



Translation

EC-Type Examination Certificate

- (1) **EC-Type Examination Certificate**
- (2) **- Directive 94/9/EC -**
Equipment and protective systems intended for use
in potentially explosive atmospheres
- (3) **DMT 02 ATEX E 029 X**
- (4) **Equipment: Stellungenregler Type Doc. 901132**
- (5) **Manufacturer: ABB Automation Products GmbH**
- (6) **Address: D 32425 Minden**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.
- (8) The certification body of Deutsche Montan Technologie GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
The examination and test results are recorded in the test and assessment report BVS PP 02.2009 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- EN 50014:1997 + A1 – A2 General requirements
EN 50018: 2000 Flameproof enclosure
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate
- (12) The marking of the equipment shall include the following:

II 2G EEx d IIC T4/T5/T6

Deutsche Montan Technologie GmbH
Essen, dated 31. January 2002

Signed: Dill

Signed: Eickhoff

DMT-Certification body

Head of special services unit

(13) Appendix to

(14) **EC-Type Examination Certificate**

DMT 02 ATEX E 029 X

(15) 15.1 Subject and type
Positioner type Doc. 901132

15.2 Description

The positioner is designed for the transmission of an electrical signal into a pneumatic signal.
Certain variants of the electronics may be used intrinsically safe according to separate certification (see 7.3).
As pressure media neither flammable gases nor oxygen or oxygen enriched gases will be used.

15.3 Parameters

15.3.1	Electrical data				
	Voltage	≤ AC/DC	30	V	
	Current	≤	20	mA	
15.3.2	Pneumatic data				
	Supply pressure	≤	6	bar	
15.3.3	Thermal data				
	Temperature class		T4	T5	T6
	Ambient temperature range	-40 °C ≤ Ta ≤	85 °C	80 °C	65 °C

(16) Test and assessment report
BVS PP 02.2009 EG as of 31.01.2002

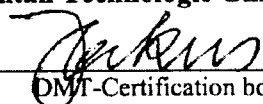
(17) Special conditions for safe use


- 17.1 As per 4.3, the positioner is designed for use at an ambient temperature range of -40 °C up to 85 °C at maximum.
- 17.2 If the positioner is used at an ambient temperature above 60 °C or below -20 °C, cable entries and cable approved for a service temperature corresponding to the maximum ambient temperature increased by 10 K respectively corresponding to the minimum ambient temperature shall be used.
- 17.3 Variants which, according to separate certification, comply with type of protection intrinsic safety, shall not be used intrinsically safe once they have been used in type of protection flameproof enclosure.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

45307 Essen, 31.01.2002
BVS-We/Mi A 20010478

Deutsche Montan Technologie GmbH


DMT-Certification body


Head of special services unit



Translation



1st Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

to the EC-Type Examination Certificate DMT 02 ATEX E 029 X

Equipment: Positioner type Doc. 901132
Manufacturer: ABB Automation Products GmbH
Address: D - 32425 Minden

Description

The positioner can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report

Test and assessment report

BVS PP 02.2009 EG as of 11.07.2002

Deutsche Montan Technologie GmbH

Essen, dated 11. July 2002

Jockers

DMT-Certification body

Eickhoff

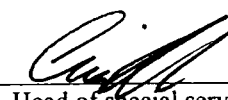
Head of special services unit

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

45307 Essen, 11.07.2002
BVS-We/Mi A 20020357

Deutsche Montan Technologie GmbH


DMT-Certification body


Head of special services unit



Deutsche
Montan Technologie GmbH

DIN EN ISO
9001
zertifiziert

Fachstelle für Sicherheit
elektrischer Betriebsmittel -
Bergbau-Versuchsstrecke

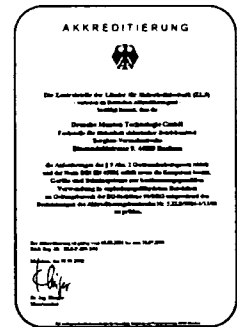
Prüfprotokoll - Test and Assessment Report

1. Nachtrag – 1st Supplement

BVS PP 02.2009 EG

EG - Baumusterprüfung für Geräte und Komponenten zur Verwendung in explosionsgefährdeten Bereichen (Richtlinie 94/9/EG)

EC - Type Examination for Equipment and Components Intended for Use in Potentially Explosive Atmospheres (Directive 94/9/EC)



DAR-Reg.-Nr.:
ZLS-P-359-2/01

Gegenstand: Gerät Typ
Subject: Equipment type

Stellungsregler Typ Doc. 901132
Positioner type Doc. 901132

Hergestellt und zur Prüfung vorgelegt
Manufactured and submitted for examination

ABB Automation Products GmbH

Anschrift
Address

D-32425 Minden, Schillerstraße 32

Prüfgrundlage
Basis for verifications and tests

Anhang II der Richtlinie 94/9/EG
Annex II of Directive 94/9/EC

Verwendete Normen
Standard basis

EN 50014:1997+A1-A2 Allgemeine Bestimmungen General requirements
EN 50018:2000 Druckfeste Kapselung Flameproof enclosure 'd'

Prüfgrundlage für Sicherheits- und
Gesundheitsanforderungen, die nicht von
den verwendeten Normen abgedeckt
werden.

Entfällt

Basis for those health and safety requirements
not covered by the standard basis

Not relevant

Schutzartkennzeichen
Code for type of protection

EEx d IIC T4/T5/T6

Antragsnummer
Project number

A 20020357

1) **Gegenstand und Typ**

Stellungsregler Typ Doc. 901132

Subject and Type

Positioner type Doc. 901132

2) **Beschreibung**

Alternativ werden die Einführungsbohrungen geändert. Die Sintermetallscheibe Ø10 mm wird neu festgelegt.

Description

Alternatively, the entry threads are modified. The sinter disk Ø10 mm is re-defined.

3) **Dokumentation - Descriptive Documents**

Zeichnung Nr. - Drawing No.	vom - dated	unterschrieben am - signed
901137	15.01.02/14.06.02	14.06.02

4) **Kenngößen - Parameters**

Unverändert - Without change

5) **Kennzeichnung - Marking**

Unverändert - Without change

6) **Stückprüfungen - Routine verifications and tests**

Unverändert - Without change

7) **Auflagen/Bedingungen für die sichere Anwendung - Special conditions for safe use**

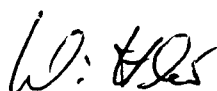
Unverändert - Without change

8) **Sicherheitstechnisch relevante Informationen - Information relevant for safety**

Unverändert - Without change

44809 Bochum, den 11.07.2002
BVS-We/Mi A20020357

Deutsche Montan Technologie GmbH
Fachstelle für Sicherheit elektrischer Betriebsmittel
Bergbau-Versuchsstrecke



Der Sachverständige
The Testing Officer



Hinweis: Der folgende Anhang bezieht sich nur auf die Bauartänderungen, die Gegenstand dieses Nachtrags sind. Er ändert bzw. ergänzt den entsprechenden Anhang des bestehenden Prüfberichts.

Note: The following annex is related only to the changes of the equipment which are subject for this supplement. It amends or supplements the respective annex of the existing test and assessment report.

Anhang - Annex

Protokoll	Druckfeste Kapselung EN 50018:2000	(P/N1 -EN 50018)
Report	Flameproof enclosure EN 50018:2000	

Protokoll - Report

Elektrische Betriebsmittel für explosionsgefährdete Bereiche
Electrical Apparatus for potentially explosive atmospheres
EN 50018: 2000
Druckfeste Kapselung „d“ - Flameproof enclosure „d“
Teil II: Kommentare - Part II: Comments

5.3 Gewindespalte - Threaded joints

Gewinde zwischen Thread between	Gewindelänge Thread engagement [mm]	Anzahl der Gewindegänge Threads engaged	Gewindeart und -güte Nature and quality of thread
Leitungseinführungsbohrungen Cable entry holes	> 20	> 13	M 20 x 1,5 ; mittel M 20 x 1,5; medium
Leitungseinführungsbohrungen Cable entry holes	> 20	>> 6	NPT 1/2

15.4 Prüfung von Atmungs- und Entwässerungseinrichtungen

Porengrößenbestimmung:

Bericht GB 6.3-S020503a: Sinter Ø10 mm; Porengröße 162 µm; zul. Porengröße 190 µm

Tests of breathing and draining devices

Pore size measurement:

Report GB 6.3-S020503a: sinter Ø10 mm; pore size 162 µm; permissible pore size 190 µm



DEKRA EXAM GmbH

Fachstelle für
Sicherheit elektrischer
Betriebsmittel - BVSDinnendahlstraße 9
44809 BochumTelefon 0234 - 3696-300
Telefax 0234 - 3696-301

Änderungsinformation – Revision Report

Prüfprotokoll – Test and Assessment Report BVS PP 02.2009 EG

Die mit folgender Dokumentation festgelegte Änderung hat keinen Einfluss auf die in o.g. Prüfprotokoll getroffenen Festlegungen.

Die bisher in der Form M20x1,5 oder NPT 1/2" hergestellten Leitungseinführungen können jetzt alternativ auch in G 1/2" hergestellt werden. Die neue Gewindeart wurde erfolgreich in BVS PS 23653 geprüft.

The modification as defined in the following documentation does not influence the details of the aforementioned test and assessment report.

The cable entry threads were manufactured in the type M20x1.5 or NPT 1/2" and can now alternatively be manufactured in the type G 1/2". The new nature of thread was tested successfully in BVS PS 23653.


Dokumentation – Descriptive Documents

Beschreibung IIMD-A10/2009-P (1 Blatt) – Description IIMD-A10/2009-P (1 sheet), unterschrieben am – signed 24.11.2009

Beschreibung Prüfmuster (2 Blatt) – Description test sample (2 sheet), unterschrieben am – signed 24.11.2009

44809 Bochum, den 08.03.2010
BVS-Kr/Kw A 20090723

DEKRA EXAM GmbH
Fachstelle für Sicherheit elektrischer Betriebsmittel - BVS



Der Sachverständige - The Testing Officer