mA
Output I		Relay with make contact, NC or NO progr.
Mechanical life		2×10^7 switching cycles
Electrical life		1×10^5 switching cycles at 3 A
Output II		Relay with changeover contact
Mechanical life		2×10^7 switching cycles
Electrical life		5×10^4 cycles at 3 A
Response time		Relay: approx. 7 ms Frequency counter: 100/600 ms
Compliance with standards and directives		
Directive conformity		
EMC Directive 2004/108/EC		EN 61000-6-2:2005, EN 50295:1999
Standard conformity		
Emitted interference		DIN EN 55011:2009, Class B
Mech. capacity		EN 60068-2-6:2008 $10 \dots 55 \text{ Hz} / 1 \text{ mm} / \text{XYZ}$ 30 min in each direction
Shock and impact resistance		EN 60068-2-27:1995 100 G / 2 ms / XYZ 3 times in each direction
Ambient conditions		
Ambient temperature		$-20 \dots 65 \text{ }^\circ\text{C}$ ($-4 \dots 149 \text{ }^\circ\text{F}$)
Storage temperature		$-25 \dots 75 \text{ }^\circ\text{C}$ ($-13 \dots 167 \text{ }^\circ\text{F}$)
Relative humidity		$\leq 93 \text{ \%}$ at $40 \text{ }^\circ\text{C}$ (noncondensing)
Altitude		$0 \dots 2000 \text{ m}$
Mechanical specifications		
Degree of protection		IP65 (front)
Mass		approx. 138 g
Dimensions		48 mm x 48 mm x 109.8 mm

Release date: 2023-11-21 Date of issue: 2023-11-21 Filename: 214737_eng.pdf

Connection



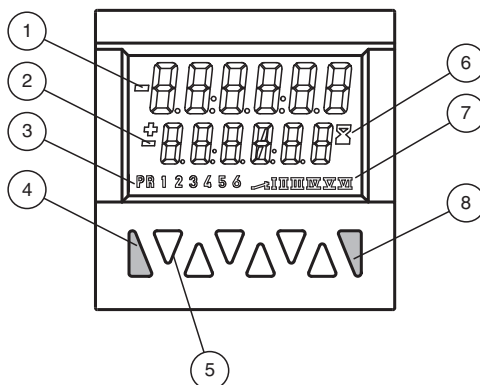
Signal and control inputs

- | | |
|---|--------------------------|
| 1 | Sensor supply voltage |
| 2 | GND (0V) |
| 3 | INP A (Signal input A) |
| 4 | INP B (Signal input B) |
| 5 | RESET (Reset input) |
| 6 | LOCK (Input Keypad lock) |
| 7 | GATE (Gate input) |
| 8 | MPI (User input) |

Supply voltage and outputs

- | | | |
|----|--------------------|----------------|
| 9 | Relay contact C. | Output 1 |
| 10 | Relay contact N.O. | |
| 11 | Relay contact C. | Output 2 |
| 12 | Relay contact N.O. | |
| 13 | Relay contact N.C. | Supply voltage |
| 14 | 10 ... 30 V DC | |
| 15 | GND (0V) | |

Assembly



- | | |
|---|--|
| 1 | Current count value |
| 2 | Preset value |
| 3 | Indicator preset value (at 9) |
| 4 | Reset key |
| 5 | Decade keys 1 to 6 /
Keys for programming |
| 6 | Run display for timer |
| 7 | Shows the active output |
| 8 | Prog/Mode key |