

Technical data

Power supply	10...30 VDC with integrated reverse voltage protection or 90...260 VAC
Power consumption	1.1 W or 4 VA
Display	6-digit 7-segment LCD display (upper row 9 mm -actual-, lower row 7 mm -target-)
Data protection	EEPROM
Keyboard	4 keys (cursor keys)
Reset	Manual, electrical or lockable
Standards	IEC 61000-6-4/IEC 55011 class B IEC 61000-6-2
EMC	CE-compliant with EU Directive 89/36/EC
Housing	Dark grey RAL 7021
Ambient temperature	0 °C to +50 °C, no condensation
Storage temperature	-25 °C to +70 °C
Protection type	IP 65 front
Dimensions	Front dimensions and switchboard section see dimension diagram

Counting inputs

Inputs

Polarity of inputs	Positive (PNP) or negative (NPN) switching, programmable for all inputs	
Counting frequency	Via DIL switch for input. A and input B 30 Hz, 10 kHz can be set separately (details see instruction manual)	
Input resistance	Approx. 10 kΩ	
Switching level	DC supply voltage Low: $0...0.2 \times U_B$ (VDC), High: $0.6 \times U_B...30$ VDC	AC supply voltage Low: 0...4 VDC, High: 12...30 VDC
Minimum pulse duration	5 ms	
Control input		

Outputs

	Output 1	Output 2
	programmable as NC or NO contact	programmable change-over contact
	Switching voltage max. 250 VAC/110 VDC	Switching voltage max. 250 VAC/150 VDC
	Switching current max. 3 A (with DC min. 30 mA)	Switching current max. 3 A (with DC min. 30 mA)
	Switching capacity with DC 90 W, with AC max. 750 VA	Switching capacity with DC 90 W, with AC max. 750 VA
Output signal type	Approx. 7 ms	Approx. 7 ms
	Active or inactive, programmable as monostable or bistable	

Pulse counter and position display

Display range	-199 999...999 999, decimal space 0.0...0.00000
Display scaling	Factor selection 0.0001...9.9999 Decimal place 0... 0.000

Frequency counter

Display range	-999 999...999 999, decimal space 0.0...0.000
Display scaling	Multiplier: 0.0001...99.9999 Divisor: 0.0001...99.9999
Display unit	Gate time measurement principle can be set from 0.01 to 99.995

Hour meters

Display range	0...999 999, decimal space 0.0...0.000 (determines the resolution of the time range)
Time range	Hrs, mins or sec and hh.mm.ss
Resolution	1 ms

Various measurement types of timing (pulse widths and period duration)

Connections CXE312

Plug connection X1

Terminal No.	AC version	DC version
1	without connection	
2	without connection	
3	relay output common contact (C) optocoupler output emitter	
4	relay output normally open contact (NO)	
5	relay output normally closed contact (NC) optocoupler output collector	
6	90...260 VAC/ 48 VAC/24 VAC	11...30 VDC operating voltage
7	90...260 VAC 48 VAC/24 VAC	0 VDC (GND)

Caution! For settings \bar{L} and \bar{LI} (inverted operation of relay or optocoupler) the connections of terminal 4 and 5 change as follows:

Terminal No.	AC- and DC versions
4	relay output normally closed contact (NC)
5	relay output normally open contact (NO)

Connections CXE322

Plug connection X1

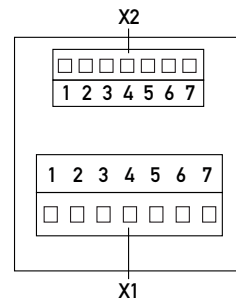
Terminal No.	230, 115, 48 and 24 VAC	11...30 VDC-version
1	Output 1, relay contact optocoupler output collector	
2	Output 1, relay contact optocoupler output emitter	
3	Output 2, relay output common contact (C) optocoupler output emitter	
4	Output 2, relay output normally open contact (NO)	
5	Output 2, relay output normally closed contact (NC) optocoupler output collector	
6	90..260 VAC/ 48 VAC/24 VAC	11...30 VDC operating voltage
7	90...260 VAC 48 VAC/24 VAC	0 VDC (GND)

Caution! For settings \bar{L} and \bar{LI} (inverted operation of relay or optocoupler) the connections of terminal 4 and 5 change as follows:

Terminal No.	AC- and DC versions
4	relay output normally closed contact (NC)
5	relay output normally open contact (NO)

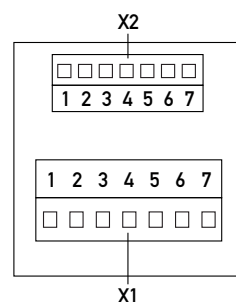
Plug connection X2

Terminal No.	Designation	Function 90...260 VAC 48 VAC/24 VAC- version	Function 11...30 VDC- version
1	+ 24 VDC	Transmitter voltage	-
2	GND	0 VDC refer- ence voltage	-
3	INP A	count input A	
4	INP B	count input B	
5	RESET	reset input	
6	GATE	gate input	
7	KEY	keyboard lock input	



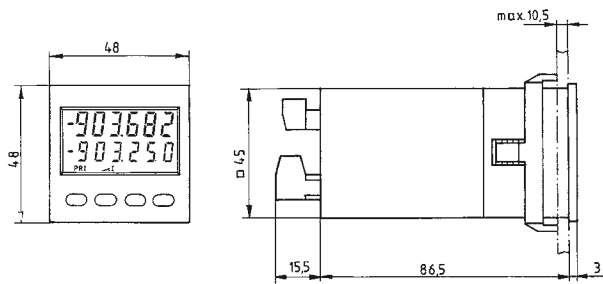
Plug connection X2

Terminal No.	Designation	Function 90...260 VAC 48 VAC/24 VAC- version	Function 11...30 VDC- version
1	+ 24 VDC	Transmitter voltage	-
2	GND	0 VDC refer- ence voltage	-
3	INP A	count input A	
4	INP B	count input B	
5	RESET	reset input	
6	GATE	gate input	
7	KEY	keyboard lock input	

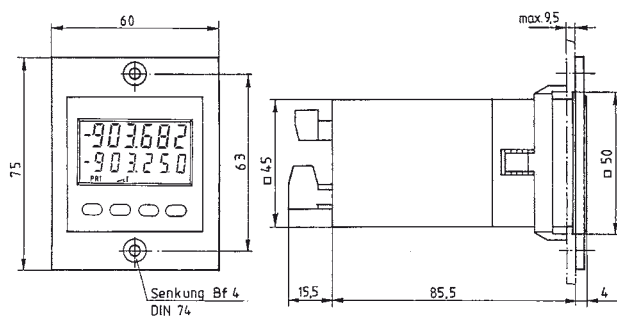


Dimension diagrams

Dimensions



with front frames for screw mounting



Scope of delivery

- Counters
- Screw terminal 7-pole, RM 5.08
- Screw terminal 7-pole, RM 3.81
- Front frames for screw mounting or panel cut-out (50 x 50 mm)
- Clamping springs
- Template for front panel cutout
- Instruction manual