

THERMOCOUPLES * RTD SENSORS * THERMOWELLS * EXTENSION CABLES * LEVEL SWITCHES

Hazardous Area “Ex n” (1610)

Thermocouples and RTD Sensors are an Ignition Source ([1047 Ex n](#))

RTD and Thermocouple sensors are considered to be apparatus that in normal operation and in certain specified regular occurrences are not capable of igniting a surrounding gas atmosphere, and can be freely installed in “Ex n” applications.

However all equipment installed must comply with the International standard IEC 60079-15 : 2010 Equipment Protection “n” (“Ex n”).

The International Standard IEC 60079-15 : 2010 Equipment Protection “n” has been introduced to cover the certification of equipment suitable for use in Zone 2 Hazardous Areas.

Electrical equipment and Instrumentation including RTD or thermocouple temperature sensors are considered a source of ignition and the design of these products for “ Ex n” Non Sparking applications must ensure that non-sparking is maintained and heat is kept to safe levels suitable for the hazardous environment the equipment is expected to work in.

To ensure that the RTD and Thermocouple temperature sensors supplied by Temperature Controls comply with IEC 60079-15: 2010, new manufacturing and testing procedures have been developed by Temperature Controls and audited by Simtars Engineering , Testing and Certification Centre with Test Report No NE10/0037 issued to confirm compliance.

Each Rtd or thermocouple temperature sensor supplied by Temperature Controls which meet the requirements of this new standard will be supplied with a serial number and Certificate of Compliance to enable traceability of equipment during Hazardous Area Installation inspections.

For more information on “ Ex n “ temperature sensors, please visit the Temperature Controls website. www.temperature.com.au (Search 1047Ex n)

Transmitters –

“Ex n” certified transmitters may be fitted in “Ex n” hazardous areas without a barrier.

Part No

**TCIPAQ
C520**

**Transmitter Head Mounted 2 Wire Hart Protocol “Ex n”, SIL 2
Compliance (ITS09 ATEX 26305x)**

Data Sheet [SD 1588](#)

Ex approvals – ATEX: II 3 G Ex nL IIC T4-T6

In progress: FM, CSA, IECEx, GOST

Multi Input Thermocouple and RTD

Single or dual sensor input; Average, Differential.

Sensor drift monitoring

4—20 or 20—4 mA output

Upscale or Downscale Burnout

10 to 30 V Power Supply

ATEX
Certificate
[SD 1493](#)



Din Rail Version Available