

TEMPERATURE SENSOR/TRANSMITTER

High accuracy Temperature Sensor with integral signal transmitter. Fast response for temperature protection in pipes, vessels, bearings, power packs, gearboxes, drive heads, hydraulic circuits, brake shoes, and ambient air temperature.

- Long signal transmission distance with automatic stability control.
- Choice of analogue output signal:-
4...20mA • 0.4...2V • 5...15Hz.
- Optional LCD temperature readout.
- Use with insertion probes or with integral ambient air temperature sensor.
- Semi-conductor or PT100 sensing element compatibility.
- Intrinsically Safe to Euronorm standards.

Technical Details

Sensor Input Type:	Semi-conductor	PT100 (TX6273 only)
Temperature Measuring Range:	0...100°C	0...200°C
Overall Accuracy:	±2%.	1%. (dependent on class of probe).
Repeatability:	±1%.	1%.
Ambient Temperature Limits:	-10...70°C.	
Housing Material:	Stainless steel filled Polyamide 6.	
Indicator:	Green 'Power on' LED (on versions without LCD).	
Protection Classification:	Dust and waterproof to IP65.	
Electrical Connections:	4mm barrier terminals.	
Nett Weight:	500gms.	
Information Display:	3½ digit LCD calibrated in °C.	

Certification and Approval



Group I EEx ia I

Group II EEx ia IIC T4

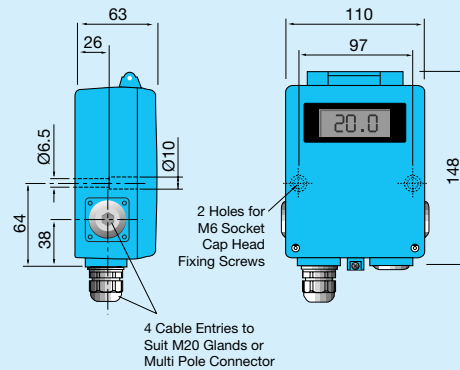


Designed to comply with the requirements of the following EC directives:

- ATEX directive 94/9/EEC
- EMC directive 89/336/EEC

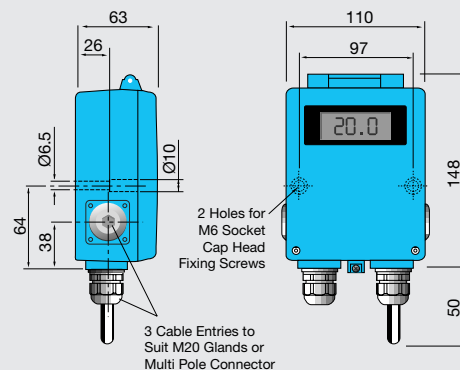
TX 6273

Remote Temperature Sensing Probes



TX 6274

Integral Air Temperature Sensing Probe



Electrical Details

GENERAL PURPOSE AND Ex GROUP II APPLICATIONS (24V dc)

TX6273 • TX6274

Output	4...20mA	
Max Load	600 ohms at 24V dc	
Supply	10...30V dc	
Current	Loop Powered	

Ex GROUP I APPLICATIONS (12V dc)

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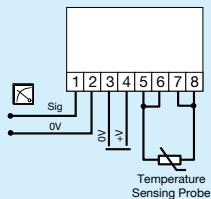
Output	0.4...2V	
Min Load	10k ohms	
Supply	9...16.5V dc	
Current	<10mA	

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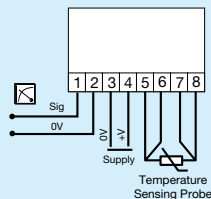
Output	4...20mA	
Max Load	200 ohms at 12V dc	
Supply	9...16.5V dc	
Current	Loop Powered	

Connections

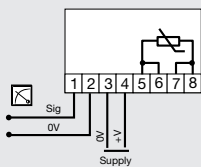
TX6273
Two wire probe connection.



TX6273
Four wire probe connection for line compensation.



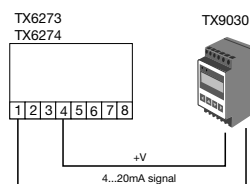
TX6274 • Integral air temperature sensing probe.



The output signal from terminals 1 and 4 is a conventional 4...20mA two wire current regulated signal loop.

Sensor/transmitter using PT100 or semiconductor sensing probes have very low power consumption so the same loop can be used to also power the sensor.

No separate power supply is needed.



Order Reference

TX6273 TEMPERATURE SENSOR/TRANSMITTER.

(Remote temperature sensing probe).



Please specify additional information

CERTIFICATION:

- Intrinsically Safe Group I (01)
- Intrinsically Safe Group II (02)
- General Purpose (03)

OUTPUT SIGNAL:

- 0.4...2V (Group I only) (11)
- 4...20mA (12)
- (5...15Hz output available to special order) (Group I only)

SENSOR TYPE:

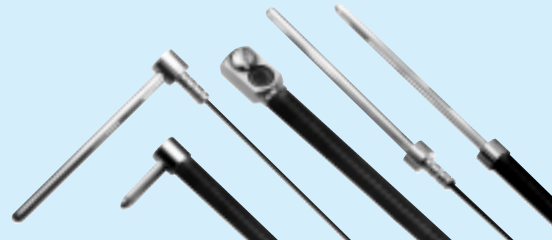
- KTY21-6 Semiconductor (21)
- PT100 Resistive (23)

DISPLAY:

- With Display (45)
- Without Display (46)

SENSING PROBES:

- Please order separately from Technical Datasheet TX2070.



TX6274 TEMPERATURE SENSOR/TRANSMITTER.

(Integral air temperature sensing probe).



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