

CXM201/211

Temperature display for Pt/Ni 100 and thermo elements J, K and N

- Input for Pt/Ni 100, galvanically separated (CXM201)
- Input for J, K, N thermo elements, galvanically separated (CXM211)
- Supply voltage 10...30 VDC, galvanically separated
- Programmable using 2 large keys
- Defined characteristic line
- Automatic minimum-/ maximum display



		CXM201	CXM211
Mounting	Flush mounting	•	•
Function	Input for resistance thermometers Pt/Ni 100	•	
	Input for J, K, N thermo elements		•
	Correction over the entire measurement area	•	
	External/internal reference point compensation		•
Display range	Temperature display in °C or °F with 1 or 2 decimal spaces	•	•
	Min/max value display	•	•
	Order no.	CXM201M4N	CXM211M4N

Applications

- Temperature display and monitoring
 - Switching cabinet cooling
 - Bakery systems
 - Drying systems/Ovens
 - Packaging machines
 - Tool and plastic processing machines
 - Chemistry and pharmacy systems

Settings



Reset key/
point selection

Programming key

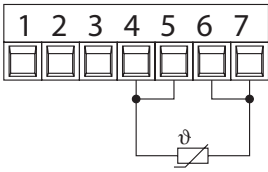
Technical data

Power supply	10...30 VDC with integrated reverse voltage protection, galvanically separated	
Current consumption	Max. 40 mA	
Display	5-digit red, 7-segment LED display, 8 mm high	
Data protection	EEPROM	
Temperature ranges	CXM201	CXM211 in accordance with DIN IEC 585
	PT 100 in accordance with DIN IEC 751: -199.9 °C...+850.0 °C (-327.8 °F...+1562.0 °F)	J (Fe-CuNi) -210.0 °C...+1200.0 °C (-376.0 °F...+2192.0 °F)
	Ni 100 in accordance with DIN 43760: -60.0 °C...+250.0 °C (-76.0 °F...-482.0 °F)	K (Ni-CrNi) -200.0 °C...+1372.0 °C (-328.0 °F...+2501.6 °F)
		N (NiCrSi-NiSi) -200 °C...+1300.0 °C (-328.0 °F...+2370.0 °F)
Inputs	Pt100 resistance thermometer	Thermo element sensor J (Fe-CuNi), K (Ni-CrNi), N (NiCrSi-NiSi) with sensor break monitoring
	Ni 100 resistance thermometer with sensor break monitoring	
Linearity error	Pt 100 <0.1% above the entire measurement range at an ambient temperature of 20 °C	
	Ni 100 <0.2% above the entire measurement range at an ambient temperature of 20 °C	
Reference point error	±3.0 °C (max.) ±1.0 °C (typ.)	
Control input	High: 4...30 VDC, Low: 0...2 VDC	
Resolution	0.1 °C (0.1 °F) or 1.0 °C (1.0 °F)	
Accuracy	>0.1 % of the entire measurement range at an ambient temperature of 20 °C	
Measurement rate	Approx. 5 measurement per second	
Switching type	2-wire, 3-wire, 4-wire connection technology, programmable (CXM201)	
Standards	IEC 61 000-6-4/IEC 55011 class B IEC 61 000-6-2	
EMC	CE-compliant with EU Directive 89/36/EC	
Housing	Dark grey RAL 7021	
Ambient temperature	-20 °C to +65 °C, no condensation	
Storage temperature	-25 °C to +70 °C	
Protection type	IP 65 front	
Dimensions	Front dimensions and switchboard section see dimension diagram	

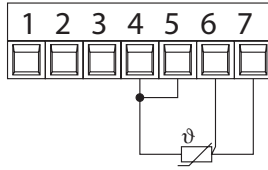
Electrical connection

CMX201

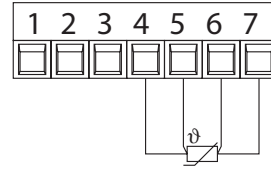
2-wire resistance thermometer



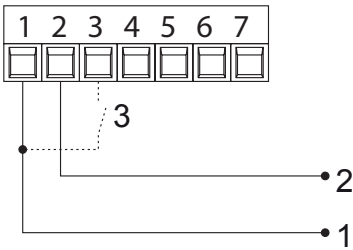
3-wire resistance thermometer



4-wire resistance thermometer



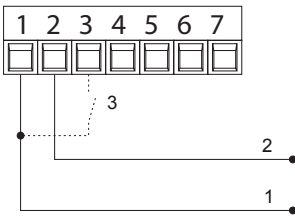
Supply voltage and Latch input connection



3 Latch-input
2 0 V DC (GND)
1 10 ... 30 V DC

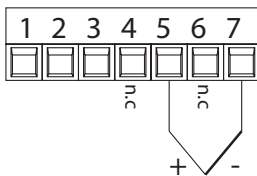
CMX211

Supply voltage and Latch input connection



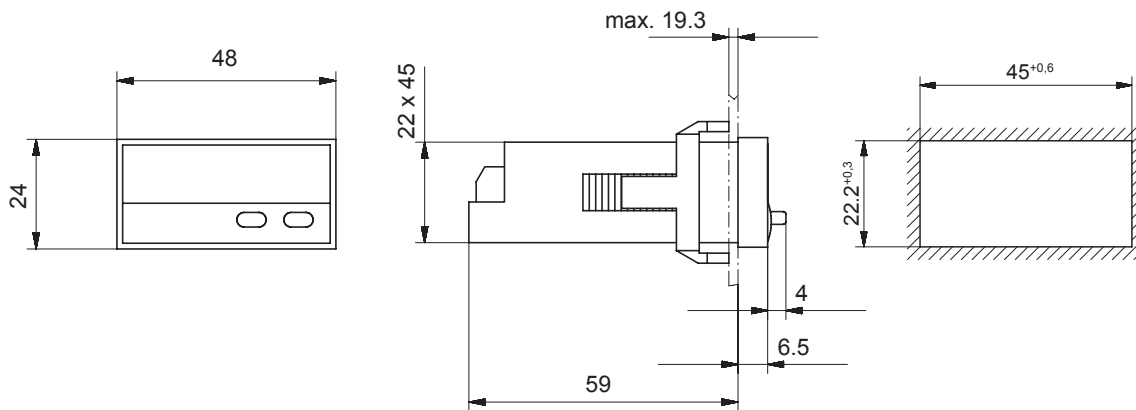
3 Latch-input
2 0 V DC (GND)
1 10 ... 30 V DC

Thermoelectric couple sensor

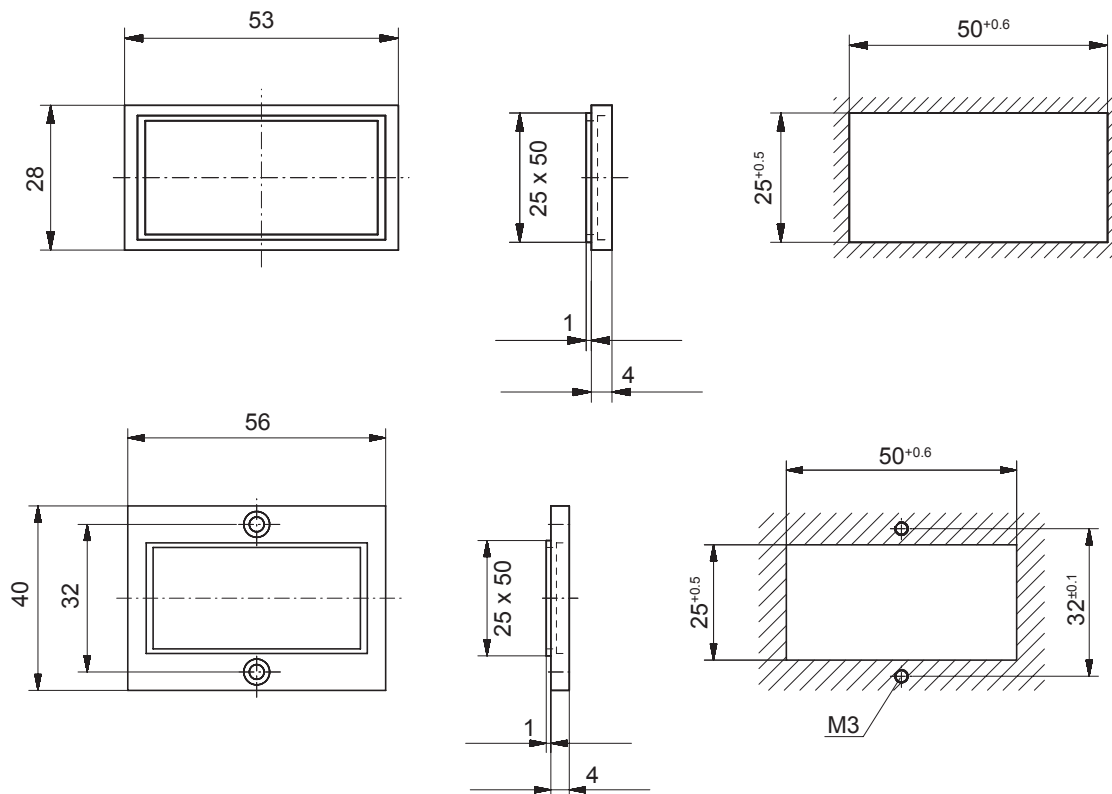


Dimension diagrams

Dimensions



Dimensions for mounting frames (included in scope of delivery)



Scope of delivery

- Digital display
- Clamping springs
- Front frames for screw mounting (56 x 40 mm) or panel cut-out (50 x 25 mm)
- Sealing
- 1 set of self-adhesive symbols
- Instruction manual