

CXL241

Electronic display counters

- Position display for rotation pulse generator with 90° shifted pulses
- Battery-powered (lithium battery)
- Pulse assessment single or double
- Optional backlight display
- Reset-key lockable
- Screw terminal connection in 5 mm grid

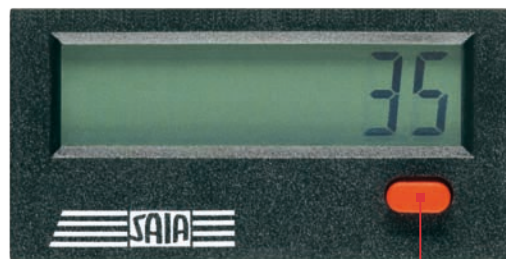


		CXL241			
Mounting	Flush mounting	•	•	•	•
Input type	One-channel, adding or subtracting counting method				
	With counting direction input				
	One adding and subtracting counting input each (difference mode)				
	Phase discriminator for incremental shaft encoder with single analysis	•	•	•	•
Display	Standard LCD display		•		•
	Display backlight	•		•	
Counting inputs	NPN	•	•		
	PNP			•	•
	Control for 10...260 VAC/DC				
Order no.		CXL241VHL	CXL241VHN	CXL241VJL	CXL241VJN

Applications

- Simple position display for incremental rotation pulse generator

Settings



Reset key, lockable

Technical data

Power supply	Internal lithium battery: approx. 8 years at 20 °C
Display backlight*	External voltage supply 24 VDC +/-20%, 50 mA
Display	LCD, 8-digit, 8 mm high
Operating modes	Phase discriminator, single or double analysis selectable
Counting display	-9 99 99 99...99 99 99 99, overflow is displayed
Reset	Manual, electrical or lockable
Standards	IEC 55011 class B, IEC 61 000-6-2 IEC 61 010 part 1 (for AC versions only)
Housing	Dark grey RAL 7021
Ambient temperature	-10 °C to +55 °C, no condensation
Storage temperature	-20 °C to +70 °C
Protection type	IP 65 front
Dimensions	Front dimensions and switchboard section see dimension diagram

* only for VHL and VJL types

Counting inputs

Counting input of the DC devices (max. 30 VDC)

Fast counting input	Max. 6 kHz (PNP), 3 kHz (NPN)
Switching level	NPN: Low 0...0.7 VDC, High 3...30 VDC PNP: Low 0...0.7 VDC, High 4...30 VDC

Change-over

Single or double analysis

Contact input	Open collector (NPN switching after 0 V)
Switching level	NPN: Low 0...0.7 VDC, High 3...5 VDC

Reset input

Minimum pulse time	NPN: 50 ms
DC contact input	NPN: Low 0...0.7 VDC, High 3...30 VDC

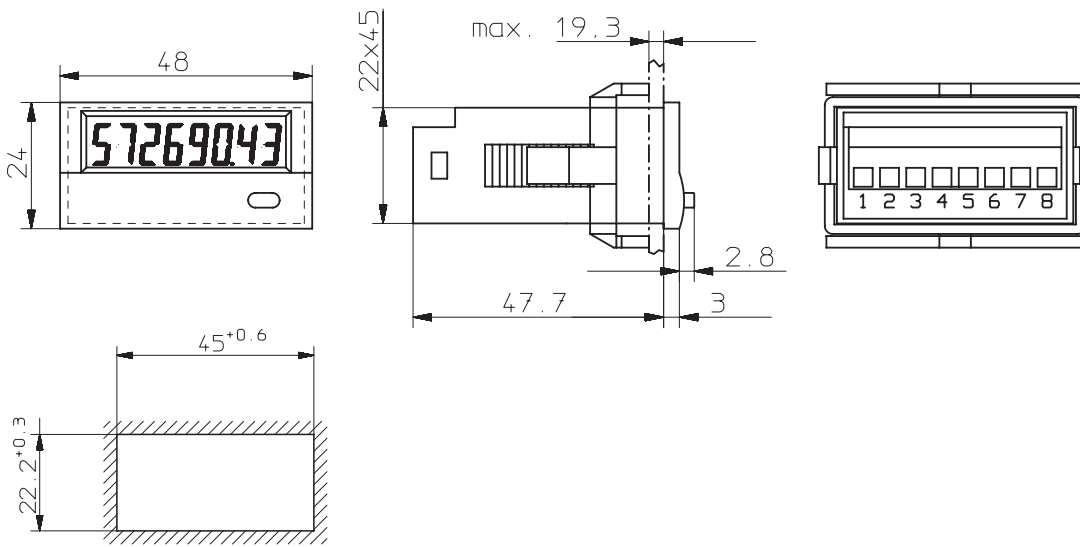
Electrical locking of the reset key (for DC and AC)

Contact input	Open collector NPN (switching after 0 V)
Switching level	NPN: Low 0...0.7 VDC, High 3...5 VDC

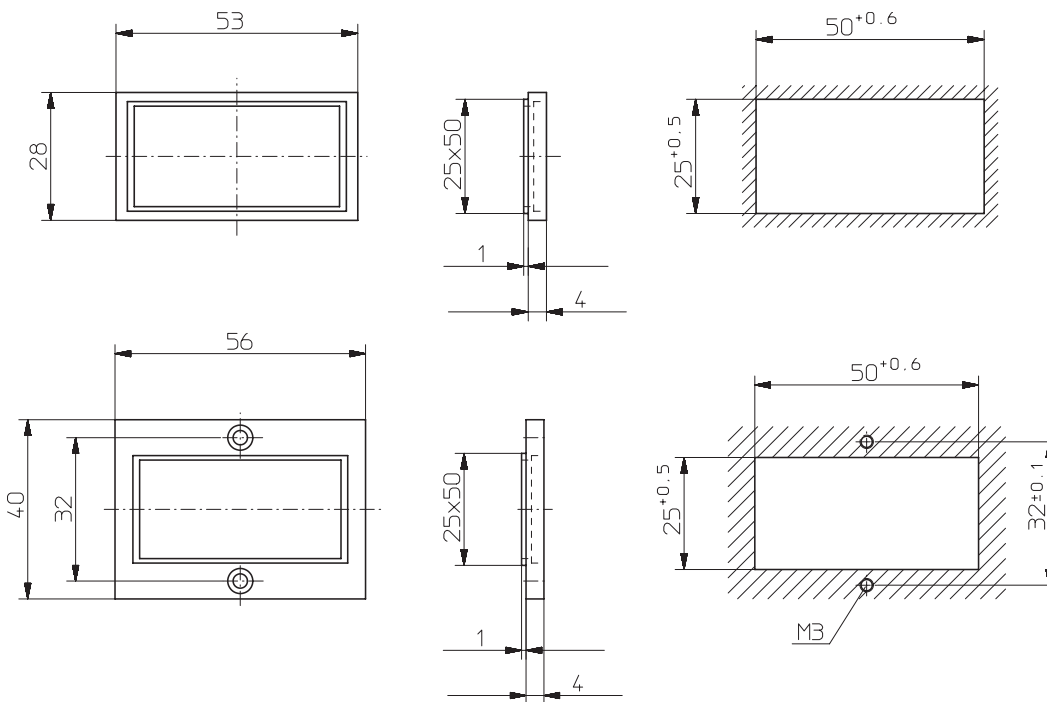
Type	Input type	Counting inputs							
		INP A				INP B			
...VHN, ...VHL	single or double analysis selectable	0...0.7 VDC	Channel A	NPN	3 kHz	0...0.7 VDC	Channel B	NPN	3 kHz
...VJN, ...VJL		4...30 VDC	Channel A	PNP	6 kHz	4...30 VDC	Channel B	PNP	6 kHz

Dimension diagrams

Dimensions



Dimensions for mounting frames (included in scope of delivery)



Pin assignment

Input specification, pin assignment and adjustable operating modes (DC versions).
A control input (screw terminal 5) allows adjusting the operating mode.

Screw terminal	Nr. 1	Nr. 2		Nr. 3	Nr. 4	Nr. 5		Nr. 6	Nr. 7	Nr. 8	
Designation	INP A	INP B		Reset	Reset Enable	Control inputs for operating mode (Mode)		GND	BL -	BL +	
CXL241VHX	03 kHz	NPN	03 kHz	NPN	NPN reset input	NPN reset key locking input. Contact with GND, key free..	not active = Quad Mode	contact with GND = Quad2 Mode	GND = 0 V DC	Backlighting (-)	Backlighting (+)
CXL241VJX	06 kHz	PNP	06 kHz	PNP							

Scope of delivery

- Counters
- Clamping springs
- Front frames for screw mounting (56 × 40 mm) or panel cut-out (50 × 25 mm)
- Sealing
- Instruction manual