SIEMENS

SIPART

Introduction and general safety notes

Description

Installing

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Certificates

Electropneumatic positioner SIPART PS2 with mechanical limit switch module

Operating Instructions (Compact)

Supplement to the equipment manuals

6DR5**0-*N*3*-**** in the plastic enclosure 6DR5**1-*N*3*-**** in the aluminum enclosure 6DR5**2-*N*3*-**** in the stainless steel enclosure 6DR5**0-*E*3*-**** in the plastic enclosure 6DR5**1-*E*3*-*** in the aluminum enclosure 6DR5**2-*E*3*-*** in the stainless steel enclosure

Safety Guidelines

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.

AWARNING

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

▲CAUTION

with a safety alert symbol, indicates that minor personal injury can result if proper precautions are not taken.

CAUTION

without a safety alert symbol, indicates that property damage can result if proper precautions are not taken.

NOTICE

indicates that an unintended result or situation can occur if the corresponding information is not taken into account.

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 device/system may only be set up and used in conjunction with this documentation. Commissioning and operation of a device/system may only be performed by **qualified personnel**. Within the context of the safety notes in this documentation qualified persons are defined as persons who are authorized to commission, ground and label devices, systems and circuits in accordance with established safety practices and standards.

Prescribed Usage

Note the following:

AWARNING

This device may only be used for the applications described in the catalog or the technical description and only in connection with devices or components from other manufacturers which have been approved or recommended by Siemens. Correct, reliable operation of the product requires proper transport, storage, positioning and assembly as well as careful operation and maintenance.

Trademarks

All names identified by ® are registered trademarks of the 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 and general safety notes

1

1.1 Purpose of this documentation

These instructions contain all the information you need for commissioning and using the device.

It is aimed both at persons mechanically installing the device, connecting it electronically, configuring the parameters and commissioning it as well as service and maintenance engineers.

1.2 General information

This device left the factory free from safety problems. In order to maintain this status and to ensure safe operation of the device, please observe the safety information and warnings contained in these instructions.

1.3 Correct usage

The device may only be used for the purposes specified in these instructions.

Insofar as they are not expressly stated in these instructions, all changes to the device are the sole responsibility of the user.

1.4 Laws and directives

The regulations of the test certification valid in your country are to be observed.

Electrical connection in hazardous zones with explosive atmospheres

The national directives and laws for hazardous areas valid in your country must be observed for electrical connection. For example, in Germany these are:

- Operational safety regulations
- Directive for the installation of electrical systems in hazardous areas DIN EN 60079-14 (previously VDE 0165, T1)

1.5 Qualified Personnel

Qualified personnel are people who are familiar with the installation, mounting, commissioning, and operation of the product. These people have the following qualifications:

- They are authorized, trained or instructed in operating and maintaining devices and systems according to the safety regulations for electrical circuits, high pressures and aggressive as well as hazardous media.
- For explosion-proof devices: They are authorized, trained, or instructed in carrying out work on electrical circuits for hazardous systems.
- They are trained or instructed in maintenance and use of appropriate safety equipment according to the safety regulations.
- They should be trained in first aid.

1.6 The meaning of the pictograms

The pictograms on the warning labels are described below:

\triangle	Notice Pay attention to the operating instructions
	Warning hot surfaces. For ambient temperatures above 55°C there is a danger of burns on contact.
	Isolate the device from power using a circuit breaker.
Θ	Protect the device from shocks (otherwise the degree of protection IP66 is not guaranteed).
	Protective insulation; device in protection class II

Description

The following are described in these Operating Instructions (Compact):

- Assembling, installing and connecting the mechanical limit switch module of both the non-intrinsically safe and the intrinsically safe version.
- Subsequent installation of the mechanical limit switch module of both the non-intrinsically safe and the intrinsically safe version.

For more information on the electropneumatic positioner, please see its Programming Manual.

Installing

3.1 Safety notes for installing the option modules



Assembling the components

For the composition of the components it must be ensured that only positioners and option modules that are certified for the relevant operating range are combined.

This condition applies in particular to the safe operation of the positioner in the areas of zone 1, 2 and 22, in which the atmosphere can be potentially explosive. Make sure you observe the device categories 2 and 3 of the device itself as well as the ones of its option modules.

NOTICE

To observe before installation

Before you install option modules, you must open the housing of the positioner. Please note that the degree of protection IP66/NEMA 4x is not guaranteed when the housing is open.

3.2 Set of signs for the non-intrinsically safe version

Warning labels

Fasten the included warning label on the side across from the type plate. There are different warning labels depending on the housing material, as described below.



Figure 3-1 Warning label for a device with a plastic enclosure



Figure 3-2 Warning label for a device with an aluminum enclosure



Figure 3-3 Warning label for a device with a stainless steel enclosure

3.3 Installing the mechanical limit switch module

Preparing for installation



Zone 2 and 22

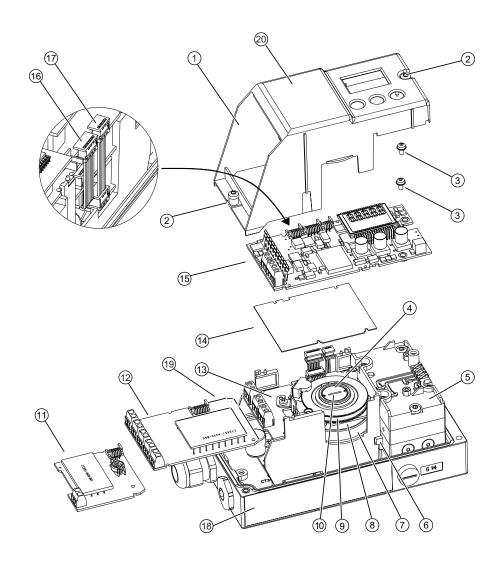
It is not permissible to use the mechanical limit switch module in the zones 2 and 22.

To prepare the installation, proceed as follows:

- 1. Open the positioner.
- 2. To do this, loosen the four fixing screws of the housing cover with a Phillips screwdriver.
- 3. Disconnect the power supply cables or isolate them from power.
- 4. Remove the module cover.
- 5. To do this, remove the two screws with a screwdriver.

Overview of the installation of the option modules

The following drawing will assist you in installing the mechanical limit switch module:



- ① Module cover
- ② Fixing screws
- ③ Fixing screws
- 4 Actuating disc bearing
- ⑤ Pneumatic block
- ⑤ Transmission ratio selector
- Adjustment wheel for friction clutch
- Actuating disc for A2, terminals 51 and 52
- 1 I_v module
- ② Alarm unit

- SIA module or mechanical limit switch module
- Insulating cover
- (5) Motherboard
- ® Ribbon cable for alarm unit
- Ribbon cable for I_y module
- ® Type plate

Set of signs

- Warning label on the side across from the type plate
- Wiring diagram

Function

The module is used to signal two limits. The limits are signaled by means of electrical switch contacts.

Equipment features

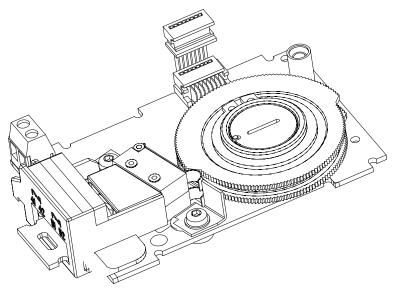


Figure 3-4 Mechanical limit switch module

The mechanical limit switch module contains:

- A binary output for the output of a group fault message.
- Two switches for signaling two limits that can be set mechanically. These two switches
 are electrically independent from the rest of the electronic system.

Installing the mechanical limit switch module

To install the mechanical limit switch module, proceed as follows:

- 1. Remove all electrical connects in the motherboard.
- 2. Loosen both fixing screws on the motherboard.
- 3. Snap out the motherboard by carefully bending the four holders.
- 4. Insert the mechanical limit switch module from above until it reaches the upper circuit board rail of the rack.
- 5. Push the mechanical limit switch module in the circuit board rail of the rack approx. 3 mm toward the right.
- 6. Screw the special screw through the mechanical limit switch module into the axle of the positioner. Tighten the special screw with a **torque of 2 Nm**.

NOTICE

A pin is pressed into the actuating disc bearing. Set this pin upright before it is touched by the special screw. In order that the pins slot into the special screw, you must turn the actuating disc bearing and the special screw simultaneously.

- 7. The insulating cover is locate above the mechanical limit switch module. Place the insulating cover one on side under the mother board surface against the wall of the container. The recesses in the insulating cover must slot into the corresponding webs on the container wall.
- 8. Lay the insulating cover on the mechanical limit switch module by carefully bending the container walls.
- 9. Snap the motherboard into the four holders.
- 10. Secure the motherboard with both fixing screws again.
- 11.Reestablish all electrical connections between the motherboard and the option modules. Connect the motherboard and the option modules with the ribbon cables included with the delivery. Connect the motherboard and the potentiometer with the potentiometer cable.
- 12. Fix the module cover included with the delivery with both screws. Do not use the standard module cover.
- 13. From the set of plates enclosed, select the plates that are already on the standard version of the module cover. Stick the selected plates to the installed module cover as on the standard version.
- 14. Reestablish all electrical connections.

3.4 Setting the limits of the mechanical limit switch module

Setting limits L1 and L2

To set the limits, proceed as follows:

- 1. Drive the actuator to the first desired mechanical position.
- 2. Adjust the top actuating disc by hand until the output signal on terminals 41 and 42 changes. Set a high-low or low-high change as follows:
 - Turn the actuating disc over the switching point out until you reach the next switching point.
- 3. Drive the actuator to the second desired mechanical position.
- 4. Adjust the bottom actuating disc by hand until the output signal on terminals 51 and 52 changes. Set a high-low or low-high change as follows:
 - Turn the actuating disc over the switching point out until you reach the next switching point.

Note

To prevent the actuating discs from being accidentally moved during operation, the actuating discs are designed to be relatively sluggish. You can achieve an easier and more sensitive adjustment by temporarily reducing the friction. To do this, open and close the actuator several times while at the same time holding the actuating discs steady.

Connecting

4.1 Connection safety note

DANGER

Low-voltage supply

When you supply the module in the non-intrinsically safe version with low voltage, you must be sure to observe the following safety rules before starting work on the device:

- Isolate the device from power. Use a circuit breaker positioned near the device to do this.
- 2. Make sure that the device cannot be switched back on inadvertently.
- 3. Make sure the device is truly isolated from power.

WARNING

Assembling the components

For the composition of the components it must be ensured that only positioners and option modules that are certified for the relevant operating range are combined.

This condition applies in particular to the safe operation of the positioner in the areas of zone 1, 2 and 22, in which the atmosphere can be potentially explosive. Make sure you observe the device categories 2 and 3 of the device itself as well as the ones of its option modules.



Protection against mechanical influences

In order to guarantee the degree of protection IP66/NEMA 4x, you must protect the module against mechanical influences. This is achieved by selecting a suitable installation location or by installing a suitable protection device. This required protection applies to the operation of the module with the following voltages:

- > AC 16 V
- > DC 35 V, low voltage

4.1 Connection safety note

NOTICE

Maximal values for terminals 41/42 and 51/52

The following maximum values concern only terminals 41, 42, 51, and 52:

- Maximum voltage:
 - Not Ex: AC 250 V or DC 24 V
 - Ex: 30 V DC
- Maximum current:
 - Not Ex: 4 A AC/DCEx: 100 mA DC
- Maximum performance:
 - Ex: 750 mW

No safe separation between the terminals can be guaranteed.

NOTICE

Installing/connecting

Only qualified personnel is permitted to install and connect the mechanical limit switch module.

NOTICE

To observe before connecting

Before you connect the mechanical limit switch module, observe the following conditions:

- Only qualified personnel is permitted to connect the mechanical limit switch module.
- Isolate all wires from power and make sure the device is truly isolated from power.
- Construct the cross-sectional area of the connection cables in such a way that it is appropriate for the permitted current load.
- Selected the wires on the basis of the following rule: The temperature at which the wires are permitted to be used must be 25°C above the maximum ambient temperature.
- Operate the Ex-version only in intrinsically safe circuits with approved switching amplifiers.

NOTICE

Preparing the cables or stranded wires

- 1. Insulate the cables in such a way that the insulation is flush with the terminal when plugging in the wires.
- 2. Fit ferrules to the ends of stranded wires.

4.2 Mechanical limit switch module wiring diagram, not Ex

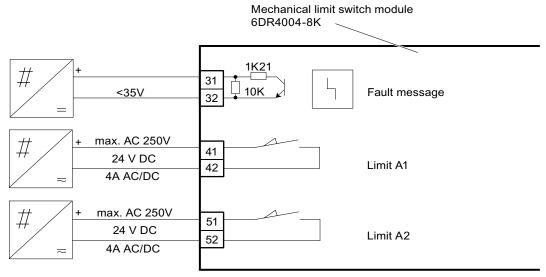


Figure 4-1 Mechanical limit switch module 6DR4004-8K

4.3 Mechanical limit switch module wiring diagram, EEx i



Electrical circuits

Only certified intrinsically safe electrical circuits can be connected as power supply, control, and signal electrical circuits.

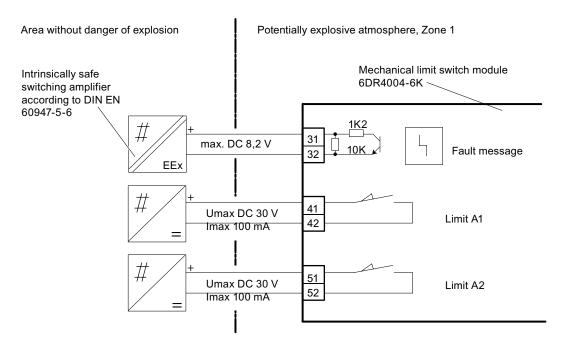


Figure 4-2 Mechanical limit switch module 6DR4004-6K, EEx i

4.4 Connecting the mechanical limit switch module

Preparing to connect the mechanical limit switch module

NOTICE

Before you connect the mechanical limit switch module, observe the following conditions:

- 1. Only qualified personnel is permitted to connect the mechanical limit switch module.
- 2. Isolate all wires from power and make sure the device is truly isolated from power.
- 3. Construct the cross-sectional area of the connection cables in such a way that it is appropriate for the permitted current load.
- 4. Selected the wires on the basis of the following rule: The temperature at which the wires are permitted to be used must be 25°C above the maximum ambient temperature.
- 5. Operate the Ex-version only in intrinsically safe circuits with approved switching amplifiers.

NOTICE

Prepare the cables or stranded wires as follows:

- 1. Insulate the cables in such a way that the insulation is flush with the terminal when plugging in the wires.
- 2. Fit ferrules to the ends of stranded wires.

Connecting the mechanical limit switch module

How to connect the mechanical limit switch module:

- 1. Loosen the screw ® on the transparent cover ®.
- 2. Pull the transparent cover ® to the front stop.
- 3. Tighten each cable in the corresponding terminal.
- 4. Push the transparent cover ⁽⁹⁾ to the stop of the motherboard.
- 5. Tighten the screw ® on the transparent cover ®.
- 6. Attach the wires of each switch in pairs on the lug of the circuit board. Use the cable ties② included with the delivery for this.

4.4 Connecting the mechanical limit switch module

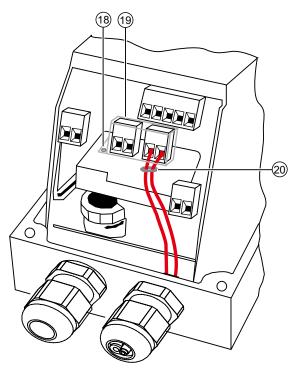


Figure 4-3 Connecting the cables

- ® Screw
- Over
- ② Cable tie

Scope of delivery

5

If the mechanical limit switch module was ordered for later installation, then the following components are included in the scope of delivery:

- One mechanical limit switch module with accessories
- These Operating Instructions (Compact) "SIPART PS2 with mechanical limit switch module" to be found on the CD included with delivery
- One housing cover with enlarged aperture
- One insulating cover
- Two cable ties
- One set of signs; how these are to be attached depends on the version.

Certificates

Declaration of conformity for low-voltage version

SIEMENS

EC Declaration of Conformity EG-Konformitätserklärung ,

No. A5E00782710-01

Manufacturer: Hersteller:

Siemens AG Automation & Drives

i/p Positioner

Address: Anschrift: Östliche Rheinbrückenstr. 50; 76187 Karlsruhe

Bundesrepublik Deutschland

Product description: Produktbezeichnung

SIPART PS2

Type / Typ 6DR5**a-*N*3*-**** a = 0, 1, 2 with options / mit Optionen ly - Modul 6DR4004-6J EMV - Modul

EMV - Modul C73451-A430-L8 Grenzwert - Kontakt - Modul 6DR4004-8K

The product described above in the form as delivered is in conformity with the provisions of the following European Directives:

Das bezeichnete Produkt stimmt in der von uns in Verkehr gebrachten Ausführung mit den Vorschriften folgender Europäischer Richtlinien überein:

89/336/EEC **EMC**

Council Directive on the approximation of the laws of the Member States relating to electromagnetic compatibility.(amended by 91/263/EEC, 92/31/EEC and 93/68/EEC)
Richtlinie des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über die elektromagnetische Verträglichkeit.(geändert durch 91/263/EWG, 92/31/EWG und 93/68/EWG).

73/23/EEC

LVD

Council Directive on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits. (amended by 93/68/EEC). Richtlinie des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten betreffend elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen. (geändert durch 93/68/EWG)

Karlsruhe, 17.03.2006

Siemens AG

Schradi, Entwicklung /

signatur Unterschrift

Annex A is integral part of this declaration.

Anhang A ist integraler Bestandteil dieser Erklärung.

This declaration certifies the conformity to the specified directives but contains no assurance of properties.

The safety documentation accompanying the product shall be considered in detail.

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, ist jedoch keine Zusicherung von Eigenschaften Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

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SIEMENS

Annex A to the EC Declaration of Conformity Anhang A zur EG-Konformitätserklärung

No. A5E00782710-01

Product description: Produktbezeichnung i/p Positioner SIPART PS2

Type / Typ 6DR5**a-*N*3*_**** a = 0, 1, 2
with options / mit Optionen
ly - Modul 6DR4004-6J EMV - Modul
Grenzwert - Kontakt - Modul 6DR4004-8K

EMV - Modul C73451-A430-L8

Conformity to the Directives indicated on page 1 is assured through the application of the following standards (depending on versions):

Die Konformität mit den auf Blatt 1 angeführten Richtlinien wird nachgewiesen durch die Einhaltung folgender Normen (variantenabhängig):

Direktive Richtlinie	Standard / Reference number Norm / Referenznummer	Edition Ausgabedatum	a=
89/336/EEC	EN 61326/A1 Anh. A.1	1998	0, 1, 2
89/336/EEC	EN 60947-5-2/A1	1999	0, 1, 2
73/23/EEC	EN 61010-1 *)	2001	0, 1
73/23/EEC	EN 61010-1	2001	2

^{*)} enclosures protection / Gehäuseschutzart IP 66 with impact energy / bei Schlagenergie < 1Joule enclosures protection / Gehäuseschutzart IP 40 with impact energy / bei Schlagenergie > 1Joule

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Declaration of conformity for Ex version



EC Declaration of Conformity EG-Konformitätserklärung



No. A5E00191762L - 02

Manufacturer: Hersteller:

Siemens AG **Automation & Drives**

Address: Anschrift: Östliche Rheinbrückenstr. 50; 76187 Karlsruhe Bundesrepublik Deutschland

Product description: Produktbezeichnung Electropneumatic Positioner / Elektropneumatischer Stellungsregler

SIPART PS2

Type / Typ 6DR5axb-xcxxx-xxxx a = 0, 1, 2, 3, 5, 6 b = 0, 1, 2 c = N, E

with the options / mit den Optionen

Alarm Module.....6DR4004-6/8A SIA Module...6DR4004-6/8G ly Module.....6DR4004-6/8J EMC Module.....C73451-A430-L8

Mechanical Limit Switch Module......6DR4004-6K *

* (only for type / nur für Ausführung 6DR5axb-xEx3x-xxxx)

The product described above in the form as delivered is in conformity with the provisions of the following European Directives:

Das bezeichnete Produkt stimmt in der von uns in Verkehr gebrachten Ausführung mit den Vorschriften folgender Europäischer Richtlinien überein:

2004/108/EC Directive of the European Parliament and of the Council on the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC. Richtlinie des Europäischen Parlaments und des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über die elektromagnetische Verträglichkeit und zur Aufhebung der Richtlinie

94/9/EC **ATEX**

EMC

Directive of the European Parliament and the Council on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially

explosive atmospheres.

Richtlinie des Europäischen Parlaments und des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten für Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen.

Karlsruhe, 25.04.2007

Siemens AG

Schradi, Entwicklung

Name, function Name, Funktion

signatur

van Dycke, Fertigung Name, function

signatur

Annex A is integral part of this declaration

Annang A is integral part or this decilaration.

Annang A is integraler Bestandfell dieser Erklärung.

This declaration certifies the conformity to the specified directives but contains no assurance of properties.

The safety documentation accompanying the product shall be considered in detail.

Diese Erklärung bescheinigt die Übereinstimmung mit den genannten Richtlinien, ist jedoch keine Zusicherung von Eigenschaften

Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten.

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SIEMENS

Annex A to the EC Declaration of Conformity Anhang A zur EG-Konformitätserklärung

No. A5E00191762L - 02

Product description: Produktbezeichnung Electropneumatic Positioner / Elektropneumatischer Stellungsregler

SIPART PS2

Type / Typ 6DR5axb-xcxxx-xxxx a = 0, 1, 2, 3, 5, 6 b = 0, 1, 2 c = N, E

with the options / mit den Optionen

Alarm Module......6DR4004-6/8A

Iy Module......6DR4004-6/8J EMC Module......C73451-A430-L8

Conformity to the Directives indicated on page 1 is assured through the application of the following standards (depending on versions):

Die Konformität mit den auf Blatt 1 angeführten Richtlinien wird nachgewiesen durch die Einhaltung folgender Normen (variantenabhängig):

Directive Richtlinie	Standard / Reference number Norm / Referenznummer	Edition Ausgabedatum	a =	b =	c =	
2004/108/EC	EN 61326-1 *	2006	0,1,2,3,5,6	0,1,2	N,E	
2004/108/EC	EN 60947-5-2	1998+A1+A2	0,1,2,3,5,6	0,1,2	N,E	
94/9/EC	EN 50014	1997+A1+A2	0,2,5,6	0,1,2	É	
94/9/EC	EN 50020	2002	0,2,5,6	0,1,2	E	
94/9/EC	EN 60079-0	2004	0,2,5,6	0,1,2	E	
94/9/EC	IEC 60079-11	1999	0,2,5,6	0,1,2	E	

^{*} all environments includet

Certificates Zertifikate

Certificates Zertifikate	a =	b =	c =	
TÜV 00 ATEX 1654	0,2,5,6	0,1,2	E	

Inspection / Surveillance: Kontrolle / Überwachung:

Directive Richtlinie		Notified Body Product Quality Assurance Benannte Stelle Qualitätssicherung Produktion	No.:
94/9/EC	ΔTEX	TÜV NORD CERT GmbH. Am TÜV 1 D-30516 Hannover	0044

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Certificate



Translation 5. SUPPLEMENT

to Certificate No.

TÜV 00 ATEX 1654

Equipment:

Electropneumatic positioner SIPART PS2 type 6DR5***-***** with options

Manufacturer:

Siemens AG

Automatisierungs- und Antriebstechnik (A&D)

Address:

Östliche Rheinbrückenstraße 50

76187 Karlsruhe Germany

Order number:

8000553178

Date of issue:

2007-01-23

Amendments:

In the future, the electropneumatic positioner SIPART PS2 may also be manufactured and operated according to the documents listed in the test report.

The amendments concern the inner construction of the device, device connectors for profibus and foundation fieldbus, a locking unit for the potentiometer, an additional material for the type label and a limiting switch module with the identifier 6DR4004-6K as an additional option.

In the future, the device of the category "ia" can also be operated with clean dry natural gas, freely by additions at place of air. The condition for the operation with natural gas is an electric connection of the category "ia".

Electrical data

Limiting switch module type 6DR4004-6K

1 binary output (fault signalling) (terminals 31 and 32)

in type of protection "Intrinsic Safety" Ex ia IIC

Ex ib IIC

only for the connection to certified intrinsically safe circuits

(for example switching amplifiers according to

DIN EN 60947-5-6)

Maximum values:

15,5 V

25 mA

effective internal capacitance: C_i =

64 mW

effective internal inductance: L_i = negligibly small

5,2 nF

in type of protection "Intrinsic Safety" Ex ia IIC

2 binary outputs (limit contacts)

(terminals 41 and 42 terminals 51 and 52) Ex ib IIC

only for the connection to certified intrinsically safe circuits

Maximum values:

30 V $U_i =$

100 mA 750 mW

P17-F-016 06-06

page 1/2



5. Supplement to Certificate No. TÜV 00 ATEX 1654

effective internal capacitance: $C_l = negligibly small$ effective internal inductance: $L_l = negligibly small$

The inputs for the limit contacts are not potential separated from each other.

All other data apply unchanged for this supplement.

The equipment incl. of this supplement meets the requirements of these standards:

EN 50014:1997+A1+A2 IEC 60079-11:1999 EN 50020:2002

EN 60079-0:2004

- (16) The test documents are listed in the test report No. 07203553178.
- (17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

Schwedt

Hanover office, Am TÜV 1, 30519 Hanover, Tel.: +49 (0) 511 986-1455, Fax: +49 (0) 511 986-1590

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