



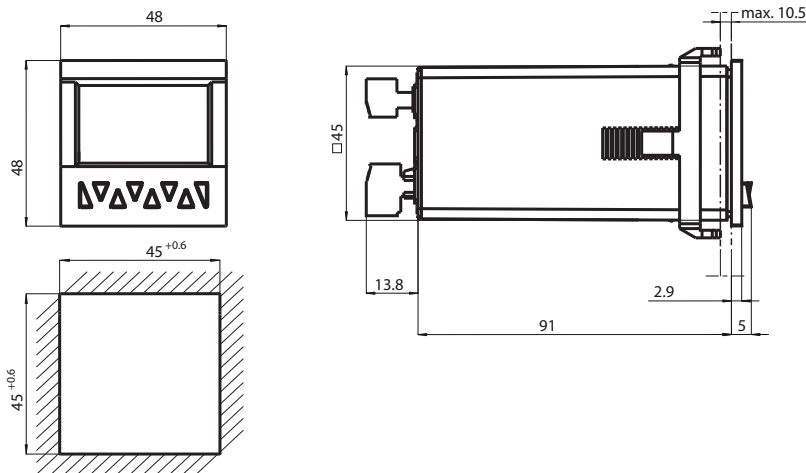
Timer, Counter KC-LCD-48-1R-24VDC

- Counter/Timer
- Adding/subtracting via 2 separate inputs
- Batch controller with 1 pre-selection
- 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
- Degree of protection IP65 (front only)

LCD batch controller with 1 relay output and 24 VDC supply voltage



Dimensions



Technical Data

General specifications

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

Indicators/operating means

Type	2-line, 2 x 6-digit LC display with leading sign
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

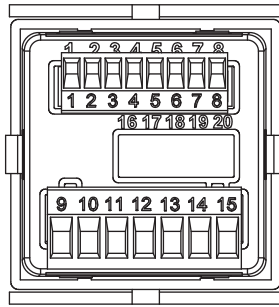
Fusing	11 ... 30 V DC: T 0.2 A
Operating voltage	U _B 11 ... 30 V DC
Power consumption	P ₀ max. 4 W

Release date: 2020-03-23 Date of issue: 2020-03-26 Filename: 214735_eng.pdf

Technical Data

Input	
Connection	Counter inputs: A and B Control/reset inputs: LOCK, RESET
Signal voltage	
High	3.5 ... 30 V DC
Low	0 ... 2 V DC
Counting frequency	30 Hz / 5 kHz
Minimum pulse duration	Control/reset inputs: static / 1 ms
Impedance	10 kOhm
Count modes	
Pulse counter	Counting with counting direction (cnt.dir), difference counting (up.dn), up/down counting (quad),
Timer	Time measurement via GATE input (FrErün), counter input A: Start, counter input B: Stop (InpA.InpB.), counter input B: Start/Stop (InpB.InpB.),
Output	
Relay	changeover 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
Mechanical life	2 x 10 ⁷ switching cycles
Electrical life	5 x 10 ⁴ cycles at 3 A
Response time	< 15 ms pulse counter < 10 ms time counter
Sensor supply	connected power supply is looped through, max. 50 mA
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 ... 55 Hz / 1 mm / 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	-10 ... 50 °C (14 ... 122 °F)
Storage temperature	-25 ... 75 °C (-13 ... 167 °F)
Relative humidity	≤ 93 % at 40 °C (noncondensing)
Altitude	0 ... 2000 m
Mechanical specifications	
Degree of protection	IP65 (front)
Mass	approx. 117 g
Dimensions	48 mm x 48 mm x 109.8 mm

Connection



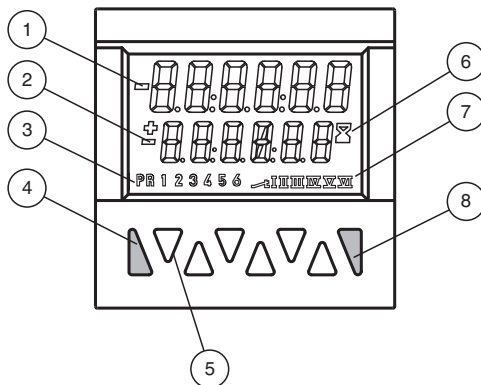
Signal and control inputs

- 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 not connected
- 8 not connected

Supply voltage and outputs

- 9 not connected
 - 10 not connected
 - 11 Relay contact C.
 - 12 Relay contact N.O.
 - 13 Relay contact N.C.
 - 14 11 ... 30 V DC
 - 15 GND (0V)
- } Output
- } Supply voltage

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

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