



[1] EC-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protected System Intended for use
in Potentially explosive atmospheres
Directive 94/9/EC

- [3] EC-Type Examination Certificate Number: **Nemko 03ATEX110X**
- [4] Equipment or Protective System: **Valve Positioner**
- [5] Applicant/ Manufacturer: **PMV Palmstiernas Instrument AB**
- [6] Address: **Korta gatan 9
S-17154 Solna
Sweden**
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] Nemko AS, notified body number 0470 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 confidential report no. 200309115.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 + A1: 1999 + A2: 1999 , EN 50020: 2002, EN 50284: 1999, EN 50281-1-1: 1998
- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 or protective system in accordance to the directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [12] The marking of the equipment or protective system shall include the following:

 **II 1 GD EEx ia IIC T4 Ta:80°C**

Oslo, 2003-05-07

Rolf Hoel
Certification Department

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P.O.Box 73 Blindern
N-0314 OSLO, NORWAY

Office address:
Gaustadalléen 30
0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

Enterprise number:
NO 974404532

[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE No Nemko 03ATEX110X

[15] Description of Equipment or Protective System

The PMV D3I is a digital positioner designed primarily to control modulating valves. The positioner can be used with single or double action actuators with either rotary or linear movement.

The D3I positioner comprises:

- electronic board with microprocessor, Hart modem, display etc,
- pneumatic valve block,
- positional feedback with potentiometer
- compartment for electrical connections.
- the positioner D3I can also be equipped with modules for feedback, limit switches, and a pressure gauge block. The modules can be factory assembled before delivery or fitted later. The modules for feedback and limit switches can contain the following. Feedback 4-20mA and one of the following functions:
Two mechanical switches: Two reed switches: Two inductive sensors.
- Remote unit, an external unit containing the position potentiometer and indicator.

Type Designation.

D3I abcdefghijkl

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

- a: Air pipe connection thread type,
- b: Surface treatment,
- c: Function,
- de: Spindle,
- fgh: Cover and indicator,
- i: Temperature/Seals,
- j: Input signal/protocol: 4, 5, P, The letter "P" denotes the Profibus version
 - S: Limit switches MEC + 4-20mA
 - N: Limit sensors NAM + 4-20mA
 - P: Limit switches PXY + 4-20mA
 - T: 4-20mA
- k: Feedback option
 - X: no option
 - S: Limit switch MEC + 4-20mA
 - N: Limit sensors NAM + 4-20mA
 - P: Limit switches PXY + 4-20mA
 - T: 4-20mA transmitter only
- l: Accessories:
 - X: No accessories
 - M: Gauge block

D3I Remote Unit

A separate unit for connection to the D3I

The Remote Unit is connected to terminals 3,4 and 5 on models with type indicator c= C or R and k=T

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N-0314 OSLO, NORWAY

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0373 OSLO

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+47 22 96 03 30
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+47 22 96 05 50

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Safety Data

The transmitter must be connected to safety barriers or isolators according to the drawing D3-70 and corresponding to the stated input values of the positioner.

Profibus PA input signal. Terminals no. 1, 2

Maximum input voltage.	U_i :	15V
Maximum input current.	I_i :	208mA
Maximum input power.	P_i :	1,9W
Maximum internal capacitance.	C_i :	4nF
Maximum internal inductance.	L_i :	5 μ H

4-20mA input signal. Terminals no. 1, 2

Maximum input voltage.	U_i :	28V
Maximum input current.	I_i :	93mA
Maximum input power.	P_i :	653mW
Maximum internal capacitance.	C_i :	4nF
Maximum internal inductance.	L_i :	5 μ H

Switches, Mechanical or Proximity. Terminals 3-5, 6-8 or 4-5, 7-8

Maximum input voltage.	U_i :	28V
Maximum input current.	I_i :	45mA
Maximum input power.	P_i :	315mW
Maximum internal capacitance.	C_i :	4nF
Maximum internal inductance.	L_i :	5 μ H

Switches, Mechanical or Proximity with isolator barriers. Terminals 3-5, 6-8

Maximum input voltage.	U_i :	10,6V
Maximum input current.	I_i :	29,7mA
Maximum input power.	P_i :	79mW
Maximum internal capacitance.	C_i :	1nF
Maximum internal inductance.	L_i :	1 μ H

Namur switch and isolator barrier. Terminals 3-4, 6-7

Maximum input voltage.	U_i :	10,6V
Maximum input current.	I_i :	29,7mA
Maximum input power.	P_i :	79mW
Maximum internal capacitance.	C_i :	35nF
Maximum internal inductance.	L_i :	50 μ H

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Aux input 4-20mA- Terminals 9-10

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	5,7nF
Maximum internal inductance.	L _i :	5μH

4-20mA Output. Terminals 11-12

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	75mA
Maximum input power.	P _i :	525mW
Maximum internal capacitance.	C _i :	5,7nF
Maximum internal inductance.	L _i :	5μH

Alarm. Terminals 13-14

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	5,7nF
Maximum internal inductance.	L _i :	5μH

Ambient Temperature Range

-30°C < Ta < 80°C

D3I Remote Unit

-30°C < Ta < 120°C

Ingress Protection Code

IP 66 according to IEC 60529

Type 4X according to NEMA 250

[16] Report No. 200309115 and the list of Schedule Documents D3I Technical File Contents Rev. B Dated 2003-05-06.

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0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

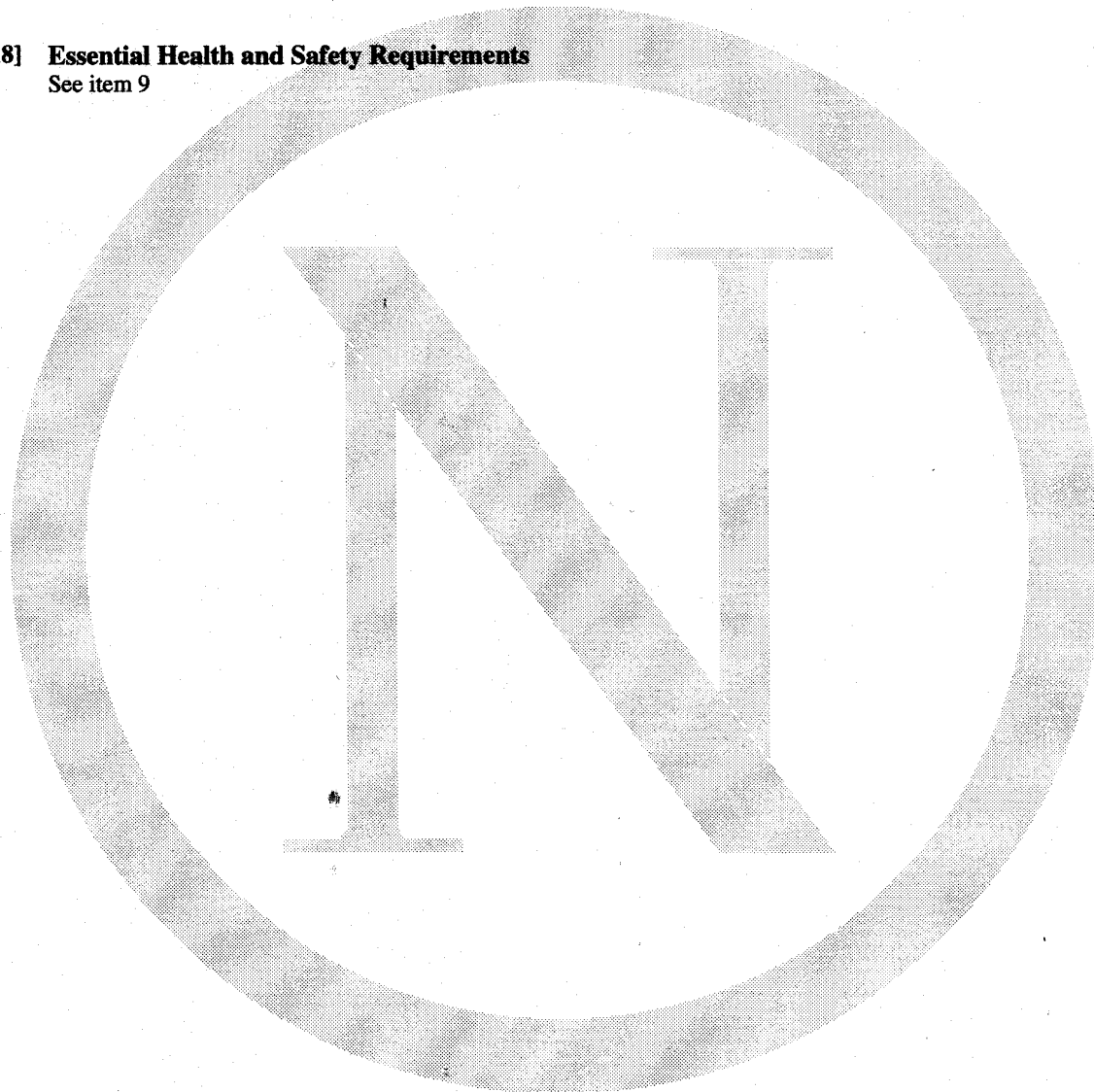
Enterprise number:
NO 974404532

[17] Special Conditions for Safe Use

1. The enclosure is made of aluminium and impact or friction caused by external objects shall be avoided in the application.
2. The surface area of the plastic parts on the cover exceeds the limits specified in EN 50284 for gas group IIC and intensive rubbing or brush charging should be avoided when used in an IIC explosive atmosphere.

[18] Essential Health and Safety Requirements

See item 9



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Gaustadalléen 30
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+47 22 96 03 30
Fax:
+47 22 96 05 50

Enterprise number:
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Supplement 1 to EC-TYPE EXAMINATION CERTIFICATE

[14] **EC-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX110X**

[15] **Description of Equipment or Protective System**

The certificate is extended to include the Logix 800si-02 as an alternative model to the previously certified model D3I
The Logix 800si-02 is identical as D3I.

Type Designation.

Logix 800si-02 abcdefghijkl

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

a: Air pipe connection thread type,

b: Surface treatment,

c: Function,

de: Spindle,

fgh: Cover and indicator,

i: Temperature/Seals,

j: Input signal/protocol: 4, 5, P, The letter "P" denotes the Profibus version

S: Limit switches MEC + 4-20mA

N: Limit sensors NAM + 4-20mA

P: Limit switches PXY + 4-20mA

T: 4-20mA

k: Feedback option

X: no option

S: Limit switch MEC + 4-20mA

N: Limit sensors NAM + 4-20mA

P: Limit switches PXY + 4-20mA

T: 4-20mA transmitter only

l: Accessories:

X: No accessories

M: Gauge block

Logix 800si-02 Remote Unit

A separate unit for connection to the Logix 800si-02

The Remote Unit is connected to terminals 3,4 and 5 on models with type indicator c= C or R and k=T

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N-0314 OSLO, NORWAY

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0373 OSLO

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+47 22 96 03 30
Fax:
+47 22 96 05 50

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[16] Report No. 26023 and the listed descriptive documents**Descriptive Documents**

Number	Rev.	Date	Title/Description
D3IS-app6	--	2004-07-08	Marking plate
D3-70	--	2001-06-29	Control Drawing

[17] Special Conditions for Safe Use

1. The enclosure is made of aluminium and impact or friction caused by external objects shall be avoided in the application.
2. The surface area of the plastic parts on the cover exceeds the limits specified in EN 50284 for gas group IIC and intensive rubbing or brush charging should be avoided when used in an IIC explosive atmosphere.

[18] Essential Health and Safety Requirements

See item 9

Oslo, 2004-07-12

**Rolf Hoel****Certification Department**

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P.O.Box 73 Blindern
N-0314 OSLO, NORWAY

Office address:
Gaustadalléen 30
0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

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Supplement 2 to EC-TYPE EXAMINATION CERTIFICATE

- [14] **EC-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX110X**
[15] **Description of Equipment or Protective System**

The Supplement concerns modifications of the transmitter board PCB.

- [16] **Report No. 41473** and descriptive documents listed in the document D3-AS38E Supplement Technical File Contents 2005-03-07 Revision A
- [17] **Special Conditions for Safe Use**
As specified in the previous Schedule and Supplement 1 to the Certificate
- [18] **Essential Health and Safety Requirements**
See item 9

Oslo, 2005-03-31



Rolf Hoel
Certification Department

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P.O.Box 73 Blindern
N-0314 OSLO, NORWAY

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Gaustadalléen 30
0373 OSLO

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+47 22 96 03 30
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Supplement 3 to EC-TYPE EXAMINATION CERTIFICATE

- [14] **EC-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX110X**
[15] **Description of Equipment or Protective System**

The Supplement concerns new updated models new terminal board/main electronic board and new transmitter board.
The changes concern all models D3I... and Logix 800 as specified in this Supplement.
The safety parameters are changed and according to the listed values.

Type Designations and Model Codes.

D3I abcdefghijkl

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

- a: Air pipe connection thread type,
- b: Surface treatment,
- c: Function,
- de: Spindle,
- fgh: Cover and indicator,
- i: Temperature/Seals,
- j: Input signal/protocol: 4, 5
 - 4: 4-20mA
 - 5: 4-20mA Hart
- k: Feedback option
 - X: no option
 - S: Limit switch MEC + 4-20mA
 - N: Limit sensors NAM + 4-20mA
 - P: Limit switches PXY + 4-20mA
 - T: 4-20mA transmitter only
- l: Accessories:
 - X: No accessories
 - M: Gauge block

Logix 810-02-abcdefghijklmn (4-20mA version)

Logix 820-02-abcdefghijklmn (4-20mA Hart version)

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

- a: Housing, surface treatment.
- b: Threaded connection.
- cd: Spindle
- e: Operating temperature
- f: Language display
- g: Cover and indicator,
- h: Special options,
- i: limit switches and feedback option
 - T: 4-20mA position feedback + alarm
 - 0 : No switches
 - 1: Limit switch MEC + 4-20mA
 - 2: reed switch + 4-20mA
 - 3: Namur V3 type prox switch P+F NJ2-V3-N
- lm: Auxiliary options:
 - XX: No manifold
 - GM: Gauge manifold
- n: Gauge options
 - 0 No gauges

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N-0314 OSLO, NORWAY

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Gaustadalléen 30
0373 OSLO

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+47 22 96 03 30
Fax:
+47 22 96 05 50

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Supplement 3 to EC-TYPE EXAMINATION CERTIFICATE

Safety Data for External Connections

4-20mA input signal & Hart . Terminals no. 1, 2

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	93mA
Maximum input power.	P _i :	653mW
Maximum internal capacitance.	C _i :	11,28nF
Maximum internal inductance.	L _i :	11,28μH

Switches, Mechanical or Proximity. Terminals 3-5, 6-8 or 4-5, 7-8

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	1nF
Maximum internal inductance.	L _i :	1μH

Switches, Mechanical or Proximity with isolator barriers. Terminals 3-5, 6-8

Maximum input voltage.	U _i :	10,6V
Maximum input current.	I _i :	29,7mA
Maximum input power.	P _i :	79mW
Maximum internal capacitance.	C _i :	1nF
Maximum internal inductance.	L _i :	1μH

Namur switch and isolator barrier. Terminals 3-4, 6-7

Maximum input voltage.	U _i :	10,6V
Maximum input current.	I _i :	29,7mA
Maximum input power.	P _i :	79mW
Maximum internal capacitance.	C _i :	35nF
Maximum internal inductance.	L _i :	50μH

4-20mA Output - Terminals 9-10

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	93mA
Maximum input power.	P _i :	653mW
Maximum internal capacitance.	C _i :	16,4nF
Maximum internal inductance.	L _i :	11,28μH

Alarm. Terminals 11-12

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	5,7nF
Maximum internal inductance.	L _i :	11,28μH

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Supplement 3 to EC-TYPE EXAMINATION CERTIFICATE

[16] **Report No. 64145** and descriptive documents listed in the document:
D3I Technical File Content 2007-01-12 Revision B

[17] **Special Conditions for Safe Use**

As specified in the previous Schedule and Supplement 1 to the Certificate

[18] **Essential Health and Safety Requirements**

See item 9

Oslo, 2007-01-17



Rolf Hoel
Certification Manager, Ex-products

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P.O.Box 73 Blindern
N-0314 OSLO, NORWAY

Office address:
Gaustadalléen 30
0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

Enterprise number:
NO 974404532

Supplement 4 to EC-TYPE EXAMINATION CERTIFICATE

- [14] **EC-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX110X**
[15] **Description of Equipment or Protective System**

This Supplement concerns modifications of the display, main board and addition of a new pressure sensor board. There are also changes of safety data and model codes. The revised model codes and data are listed in this Supplement.

Type Designations and Model Codes.

D3I abcdefghijkl

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

a: Air pipe connection thread type,

b: Surface treatment,

c: Function,

de: Spindle,

fgh: Cover and indicator,

i: Sensors /Temperature/Seals,

j: Input signal/protocol: 4, 5

4: 4-20mA

5: 4-20mA Hart

k: Feedback option

X: no option

S: Limit switch MEC + 4-20mA

N: Limit sensors NAM + 4-20mA

P: Limit switches PXY + 4-20mA

T: 4-20mA transmitter only

4* Slot type Namur sensor, P+F SJ2 S1N+ Alarm

5* Slot type Namur sensor, P+F SJ2 SN+ Alarm

6* Slot type Namur sensor, P+F SJN + Alarm

l: Accessories:

X: No accessories

M: Gauge block

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N-0314 OSLO, NORWAY

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Gaustadalléen 30
0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

Enterprise number:
NO 974404532

Supplement 4 to EC-TYPE EXAMINATION CERTIFICATE

Logix 810-02-abcdefghijklmn (4-20mA version)

Logix 820-02-abcdefghijklmn (4-20mA Hart version)

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

a: Housing, surface treatment.

b: Threaded connection.

cd: Spindle

e: Operating temperature

f: Language display

g: Cover and indicator,

h: Special options,

i: limit switches and feedback option

T: 4-20mA position feedback + alarm

0 : No switches

1: Limit switch MEC + 4-20mA

2: reed switch + 4-20mA

3: Namur V3 type prox switch P+F NJ2-V3-N

4* Slot type Namur sensor, P+F SJ2 S1N+ Alarm

5* Slot type Namur sensor, P+F SJ2 SN+ Alarm

6* Slot type Namur sensor, P+F SJN + Alarm

lm: Manifold options:

XX: No manifold

GM: Gauge manifold

n: Gauge options

0 No gauges

Safety Data for External Connections

4-20mA input signal & Hart . Terminals no. 1, 2

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	93mA
Maximum input power.	P _i :	653mW
Maximum internal capacitance.	C _i :	11,28nF
Maximum internal inductance.	L _i :	11,28µH

Switches, Mechanical or Proximity. Terminals 3-5, 6-8 or 4-5, 7-8

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	1nF
Maximum internal inductance.	L _i :	1µH

Switches, Mechanical or Proximity with isolator barriers. Terminals 3-5, 6-8

Maximum input voltage.	U _i :	10,6V
Maximum input current.	I _i :	29,7mA
Maximum input power.	P _i :	79mW
Maximum internal capacitance.	C _i :	1nF
Maximum internal inductance.	L _i :	1µH

Namur switch and isolator barrier. Terminals 3-4, 6-7

Maximum input voltage.	U _i :	10,6V
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N-0314 OSLO, NORWAY

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Gaustadalléen 30
0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

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Supplement 4 to EC-TYPE EXAMINATION CERTIFICATE

Maximum input current.	I _i :	29,7mA
Maximum input power.	P _i :	79mW
Maximum internal capacitance.	C _i :	40nF
Maximum internal inductance.	L _i :	100µH

4-20mA Output - Terminals 9-10

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	93mA
Maximum input power.	P _i :	653mW
Maximum internal capacitance.	C _i :	16,4nF
Maximum internal inductance.	L _i :	11,28µH

Alarm. Terminals 11-12

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	5,7nF
Maximum internal inductance.	L _i :	11,28µH

[16] Report No. 105867 and descriptive documents listed in the document:

1. D3I/Logix 800 Digital Positioner Technical File Contents Version for 3-AS80I XH R3 Rev. A dated 2008-03-13.
2. Technical File contents intrinsically safe (ia) certification of D3/Logix 800 returnspring rev. C dated 2007-06-12 rev. C.
3. Drawing No. 3-305, dated 2007-07-02

[17] **Special Conditions for Safe Use**

As specified in the previous Schedule and Supplement 1 to the Certificate

[18] **Essential Health and Safety Requirements**

See item 9

Oslo, 2008-04-30

Asle Kleivstad

p. p. Rolf Hoel
Certification Manager, Ex-products

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N-0314 OSLO, NORWAY

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Supplement 1 to EC-TYPE EXAMINATION CERTIFICATE

[14] **EC-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX110X**

[15] **Description of Equipment or Protective System**

The certificate is extended to include the Logix 800si-02 as an alternative model to the previously certified model D3I
The Logix 800si-02 is identical as D3I.

Type Designation.

Logix 800si-02 abcdefghijkl

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

a: Air pipe connection thread type,

b: Surface treatment,

c: Function,

de: Spindle,

fgh: Cover and indicator,

i: Temperature/Seals,

j: Input signal/protocol: 4, 5, P, The letter "P" denotes the Profibus version

S: Limit switches MEC + 4-20mA

N: Limit sensors NAM + 4-20mA

P: Limit switches PXY + 4-20mA

T: 4-20mA

k: Feedback option

X: no option

S: Limit switch MEC + 4-20mA

N: Limit sensors NAM + 4-20mA

P: Limit switches PXY + 4-20mA

T: 4-20mA transmitter only

l: Accessories:

X: No accessories

M: Gauge block

Logix 800si-02 Remote Unit

A separate unit for connection to the Logix 800si-02

The Remote Unit is connected to terminals 3,4 and 5 on models with type indicator c= C or R and k=T

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[16] Report No. 26023 and the listed descriptive documents**Descriptive Documents**

Number	Rev.	Date	Title/Description
D3IS-app6	--	2004-07-08	Marking plate
D3-70	--	2001-06-29	Control Drawing

[17] Special Conditions for Safe Use

1. The enclosure is made of aluminium and impact or friction caused by external objects shall be avoided in the application.
2. The surface area of the plastic parts on the cover exceeds the limits specified in EN 50284 for gas group IIC and intensive rubbing or brush charging should be avoided when used in an IIC explosive atmosphere.

[18] Essential Health and Safety Requirements

See item 9

Oslo, 2004-07-12

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Supplement 2 to EC-TYPE EXAMINATION CERTIFICATE

- [14] **EC-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX110X**
[15] **Description of Equipment or Protective System**

The Supplement concerns modifications of the transmitter board PCB.

- [16] **Report No. 41473** and descriptive documents listed in the document D3-AS38E Supplement Technical File Contents 2005-03-07 Revision A
- [17] **Special Conditions for Safe Use**
As specified in the previous Schedule and Supplement 1 to the Certificate
- [18] **Essential Health and Safety Requirements**
See item 9

Oslo, 2005-03-31



Rolf Hoel
Certification Department

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Postal address:
P.O.Box 73 Blindern
N-0314 OSLO, NORWAY

Office address:
Gaustadalléen 30
0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

Enterprise number:
NO 974404532

Supplement 3 to EC-TYPE EXAMINATION CERTIFICATE

- [14] **EC-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX110X**
[15] **Description of Equipment or Protective System**

The Supplement concerns new updated models new terminal board/main electronic board and new transmitter board.
The changes concern all models D3I... and Logix 800 as specified in this Supplement.
The safety parameters are changed and according to the listed values.

Type Designations and Model Codes.

D3I abcdefghijkl

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

- a: Air pipe connection thread type,
- b: Surface treatment,
- c: Function,
- de: Spindle,
- fgh: Cover and indicator,
- i: Temperature/Seals,
- j: Input signal/protocol: 4, 5
 - 4: 4-20mA
 - 5: 4-20mA Hart
- k: Feedback option
 - X: no option
 - S: Limit switch MEC + 4-20mA
 - N: Limit sensors NAM + 4-20mA
 - P: Limit switches PXY + 4-20mA
 - T: 4-20mA transmitter only
- l: Accessories:
 - X: No accessories
 - M: Gauge block

Logix 810-02-abcdefghijklmn (4-20mA version)

Logix 820-02-abcdefghijklmn (4-20mA Hart version)

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

- a: Housing, surface treatment.
- b: Threaded connection.
- cd: Spindle
- e: Operating temperature
- f: Language display
- g: Cover and indicator,
- h: Special options,
- i: limit switches and feedback option
 - T: 4-20mA position feedback + alarm
 - 0 : No switches
 - 1: Limit switch MEC + 4-20mA
 - 2: reed switch + 4-20mA
 - 3: Namur V3 type prox switch P+F NJ2-V3-N
- lm: Auxiliary options:
 - XX: No manifold
 - GM: Gauge manifold
- n: Gauge options
 - 0 No gauges

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Supplement 3 to EC-TYPE EXAMINATION CERTIFICATE

Safety Data for External Connections

4-20mA input signal & Hart . Terminals no. 1, 2

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	93mA
Maximum input power.	P _i :	653mW
Maximum internal capacitance.	C _i :	11,28nF
Maximum internal inductance.	L _i :	11,28μH

Switches, Mechanical or Proximity. Terminals 3-5, 6-8 or 4-5, 7-8

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	1nF
Maximum internal inductance.	L _i :	1μH

Switches, Mechanical or Proximity with isolator barriers. Terminals 3-5, 6-8

Maximum input voltage.	U _i :	10,6V
Maximum input current.	I _i :	29,7mA
Maximum input power.	P _i :	79mW
Maximum internal capacitance.	C _i :	1nF
Maximum internal inductance.	L _i :	1μH

Namur switch and isolator barrier. Terminals 3-4, 6-7

Maximum input voltage.	U _i :	10,6V
Maximum input current.	I _i :	29,7mA
Maximum input power.	P _i :	79mW
Maximum internal capacitance.	C _i :	35nF
Maximum internal inductance.	L _i :	50μH

4-20mA Output - Terminals 9-10

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	93mA
Maximum input power.	P _i :	653mW
Maximum internal capacitance.	C _i :	16,4nF
Maximum internal inductance.	L _i :	11,28μH

Alarm. Terminals 11-12

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	5,7nF
Maximum internal inductance.	L _i :	11,28μH

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Supplement 3 to EC-TYPE EXAMINATION CERTIFICATE

[16] **Report No. 64145** and descriptive documents listed in the document:
D3I Technical File Content 2007-01-12 Revision B

[17] **Special Conditions for Safe Use**

As specified in the previous Schedule and Supplement 1 to the Certificate

[18] **Essential Health and Safety Requirements**

See item 9

Oslo, 2007-01-17



Rolf Hoel
Certification Manager, Ex-products

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P.O.Box 73 Blindern
N-0314 OSLO, NORWAY

Office address:
Gaustadalléen 30
0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

Enterprise number:
NO 974404532

Supplement 4 to EC-TYPE EXAMINATION CERTIFICATE

- [14] **EC-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX110X**
[15] **Description of Equipment or Protective System**

This Supplement concerns modifications of the display, main board and addition of a new pressure sensor board. There are also changes of safety data and model codes. The revised model codes and data are listed in this Supplement.

Type Designations and Model Codes.

D3I abcdefghijkl

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

- a: Air pipe connection thread type,
b: Surface treatment,
c: Function,
de: Spindle,
fgh: Cover and indicator,
i: Sensors /Temperature/Seals,
j: Input signal/protocol: 4, 5
 4: 4-20mA
 5: 4-20mA Hart
k: Feedback option
 X: no option
 S: Limit switch MEC + 4-20mA
 N: Limit sensors NAM + 4-20mA
 P: Limit switches PXY + 4-20mA
 T: 4-20mA transmitter only
 4* Slot type Namur sensor, P+F SJ2 S1N+ Alarm
 5* Slot type Namur sensor, P+F SJ2 SN+ Alarm
 6* Slot type Namur sensor, P+F SJN + Alarm
l: Accessories:
 X: No accessories
 M: Gauge block

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P.O.Box 73 Blindern
N-0314 OSLO, NORWAY

Office address:
Gaustadalléen 30
0373 OSLO

Telephone:
+47 22 96 03 30
Fax:
+47 22 96 05 50

Enterprise number:
NO 974404532

Supplement 4 to EC-TYPE EXAMINATION CERTIFICATE

Logix 810-02-abcdefghijklmn (4-20mA version)

Logix 820-02-abcdefghijklmn (4-20mA Hart version)

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

a: Housing, surface treatment.

b: Threaded connection.

cd: Spindle

e: Operating temperature

f: Language display

g: Cover and indicator,

h: Special options,

i: limit switches and feedback option

T: 4-20mA position feedback + alarm

0 : No switches

1: Limit switch MEC + 4-20mA

2: reed switch + 4-20mA

3: Namur V3 type prox switch P+F NJ2-V3-N

4* Slot type Namur sensor, P+F SJ2 S1N+ Alarm

5* Slot type Namur sensor, P+F SJ2 SN+ Alarm

6* Slot type Namur sensor, P+F SJN + Alarm

lm: Manifold options:

XX: No manifold

GM: Gauge manifold

n: Gauge options

0 No gauges

Safety Data for External Connections

4-20mA input signal & Hart . Terminals no. 1, 2

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	93mA
Maximum input power.	P _i :	653mW
Maximum internal capacitance.	C _i :	11,28nF
Maximum internal inductance.	L _i :	11,28µH

Switches, Mechanical or Proximity. Terminals 3-5, 6-8 or 4-5, 7-8

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	1nF
Maximum internal inductance.	L _i :	1µH

Switches, Mechanical or Proximity with isolator barriers. Terminals 3-5, 6-8

Maximum input voltage.	U _i :	10,6V
Maximum input current.	I _i :	29,7mA
Maximum input power.	P _i :	79mW
Maximum internal capacitance.	C _i :	1nF
Maximum internal inductance.	L _i :	1µH

Namur switch and isolator barrier. Terminals 3-4, 6-7

Maximum input voltage.	U _i :	10,6V
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Supplement 4 to EC-TYPE EXAMINATION CERTIFICATE

Maximum input current.	I _i :	29,7mA
Maximum input power.	P _i :	79mW
Maximum internal capacitance.	C _i :	40nF
Maximum internal inductance.	L _i :	100µH

4-20mA Output - Terminals 9-10

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	93mA
Maximum input power.	P _i :	653mW
Maximum internal capacitance.	C _i :	16,4nF
Maximum internal inductance.	L _i :	11,28µH

Alarm. Terminals 11-12

Maximum input voltage.	U _i :	28V
Maximum input current.	I _i :	45mA
Maximum input power.	P _i :	315mW
Maximum internal capacitance.	C _i :	5,7nF
Maximum internal inductance.	L _i :	11,28µH

[16] Report No. 105867 and descriptive documents listed in the document:

1. D3I/Logix 800 Digital Positioner Technical File Contents Version for 3-AS80I XH R3 Rev. A dated 2008-03-13.
2. Technical File contents intrinsically safe (ia) certification of D3/Logix 800 returnspring rev. C dated 2007-06-12 rev. C.
3. Drawing No. 3-305, dated 2007-07-02

[17] **Special Conditions for Safe Use**

As specified in the previous Schedule and Supplement 1 to the Certificate

[18] **Essential Health and Safety Requirements**

See item 9

Oslo, 2008-04-30

Asle Uersted

p. p. Rolf Hoel
Certification Manager, Ex-products

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N-0314 OSLO, NORWAY

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