



Temperature transmitter

NTM 220.Ex

- RTD or Ohm input
- High accuracy
- Excellent EMC performance
- 1500V AC dielectric strength
- DIN B Head mount and field mount transmitters
- Configurable input types and ranges



Technical data

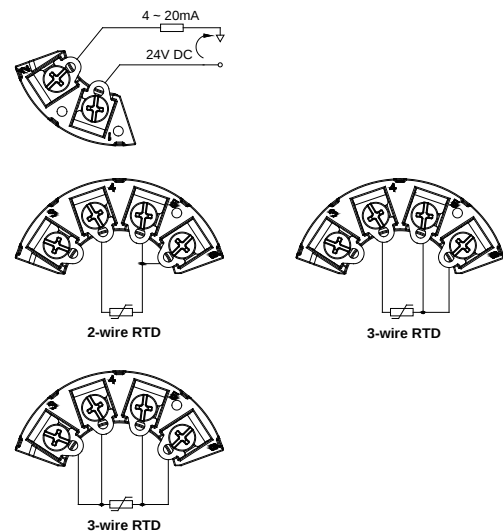
Power supply:	12 V DC~28 V DC (Reverse power protection)
Input signal:	Pt100, Cu100, Cu50, BA1, BA2, etc resistance signal (0~400Ω)
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	4~20mA
Load resistance:	$RL \leq [(U-12)/0.022]\Omega$; U is loop powered voltage

Range and Conversion accuracy list (25°C±2°C) :

Type	Range	Min.span/Accuracy	
Pt100	-200°C~+850°C	<100°C, ±0.1°C	≥100°C, ±0.1% F.S.
Cu50	-50°C~+150°C	<100°C, ±0.1°C	≥100°C, ±0.1% F.S.
Cu100	-50°C~+150°C	<100°C, ±0.1°C	≥100°C, ±0.1% F.S.
Ohm	0~400Ω	<50Ω, 0.05Ω	>50Ω, ±0.1% F.S.

Temperature drift:	50ppm/°C
Response time:	≤ 1s
Electromagnetic compatibility:	IEC 61326-1
Dielectric strength:	≥ 1500V AC (Input/Output)
Insulation resistance:	≥ 100MΩ (Input/Output)
Operation temperature:	-40°C ~ +85°C
Storage temperature:	-40°C ~ +85°C
Dimension:	Ø 44×25.5mm
Wire size:	1.5mm²
Screw terminal torque:	0.5Nm

Wiring diagram



Explosive-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)

Explosive-proof grade: Ex ia IIC T4/T6 Ga

T4: -40°C ~ +60°C

T6: -40°C ~ +50°C

Certified parameters (Terminals 3, 4, 5, 6):

$U_o=5.9V$ $I_o=24mA$ $P_o=36mW$

$C_o=40\mu F$ $L_o=40mH$

Certified parameters (Terminals 1, 2):

$U_i=28V$ $I_i=93mA$ $P_i=670mW$

$C_i=0\mu F$ $L_i=0mH$