SIEMENS

Compact Operating Instructions

SIPART PS2 (6DR5...)

Electropneumatic positioners

EDITION 05/2018

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Electropneumatic positioners SIPART PS2 (6DR5...)

Compact Operating Instructions

6DR5... with and without HART with PROFIBUS PA
with FOUNDATION Fieldbus

05/2018
A5E03436620-AD

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠ WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Introduction

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1.1 Purpose of this documentation

These instructions are a brief summary of important features, functions and safety information, and contain all information required for safe use of the device. Read the instructions carefully prior to installation and commissioning. In order to use the device correctly, first review its principle of operation.

The instructions are aimed at persons who install and commission the device.

To realize optimum performance from the device, read the complete operating instructions.

See also

SIPART PS2 product information (http://www.siemens.com/sipartps2)

1.2 Product compatibility

The following tables describe compatibility between manual edition, device revision, engineering system and associated EDD.

HART

Manual edition	Comments	Device revision	Compatible version of device integration package	
05/2018	New manual edition	FW: 5.01.00 or higher Device revision 6 or higher	SIMATIC PDM V9.0	EDD: 23.00.00 or higher
			SIMATIC PDM V8.2 SP1	EDD: 23.00.00 or higher
			AMS Device Manager V12.5	EDD: 23.00.00 or higher
			SITRANS DTM V4.1	EDD: 23.00.00 or higher
			Field communicator	EDD: 23.00.00 or higher
05/2017	New device features	HART FW: 5.01.00 or higher Device revision 6 or higher	SIMATIC PDM V9.0	EDD: 23.00.00 or higher
			SIMATIC PDM V8.2 SP1	EDD: 23.00.00 or higher
			AMS Device Manager V12.0	EDD: 23.00.00 or higher
			SITRANS DTM V4.1	EDD: 23.00.00 or higher
			Field communicator	EDD: 23.00.00 or higher

PROFIBUS PA

Manual edition	Comments	Device revision	Compatible version of device integration package	
05/2018	New manual edition	FW: 6.00.00 or higher	SIMATIC PDM V9.0	EDD: 22.00.00 or higher
			SIMATIC PDM V8.2 SP1	EDD: 22.00.00 or higher
			SITRANS DTM V4.1	EDD: 22.00.01 or higher
05/2017	New device features	PROFIBUS PA FW: 6.00.00 or higher	SIMATIC PDM V9.0	EDD: 22.00.00 or higher
			SIMATIC PDM V8.2 SP1	EDD: 22.00.00 or higher
			SITRANS DTM V4.0	EDD: 22.00.01 or higher

FOUNDATION Fieldbus

Manual edition	Comments	Device revision	Compatible version of device integration package	
05/2018	New manual edition	FW: 3.00.00 or higher Device revision 3	SITRANS DTM V4.1	EDD: 3.00.00 or higher
			AMS Device Manager V12.5	EDD: 3.00.00 or higher
			Field communicator	EDD: 3.00.00 or higher
05/2017	New device features	FOUNDATION Fieldbus FW: 3.00.00 or higher Device revision 3	SIMATIC PDM V9.0	EDD: 3.00.00 or higher
			SIMATIC PDM V8.2 SP1	EDD: 3.00.00 or higher
			SITRANS DTM V4.0	EDD: 3.00.00 or higher

1.3 Purpose

The electropneumatic positioner is used for the continuous control of process valves with pneumatic drives in the following industries.

- Chemicals
- Oil and gas
- Energy production
- Food and beverages
- Pulp and paper
- Water/waste water
- Pharmaceutical industry
- Offshore plants

Operate the device according to the specifications in section "Technical data (Page 65)".

For additional information, refer to the operating instructions for the device.

1.4 Checking the consignment

1. Check the packaging and the delivered items for visible damages.
2. Report any claims for damages immediately to the shipping company.
3. Retain damaged parts for clarification.
4. Check the scope of delivery by comparing your order to the shipping documents for correctness and completeness.

WARNING

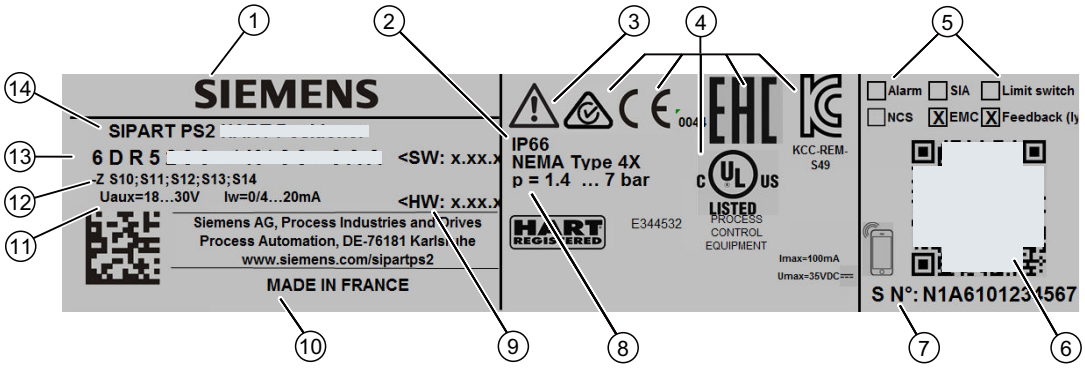
Using a damaged or incomplete device

Risk of explosion in hazardous areas.

- Do not use damaged or incomplete devices.

1.5 Nameplates

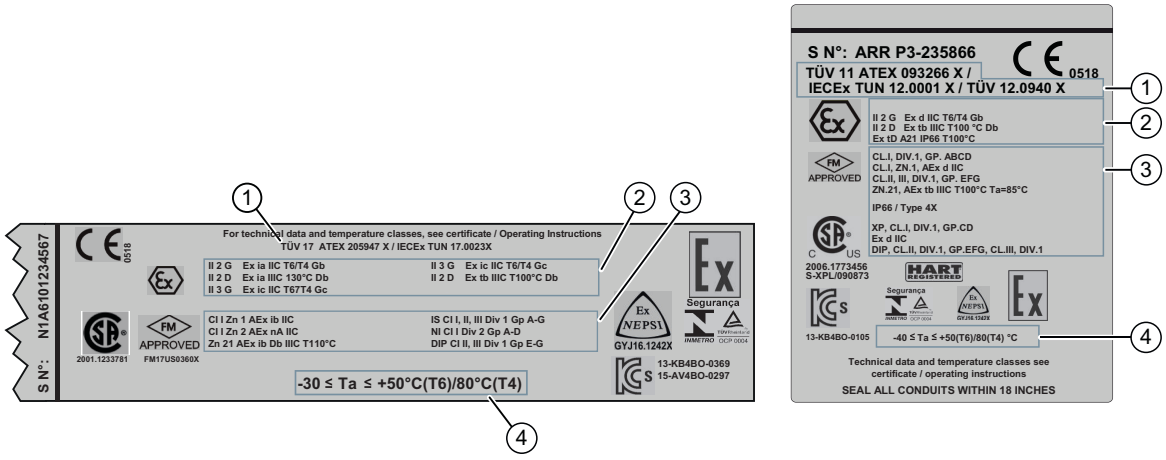
Nameplate



①	Manufacturer	⑧	Auxiliary power (supply air PZ)
②	Protection class	⑨	Software/hardware version
③	Observe the operating instructions	⑩	Place of manufacture
④	Conformity with country-specific directives	⑪	Auxiliary power
⑤	Built-in option module	⑫	Ordering supplement (Order code)
⑥	QR code to the mobile website with device-specific information on the product	⑬	Article number
⑦	Serial number	⑭	Product name

Figure 1-1 Nameplate layout, example

Ex nameplate



① Approvals
② ATEX/IECEx marking for hazardous area
③ FM/CSA marking for hazardous area
④ Permitted ambient temperature for the hazardous area of the corresponding temperature class

Figure 1-2 Ex nameplate layout, example

1.6 Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines, and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit:
https://www.siemens.com/industrialsecurity

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under
https://www.siemens.com/industrialsecurity.

1.7 Transportation and storage

To guarantee sufficient protection during transport and storage, observe the following:

- Keep the original packaging for subsequent transportation.
- Devices/replacement parts should be returned in their original packaging.
- If the original packaging is no longer available, ensure that all shipments are properly packaged to provide sufficient protection during transport. Siemens cannot assume liability for any costs associated with transportation damages.

NOTICE
Insufficient protection during storage The packaging only provides limited protection against moisture and infiltration. • Provide additional packaging as necessary.

Special conditions for storage and transportation of the device are listed in Technical data (Page 65).

1.8 Notes on warranty

The contents of this manual shall not become part of or modify any prior or existing agreement, commitment or legal relationship. The sales contract contains all obligations on the part of Siemens as well as the complete and solely applicable warranty conditions. Any statements regarding device versions described in the manual do not create new warranties or modify the existing warranty.

The content reflects the technical status at the time of publishing. Siemens reserves the right to make technical changes in the course of further development.

Safety instructions

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2.1 Precondition for use

This device left the factory in good working condition. In order to maintain this status and to ensure safe operation of the device, observe these instructions and all the specifications relevant to safety.

Observe the information and symbols on the device. Do not remove any information or symbols from the device. Always keep the information and symbols in a completely legible state.

2.2 Warning symbols on the device

Symbol	Meaning
	Consult operating instructions

2.3 Laws and directives

Observe the safety rules, provisions and laws applicable in your country during connection, assembly and operation. These include, for example:

- National Electrical Code (NEC - NFPA 70) (USA)
- Canadian Electrical Code (CEC) (Canada)

Further provisions for hazardous area applications are for example:

- IEC 60079-14 (international)
- EN 60079-14 (EU)