



\*\*\* Spare part \*\*\* SIMATIC DP, Electronics module 2 AI I High Feature for ET 200S, 15 mm width, Cycle time per module: 0.5 ms, +/-20mA; 15 bit+sign, 4.. 20mA; 15 bit, Operational limit +/-0.1% with SF LED (group fault)

| General information                                                    |                                                                                                        |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Product function                                                       |                                                                                                        |
| • Isochronous mode                                                     | Yes                                                                                                    |
| Supply voltage                                                         |                                                                                                        |
| Load voltage L+                                                        |                                                                                                        |
| • Rated value (DC)                                                     | 24 V                                                                                                   |
| • Reverse polarity protection                                          | Yes                                                                                                    |
| Input current                                                          |                                                                                                        |
| from load voltage L+ (without load), max.                              | 48 mA                                                                                                  |
| from backplane bus 3.3 V DC, max.                                      | 10 mA                                                                                                  |
| Output voltage                                                         |                                                                                                        |
| Power supply to the transmitters                                       |                                                                                                        |
| • present                                                              | Yes                                                                                                    |
| • short-circuit proof                                                  | Yes                                                                                                    |
| Power loss                                                             |                                                                                                        |
| Power loss, typ.                                                       | 1.2 W                                                                                                  |
| Address area                                                           |                                                                                                        |
| Address space per module                                               |                                                                                                        |
| • Address space per module, max.                                       | 4 byte                                                                                                 |
| Analog inputs                                                          |                                                                                                        |
| Number of analog inputs                                                | 2                                                                                                      |
| permissible input current for current input (destruction limit), max.  | 50 mA                                                                                                  |
| Cycle time (all channels) max.                                         | 0.5 ms; 0.5 ms for 2 channels without noise suppression, 18 / 21 ms per channel with noise suppression |
| Input ranges (rated values), currents                                  |                                                                                                        |
| • -20 mA to +20 mA                                                     | Yes                                                                                                    |
| • 4 mA to 20 mA                                                        | Yes                                                                                                    |
| Cable length                                                           |                                                                                                        |
| • shielded, max.                                                       | 200 m                                                                                                  |
| Analog value generation for the inputs                                 |                                                                                                        |
| Measurement principle                                                  | Sigma Delta                                                                                            |
| Integration and conversion time/resolution per channel                 |                                                                                                        |
| • Resolution with overrange (bit including sign), max.                 | 16 bit                                                                                                 |
| • Interference voltage suppression for interference frequency f1 in Hz | 60 / 50 Hz / no                                                                                        |
| • Conversion time (per channel)                                        | 0.04 ms; Without noise suppression 17/20 ms per channel with error                                     |
| Smoothing of measured values                                           |                                                                                                        |
| • Parameterizable                                                      | Yes; In 4 stages: 1x, 4x, 16x, 32x cycle time                                                          |

- Step: None
- Step: low
- Step: Medium
- Step: High

Yes; 1x  
Yes; 4x  
Yes; 16x  
Yes; 32x

## Encoder

### Connection of signal encoders

- for current measurement as 2-wire transducer  
— Burden of 2-wire transmitter, max.

750  $\Omega$

## Errors/accuracies

### Operational error limit in overall temperature range

- Current, relative to input range, (+/-)

0.1 %; 0.2% without interference frequency suppression

### Basic error limit (operational limit at 25 °C)

- Current, relative to input range, (+/-)

0.05 %; 0.1% without interference frequency suppression

## Interrupts/diagnostics/status information

### Alarms

- Hardware interrupt

Yes

### Diagnoses

- Wire break
- Group error
- Overflow/Underflow

Yes; Measuring range 4 to 20 mA only

Yes

Yes

### Diagnostics indication LED

- Group error SF (red)

Yes

## Potential separation

### Potential separation analog inputs

- between the channels
- between the channels and backplane bus
- Between the channels and load voltage L+

No; however, increased permissible potential difference between the inputs.

Yes

Yes

## Dimensions

### Width

15 mm

### Height

81 mm

### Depth

52 mm

## Weights

### Weight, approx.

45 g

## Classifications

|        | Version | Classification |
|--------|---------|----------------|
| eClass | 16      | 27-24-26-01    |
| eClass | 14      | 27-24-26-01    |
| eClass | 12      | 27-24-26-01    |
| eClass | 9.1     | 27-24-26-01    |
| eClass | 9       | 27-24-26-01    |
| eClass | 8       | 27-24-26-01    |
| eClass | 7.1     | 27-24-26-01    |
| eClass | 6       | 27-24-26-01    |
| ETIM   | 10      | EC001596       |
| ETIM   | 9       | EC001596       |
| ETIM   | 8       | EC001596       |
| ETIM   | 7       | EC001596       |
| IDEA   | 4       | 3562           |
| UNSPSC | 15      | 32-15-17-05    |

## Approvals / Certificates

### General Product Approval

[Manufacturer Declaration](#)



[Miscellaneous](#)



[Metrological Approval](#)

|                          |     |
|--------------------------|-----|
| General Product Approval | EMV |
|--------------------------|-----|



[China RoHS](#)



|                                |
|--------------------------------|
| For use in hazardous locations |
|--------------------------------|



[FM](#)



|                                |                      |
|--------------------------------|----------------------|
| For use in hazardous locations | Maritime application |
|--------------------------------|----------------------|

[Miscellaneous](#)

[CCC-Ex](#)



|                      |             |
|----------------------|-------------|
| Maritime application | Environment |
|----------------------|-------------|

[NK / Nippon Kaiji Ky-  
okai](#)



[CCS \(China Classifica-  
tion Society\)](#)

[KR \(Korean Register  
of Shipping\)](#)

[China RoHS](#)

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