

## Selection and Ordering data

Order No.

**Temperature transmitter in field housing** D) 7NG313 - ■■■■■■  
Two-wire system 4 ... 20 mA, with electrical isolation, with documentation on CD-ROM

### Integrated transmitter

SITRANS TH200, programmable

- Without Ex protection 5 0
- With Ex ia 5 1
- With Ex nAL for zone 2 5 2
- Total device SITRANS TF Ex d<sup>1)</sup> 5 4
- Total device SITRANS TF according to FM (XP, DIP, NI, S)<sup>1)</sup> 5 5

SITRANS TH300, communication capability according to HART V 5.9

- Without Ex-protection 6 0
- With Ex ia 6 1
- With Ex nAL for zone 2 6 2
- Total device SITRANS TF Ex d<sup>1)</sup> 6 4
- Total device SITRANS TF according to FM (XP, DIP, NI, S)<sup>1)</sup> 6 5

### Enclosure

Die-cast aluminium  
Stainless steel precision casting

### Connections/cable inlet

Screwed glands M20x1.5  
Screwed glands ½-14 NPT

### Digital indicator

Without 0  
With 1

### Mounting bracket and securing parts

Without 0  
Made of steel 1  
Made of stainless steel 2

### Further designs

Please add "-Z" to Order No. and specify Order code(s) and plain text.

- |  |                         |
|--|-------------------------|
| Test protocol (5 measuring points)   | <b>C11<sup>2)</sup></b> |
| Functional safety SIL2   | <b>C20</b>              |
| Functional safety SIL2/3   | <b>C23</b>              |
| Explosion protection   |                         |
| • Explosion protection Ex ia to INMETRO (Brazil) (only with 7NG313.-1....) | <b>E25</b>              |
| • Explosion protection Ex d to INMETRO (Brazil) (only with 7NG313.-4....)  | <b>E26</b>              |
| • Explosion protection Ex d to NEPSI (China) (only with 7NG313.-4....)     | <b>E56</b>              |

### Customer-specific programming

Add "-Z" to Order No. and specify Order code(s)

- |   |                           |
|---|---------------------------|
| Customer specific programming, specify <b>measuring range</b> in plain text       | <b>Y01<sup>3)</sup></b>   |
| Measuring point no. (TAG), max. 8 characters                                      | <b>Y17<sup>3)</sup></b>   |
| Meas. point descriptor, max. 16 characters  | <b>Y23<sup>3)4)</sup></b> |
| Meas. point message, max. 32 characters   | <b>Y24<sup>3)4)</sup></b> |
| Only inscription on measuring point label: specify in plain text: Measuring range | <b>Y22<sup>4)</sup></b>   |
| Pt100 (IEC) 2-wire, R <sub>L</sub> = 0 Ω  | <b>U02<sup>3)</sup></b>   |
| Pt100 (IEC) 3-wire  | <b>U03<sup>3)</sup></b>   |
| Pt100 (IEC) 4-wire  | <b>U04<sup>3)</sup></b>   |
| Thermocouple type B   | <b>U20<sup>3)</sup></b>   |
| Thermocouple type C (W5)  | <b>U21<sup>3)</sup></b>   |
| Thermocouple type D (W3)  | <b>U22<sup>3)</sup></b>   |
| Thermocouple type E   | <b>U23<sup>3)</sup></b>   |
| Thermocouple type J   | <b>U24<sup>3)</sup></b>   |
| Thermocouple type K   | <b>U25<sup>3)</sup></b>   |
| Thermocouple type L   | <b>U26<sup>3)</sup></b>   |

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- |  |                           |
|--|---------------------------|
| Thermocouple type N  | <b>U27<sup>3)</sup></b>   |
| Thermocouple type R  | <b>U28<sup>3)</sup></b>   |
| Thermocouple type S  | <b>U29<sup>3)</sup></b>   |
| Thermocouple type T  | <b>U30<sup>3)</sup></b>   |
| Thermocouple type U  | <b>U31<sup>3)</sup></b>   |
| With TC: CJC internal  | <b>U40<sup>3)</sup></b>   |
| With TC: CJC external (Pt100, 3-wire)                                  | <b>U41<sup>3)</sup></b>   |
| With TC: CJC external with fixed value, specify in plain text          | <b>Y50<sup>3)</sup></b>   |
| Special differing customer-specific programming, specify in plain text | <b>Y09<sup>3)5)</sup></b> |
| Fail-safe value 3.6 mA (instead of 22.8 mA)                            | <b>U36<sup>3)</sup></b>   |

Supply units see Chap. 8 "Supplementary Components".

- 1) Without cable gland.
- 2) Can only be ordered together with Y01, specify measuring range in plain text.
- 3) Y01 is mandatory for any customer-specific programming (measuring range will be mentioned on measuring point label as well, Y22 not necessary).
- 4) If only Y22, Y23 and Y24 are ordered and the label only has to be on the tag plate, Y01 does not have to be specified.
- 5) If needed, here you can mention settings, which cannot be specified with existing order codes.

## Selection and Ordering data

Order No.

### Accessories

- |   |  |
|---|--|
| <b>Modem for SITRANS TH100, TH200 and TR200 incl. parameterization software T</b> with USB interface  | <b>7NG3092-8KU</b>   |
| <b>CD for measuring instruments for temperature</b> with documentation in German, English, French, Spanish, Italian and Portuguese, and parameterization software SIPROM T (included in delivery with SITRANS TF) | <b>A5E00364512</b>   |
| <b>HART modem</b><br>With RS 232 interface ▶ D)<br>With USB interface ▶ D)  | <b>7MF4997-1DA</b><br><b>7MF4997-1DB</b>   |
| <b>SIMATIC PDM parameterization software</b> also for SITRANS TH300   | <b>see chap. 9</b>   |
| <b>Mounting bracket and securing parts</b><br>Made of steel for 7NG313.-..B..<br>Made of steel for 7NG313.-..C..<br>Made of stainless steel for 7NG313.-..B.. ▶<br>Made of stainless steel for 7NG313.-..C..      | <b>7MF4997-1AC</b><br><b>7MF4997-1AB</b><br><b>7MF4997-1AJ</b><br><b>7MF4997-1AH</b> |
| <b>Digital indicator<sup>1)</sup></b>   | <b>7MF4997-1BS</b>   |
| <b>Connection board</b><br>▶ Available ex stock.<br>Supply units see Chap. 8 "Supplementary Components".  | <b>A5E02226423</b>   |

1) It is not possible to upgrade devices with Ex protection

D) Subject to export regulations AL: N, ECCN: EAR99H.

### Ordering example 1:

7NG3135-0AB11-Z Y01+Y23+U03  
Y01: 0...100 C  
Y23: TICA1234HEAT

### Ordering example 2:

7NG3136-0AC11-Z Y01+Y23+Y24+U25+U40  
Y01: 0...300 C  
Y23: TICA 1234 ABC  
Y24: HEATING BOILER 56789

### Factory setting (transmitter):

- Pt100 (IEC 751) with three-wire circuit
- Measuring range: 0 ... 100 °C (32 ... 212 °F)
- Fault current 22.8 mA
- Sensor offset: 0 °C (0 °F)
- Damping 0.0 s

Selection and Ordering data	Order No.
<b>SITRANS TF field indicator</b> for 4 ... 20 mA signals, with documentation on CD-ROM	<b>7NG3130 -</b>
Without Ex-protection	<b>0 1</b>
With Ex ia	<b>1 1</b>
With Ex nAL for zone 2	<b>2 1</b>
Total device SITRANS TF Ex d <sup>1)</sup>	<b>4 1</b>
Total device SITRANS TF according to FM (XP, DIP, NI, S) <sup>1)</sup>	<b>5 1</b>
<b>Enclosure</b>	
Die-cast aluminium	<b>A</b>
Stainless steel precision casting	<b>E</b>
<b>Connections/cable inlet</b>	
Screwed glands M20x1.5	<b>B</b>
Screwed glands ½-14 NPT	<b>C</b>
<b>Digital indicator</b>	
With	<b>1</b>
<b>Mounting bracket and securing parts</b>	
Without	<b>0</b>
Made of steel	<b>1</b>
Made of stainless steel	<b>2</b>
<b>Further designs</b>	Order code
Please add <b>"-Z"</b> to Order No. and specify Order code(s) and plain text.	
Test protocol (5 measuring points)	<b>C11<sup>2)</sup></b>
Explosion protection	
• Explosion protection Ex ia to INMETRO (Brazil) (only with 7NG313.-1....)	<b>E25</b>
• Explosion protection Ex d to INMETRO (Brazil) (only with 7NG313.-4....)	<b>E26</b>
• Explosion protection Ex d to NEPSI (China) (only with 7NG313.-4....)	<b>E56</b>
<b>Customer-specific programming</b>	
Add <b>"-Z"</b> to Order No. and specify Order code(s)	
Customer specific programming, specify <b>measuring range</b> in plain text	<b>Y01<sup>3)</sup></b>
Only inscription on TAG plate: specify in plain text: Measuring range	<b>Y22</b>
Only inscription on TAG plate: Measuring point descriptor, max. 16 characters	<b>Y23</b>
Only inscription on TAG plate: Measuring point message, max. 27 characters	<b>Y24</b>
Special differing customer-specific programming, specify in plain text	<b>Y09<sup>4)</sup></b>

Supply units see Chap. 8 "Supplementary Components".

<sup>1)</sup> Without cable gland.

<sup>2)</sup> Can only be ordered together with Y01.

<sup>3)</sup> Y01 is mandatory for any customer-specific programming (measuring range will be mentioned on Measuring point label as well, Y22 not necessary).

<sup>4)</sup> If needed, here you can mention settings, which cannot be specified with existing order codes.

Selection and Ordering data	Order No.
<b>Accessories</b>	
<b>CD for measuring instruments for temperature</b> ▶ with documentation in German, English, French, Spanish, Italian and Portuguese, and parameterization software SIPROM T (included in delivery with SITRANS TF)	<b>A5E00364512</b>
<b>Mounting bracket and securing parts</b> Made of steel for 7NG313.-..B.. Made of steel for 7NG313.-..C.. Made of stainless steel for 7NG313.-..B.. ▶ Made of stainless steel for 7NG313.-..C..	<b>7MF4997-1AC</b> <b>7MF4997-1AB</b> <b>7MF4997-1AJ</b> <b>7MF4997-1AH</b>
<b>Digital indicator<sup>1)</sup></b>	<b>7MF4997-1BS</b>
<b>Connection board</b> ▶ Available ex stock.	<b>A5E02226423</b>

<sup>1)</sup> It is not possible to upgrade devices with Ex protection

#### Ordering example 1:

7NG3130-0AB10-Z Y01+Y23  
Y01: -5...100 C  
Y23: TICA1234HEAT

#### Ordering example 2:

7NG3130-0AC10-Z Y01+Y23+Y24  
Y01: 0 ... 20 BAR  
Y23: PICA 1234 ABC  
Y29: HEATING BOILER 67890

#### Factory setting (field indicator):

- 4 ... 20 mA