

## Datasheet for

SIPART PS2 Smart, electropneumatic positioner, 4...20mA, Ex/nEx, single-acting, polycarbonate enclosure, for pneumatic linear and part-turn actuators. Non-contacting (wear-free) position detection (NCS).

**Ordering data:** **6DR50100EM210AA3**

### General

|                     |   |
|---------------------|---|
| Manufacturer        | Siemens   |
| Supplier            | Siemens   |
| Product designation | Electropneumatic positioner   |
| Brand name          | SIPART PS2  |
| Type designation    | SIPART PS2 Smart, electropneumatic positioner, 4...20mA, Ex/nEx, single-acting, polycarbonate enclosure, for pneumatic linear and part-turn actuators. Non-contacting (wear-free) position detection (NCS). |
| Net weight          | 1.265 kg  |
| Slogan              | One that masters everything: SIPART PS2   |

### Input

#### Analog input

|                                  |             |
|----------------------------------|-------------|
| Signal range at the analog input | 4 ... 20 mA |
|----------------------------------|-------------|

### Operating conditions

#### Environmental conditions

|                                      |                 |
|--------------------------------------|-----------------|
| Ambient temperature during operation | -30 °C...+80 °C |
|--------------------------------------|-----------------|

#### Degree of protection

|                     |         |
|---------------------|---------|
| IP rating           | IP66    |
| NEMA Enclosure Type | NEMA 4X |

#### Electromagnetic compatibility EMC

|                  |  |
|------------------|--|
| Standard for EMC | The appropriate directives and standards applied, including the relevant versions, can be found in the EC Declaration of Conformity on the Siemens Internet pages. |
|------------------|--|

### Structural Design

#### Mechanical design

|  |                        |
|--|------------------------|
| Design of the positioner                 | single-acting          |
| Rotation angle of the part-turn actuator | 30 Degree...100 Degree |
| Stroke range of the linear actuator      | 3 mm...130 mm          |

#### Material

#### Enclosure

|          |   |
|----------|---|
| Material | polycarbonat, glass-fiber reinforced (PC) |
|----------|---|

#### Mounting

|   |  |
|---|--|
| Mounting kit for linear actuator            | Using mounting kit 6DR4004-8V and where necessary with an additional lever arm 6DR4004-8L on actuators according to IEC 534-6 (NAMUR) with ribs, bars or flat face   |
| Mounting kit for part-turn actuator         | "Using mounting kit 6DR4004-8D on actuators with mounting plane according to VDI/VDE 3845 and DIN 3337: The required mounting console has to be provided on the actuator side; shaft with groove and female thread M6" |
| Type of the assembly                        | With a suitable mounting kit, depending on use as a linear actuator or a part-turn actuator and process environment  |
| Design of connection for actuating pressure | 1/4"-18 NPT  |

#### Electrical connections

|                           |                   |
|---------------------------|-------------------|
| Connection technology     | 2-wire connection |
| Design of the cable entry | M20 x 1.5         |

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| Power supply |  |
|--------------|--|
|--------------|--|

|                                    |             |
|------------------------------------|-------------|
| Type of the auxiliary power supply | pneumatical |
|------------------------------------|-------------|

### Pneumatic

|   |  |
|---|--|
| Operating medium  | Compressed air, natural gas (purified), Nitrogen |
| Operating pressure of the supply air (maximum)            | 7 bar  |
| Compressed air purity class for humidity and liquid water | Class 2  |
| Air consumption   | 0.01 m³/h  |

| Certificates and approvals |  |
|----------------------------|--|
|----------------------------|--|

|  |  |
|--|--|
| EC declaration of conformity                       | The appropriate directives and standards applied, including the relevant versions, can be found in the EC Declaration of Conformity on the Siemens Internet pages. |
| Pressure device category according to PED 97/23/EC | Article 3.3  |
| Fluid group according to PED 97/23/EG              | gas group 1  |

### Reliability (MTBF)

|                         |                               |
|-------------------------|-------------------------------|
| MTBF                    | 359 a                         |
| Standard for MTBF       | SN 29500                      |
| Determination procedure | number of registered failures |
| Applicability           | positioner                    |

### Explosion protection

|                           |                             |
|---------------------------|-----------------------------|
| Ex-marking (IECEX & ATEX) | Ex ia IIC T6...T4 Gb        |
| Ex-marking (IECEX & ATEX) | Ex ic IIC T6...T4 Gc        |
| Ex-marking (IECEX & ATEX) | II 2 G Ex ia IIC T6...T4 Gb |
| Ex-marking (IECEX & ATEX) | II 3 G Ex ic IIC T6...T4 Gc |

The information provided in this data sheet contains descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice.