8-channel Analog Input

RTD and Ω

8206-TI-IS

- 8 input channels
- Intrinsically safe field circuits
- RTD and Ω
- 2-, 3- and 4-wire RTD format
- Channels independently configurable
- Channels are o/c failure independent

MODULE SPECIFICATION

See also System Specification

INPUTS

Number of channels
- 8

RTD inputs
- (2-, 3- or 4-wire)
- Pt100, Pt500 to BS EN60751: 1996
- Ni120 to DIN 43 760: 1985
- jPt100 to JIS C1604: 1981
- User definable linearisation table, **NOTE 1**

RTD INPUT

Input type	Range
Pt100, Pt500	-200 to +850° C
jPt100	-200 to +650° C
Ni120	-60 to +250° C

RESISTANCE INPUT

Excitation current	Range
211 µA	0 to 110 Ω
211 µA	0 to 280 Ω
211 µA	0 to 470 Ω
48 µA	0 to 2000 Ω

ACCURACY (% OF SPAN), SEE NOTE 2

Tamb	RTD & Ω inputs
25° C	± 0.05%
+10 to +40° C	± 0.1%
-40 to +70° C	± 0.2%

Cable resistance per loop
- 50 W (max)

RTD excitation current
- 211 µA (nom.)

Compliance voltage of current source
- 6.8 V

Resolution
- 16 bits

Series mode rejection
- >50 dB @ 50/60 Hz

Isolation (any channel to Railbus)
- 60 V peak

CONFIGURABLE PARAMETERS

Sensor type
- User selectable

Alarms
- High and low

Input dead zone
- User defined value

Selectable input filtering
- Off / 2 reading average / running average

Drive on open circuit fault
- Disabled / upscale / downscale

Channel status
- Active / Inactive

Offset (2-wire RTD mode)
- User defined value

RESPONSE TIME

Signal change to availability on Railbus
- 600 ms (max.)

SAFETY

Field wiring protection
- [EEx ia] IIC

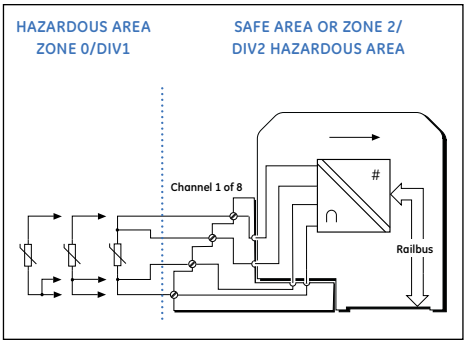
Safety Description (all channels combined)
- U_o = 16.4 V, I_o = 217 mA, P_o = 0.9 W

FM entity parameters
- V_{oc} = 16.4 V dc , I_{sc} = 350 mA, P_o = 718 mW

POWER SUPPLIES

IS Railbus (12V) current
- 120 mA (max.)

Power dissipation within module
- 1.5 W (max.)



FIELD TERMINALS

Field Wiring Type	Recommended Field Terminal
Intrinsically safe standard	8626-FT-IS

MECHANICAL

Module Key Code
- C3

Module width
- 42 mm

Weight
- 245 g

NOTE 1: *Consult GE for support in BIM/configurator.*

NOTE 2: *For Pt500 and 0 to 2000 Ω ranges a deviation of 0 to + 0.1% of reading is to be added for channel 1 or any channel preceded by a lower resistance range.*