Rosemount™ 3144P Configuration Data Sheet

HART® 4–20 mA and Safety Certified Transmitter

BOLD = Required Value
★= Default

❍ Select only one of the items provided
❑ One or more of the listed items can be selected

Customer Information

Customer: _____ Name: _____

Phone no.: _____ Fax no./email: _____

P.O./reference No.:_____ P.O. line item: _____

Quote no.: _____ Model no.:_____

Customer sign-off: _____

Tagging

Hardware tag:_____

_____ (2 lines, 28 characters maximum per line)

Software tag: _____ (8 characters maximum - default is first 8 characters of the hardware tag)

Long software tag: _____(32 Characters maximum)
(Requires HR7 and C1 options)

Sensor 1

Type

- ◉ Pt 100, α = 0.00385★
- ○ Pt 100, α = 0.003916
- ○ Pt 200, α = 0.00385
- ○ Pt 200, α= 0.003916
- ○ Pt 500, α = 0.00385
- ○ Pt 1000, α = 0.00385
- ○ Cu 10
- ○ Ni 120
- ○ Transmitter Sensor Matching (C2 Option)
- ○ Nonstandard (C7 Option), Attach Calibration Schedule(1)
- ○ Ohms
- ○ NIST Type B T/C
- ○ NIST Type E T/C
- ○ NIST Type J T/C
- ○ NIST Type K T/C
- ○ NIST Type N T/C
- ○ NIST Type R T/C
- ○ NIST Type S T/C
- ○ NIST Type T T/C
- ○ mV
- ○ DIN Type L T/C
- ○ GOST Cu 50, α= 0.00426
- ○ GOST Cu 50, α= 0.00428
- ○ GOST Cu 100, α= 0.00426
- ○ GOST Cu 100, α= 0.00428
- ○ GOST Type L T/C

Sensor 2 (dual sensor option)

Type

- ◉ Not used★
- ○ Pt 100, α = 0.00385
- ○ Pt 100, α = 0.003916
- ○ Pt 200, α = 0.00385
- ○ Pt 200, α= 0.003916
- ○ Pt 500, α = 0.00385
- ○ Pt 1000, α = 0.00385
- ○ Cu 10
- ○ Ni 120
- ○ Transmitter Sensor Matching (C2 Option)
- ○ Nonstandard (C7 Option), Attach Calibration Schedule(1)
- ○ Ohms
- ○ NIST Type B T/C
- ○ NIST Type E T/C
- ○ NIST Type J T/C
- ○ NIST Type K T/C
- ○ NIST Type N T/C
- ○ NIST Type R T/C
- ○ NIST Type S T/C
- ○ NIST Type T T/C
- ○ mV
- ○ DIN Type L T/C
- ○ DIN Type U T/C
- ○ Type W5Re/W26Re T/C
- ○ GOST Pt 50, α= 0.00391
- ○ GOST Pt 100, α= 0.00391
- ○ GOST Cu 50, α= 0.00426
- ○ GOST Cu 50, α= 0.00428
- ○ GOST Cu 100, α= 0.00426
- ○ GOST Cu 100, α= 0.00428
- ○ GOST Type L T/C

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Sensor 1				Sensor 2 (dual sensor option)				
				Note Default depends on option ordered A1: Default is "Not Used" A2: Default is PT100 3-wire				
Number of leads								
○ 2-wire	○ 3-wire	◉ 4-wire★		○ 2-wire	○ 3-wire	○ 4-wire		
4 mA Value:	◉ 0 °C★	○ _____°C	○ _____°F	○ _____ °R	○ _____ mV	○ _____ K	○ _____ Ohms	
20 mA value:	○ 100 °C	○ _____°C	○ _____°F	○ _____ °R	○ _____ mV	○ _____ K	○ _____ Ohms	

1. A nonstandard sensor type can only be used for Sensor 1 or Sensor 2, not both.

Rosemount X-well™ Technology temperature measurement configuration(1) (PT option required)			
○ Standard		○ Custom(2)	
Pipe material	**Pipe schedule**	Pipe material: _____	
○ Carbon steel	○ 40	**Pipe schedule:** _____	
○ Painted carbon steel	○ 80	Pipe conduction coefficient: _____ (value must be between 0 and 1)	
○ 304 stainless steel	○ 120		
○ 316 stainless steel			

1. 4-wire sensor configuration required for Rosemount X-well Technology.

2. For custom configuration, consult factory with pipe material and pipe schedule for the appropriate pipe conduction coefficient.

Note
Custom configuration information below this note requires C1 option code.

Transmitter information			
Damping ◉ 5 Seconds★	○ Other _____ (Value must be less than 32 seconds)		
LCD display (selections with multiple variables will be alternating)		**Rosemount X-well LCD display option**	
○ Analog output and primary variable	○ Percent of range	○ Sensor 1 and surface temperature	
○ Sensor 1, Sensor 2, and differential temperature	○ Sensor 1 temperature	○ Sensor 1 and surface temperature and analog output	
○ Sensor 1 and Sensor 2 temperature	○ Sensor 2 temperature		
○ Average temperature	○ Analog Output		
○ Differential temperature	○ Not Used		
○ Primary variable			
Descriptor ☐ _____ (16 characters maximum)			
Message ☐ _____ (32 characters maximum)			
○ Date	Day _ _ (numeric)	Month _ _ _ (alphabetic)	Year _ _ (numeric)
Jumper selection			
Failure mode	◉ High★	○ Low	
Software security	◉ Off★	○ On	

Transmitter information

Damping ◯ 5 Seconds★ ◯ Other _____ (Value must be less than 32 seconds)

Signal selection

◉ 4–20 mA with simultaneous digital signal based on HART protocol★

◯ Burst mode of HART digital process variable

Burst mode output options:

◯ Primary variable in engineering units

◯ Primary variable in percentage of range

◯ All dynamic variables in engineering units and the primary variable mA value

◯ Multidrop communication (not applicable for safety certified transmitter.)

Note: This option fixes the transmitter's analog output at 4 mA.

☐ 1_____ provide transmitter address (1★–15)

Note: The default transmitter address is 1 if multidrop communication is selected.

Alarm and saturation values

◉ Rosemount standard★

◯ NAMUR-compliant(1).

◯ Custom (field left blank will default to Rosemount standard values)

☐ High alarm level _____ mA (must be between 21.0 and 23.0 mA)

☐ Low alarm level _____ mA (must be between 3.5 and 3.75 mA)

☐ High saturation level _____ mA (must be between 20.5 and the high alarm value minus 0.1 mA, 20.5 to 20.9 mA for safety certified)

☐ Low saturation level _____ mA (must be between the low alarm value plus 0.1 mA and 3.9 mA, minimum 3.7 mA for safety certified)

1. Available with option code A1 or CN.

Global Headquarters
Emerson Automation Solutions
6021 Innovation Blvd.
Shakopee, MN 55379, USA
+1 800 999 9307 or +1 952 906 8888
+1 952 949 7001
RFQ.RMD-RCC@Emerson.com

North America Regional Office
Emerson Automation Solutions
8200 Market Blvd.
Chanhassen, MN 55317, USA
+1 800 999 9307 or +1 952 906 8888
+1 952 949 7001
RMT-NA.RCCRFQ@Emerson.com

Latin America Regional Office
Emerson Automation Solutions
1300 Concord Terrace, Suite 400
Sunrise, FL 33323, USA
+1 954 846 5030
+1 954 846 5121
RFQ.RMD-RCC@Emerson.com

Europe Regional Office
Emerson Automation Solutions Europe GmbH
Neuhofstrasse 19a P.O. Box 1046
CH 6340 Baar
Switzerland
+41 (0) 41 768 6111
+41 (0) 41 768 6300
RFQ.RMD-RCC@Emerson.com

Asia Pacific Regional Office
Emerson Automation Solutions Asia Pacific Pte Ltd
1 Pandan Crescent
Singapore 128461
+65 6777 8211
+65 6777 0947
Enquiries@AP.Emerson.com

Middle East and Africa Regional Office
Emerson Automation Solutions
Emerson FZE P.O. Box 17033
Jebel Ali Free Zone - South 2
Dubai, United Arab Emirates
+971 4 8118100
+971 4 8865465
RFQ.RMTMEA@Emerson.com

Linkedin.com/company/Emerson-Process-Management

Twitter.com/Rosemount_News

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Youtube.com/user/RosemountMeasurement

Google.com/+RosemountMeasurement

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