



EC-TYPE EXAMINATION CERTIFICATE

**Component Intended for use on/in an Equipment or Protective System
Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

EC-Type Examination Certificate Number : **BAS98ATEX7207U**

Component: **8201-HI-IS, 8 CHANNEL IS A1, 4-20 mA WITH HART**

Manufacturer: **MEASUREMENT TECHNOLOGY LIMITED**

Address: **Power Court, Luton, Bedfordshire, LU1 3JJ**

This Component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

The Electrical Equipment Certification Service, notified body number 600 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°

98(C)0558 dated 11 December 1998

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN50014: 1997

EN50020: 1994

The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.

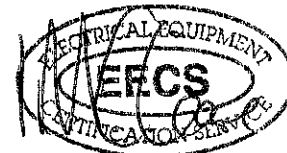
The marking of the component shall include the following:-

II [1] G [EEx ia] IIC (-40°C ≤ T_a ≤ +70°C)

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 0703/02/265

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire. SK17 9JN. United Kingdom
Tel: 01298 28000 Fax: 01298 28244

**I M CLEARE
DIRECTOR
11 December 1998**



Schedule

13

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX7207U

15

Description of Component

The 8201-HI-IS, 8-Channel IS AI, 4-20mA with HART is designed to restrict the transfer of energy, from an input supply voltage of 18V, which is provided with galvanic isolation and voltage clamping with triplicated crowbar protection e.g. the 8920-PS-DC, I.S. System Power Supply, to eight galvanically isolated and independent, intrinsically safe circuits, by the limitation of voltage and current. Digital data is passed between the Hazardous Area and the Safe Area equipment, via power blocking circuitry within the module, to a data interface unit such as the 8922-RB-IS, Railbus Isolator.

The module consists of electronic components on three printed circuit boards mounted within a moulded plastic enclosure. Each module has eight separate channels which are all referenced to a common electrical connection but will be considered as separate intrinsically safe circuits. Each output channel is designed to provide an intrinsically safe power source, for conventional 4-20mA HART compatible two wire transmitters which may be situated within a hazardous area, and to monitor the loop current. The module supports "pass through" of the HART parameters, and data signals between the field devices and safe area apparatus, on the railbus data lines.

The safe area connections of the 8204-AO-IS, 8-Channel IS AO, 4-20mA are made via a certified module carrier such as an 8720-CA-04 4-Module carrier or an 8727-CA-08 8-Module carrier and the hazardous area connections are made via certified IS field terminals such as the 8621-FT-IS Standard Field Terminals or the 8622-FT-IS Loop Disconnect Field Terminals.

All of the data lines between the module and the Railbus Isolator are diode blocked and/or optocoupled to prevent power transfer from the module back onto the data lines.

Both the PSU and the Railbus Isolator supplies and the Railbus data signals are referenced to a common point within the Railbus Isolator to ensure that the galvanically isolated supplies are not additive.

Apparatus Parameters

The 8201-HI-IS, 8-Channel IS AI, 4-20mA with HART is to be coded
[EEx ia] IIC (-40°C ≤ Ta ≤ +70°C) when:

Input Parameters

CON 2 Pins 1, 3-5, 10-12, 15 and 16.

U_m = 18V (from the PSU)

The maximum prospective current must be limited to 85A.

CON 2 Pins 13, 14, 17-22 and 31, 33 & 34.

U_m = 18V (from the RBI)

The maximum input power must be limited to 2.5W.



Schedule

13

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX7207U

Output

Channels 1 to 8 on Connectors CON5 and CON6 (Each Channel)

Channel	Output pins (+)	Output pins (-)	Channel	Output pins (+)	Output pins (-)
1	Con 5, pin 7C	Con 5, pin 7A	5	Con 6, pin 7C	Con 6, pin 7A
2	Con 5, pin 5C	Con 5, pin 5A	6	Con 6, pin 5C	Con 6, pin 5A
3	Con 5, pin 3C	Con 5, pin 3A	7	Con 6, pin 3C	Con 6, pin 3A
4	Con 5, pin1C	Con 5, pin1A	8	Con 6, pin 1C	Con 6, pin 1A

$$U_o = 28V \quad I_o = 93mA \quad P_o = 0.65W$$

The field outputs share a common rail between the four channels but are galvanically isolated from the PSU and Railbus Isolator supplies and the Railbus data signals.

Load Parameters

The capacitance and either the inductance or the inductance to resistance ratio (L/R) of the load connected to the output terminals must not exceed the following values:

GROUP	CAPACITANCE in μF	INDUCTANCE in mH	OR	L/R RATIO in $\mu H/ohm$
IIC	0.083	4.3		56
IIB	0.65	17.72		210
IIA	2.15	36.02		444

16 **Report No.**

98(C)0558

17 **Schedule of Limitations**

1. Each output channel must be considered as a separate intrinsically safe circuit which must be segregated from all other circuits by the requirements of Table 4 of EN50 020.
2. This module must be mounted with suitable connection facilities such that the output connectors are provided with a degree of protection of at least IP20.
3. Plugs and sockets for external connections must be designed such that incorrect connections or interchangeability with in-appropriate field connections is prevented.



13

Schedule

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX7207U

4. This module must be segregated from any other Non-IS or IS circuits, by the requirements of Table 4 of EN50 020: 1994.

18 Essential Health and Safety Requirements

There are no additional requirements other than those referred to in the standard.

19 DRAWINGS

Number	Sheet	Issue	Date	Description
TC8201-103/E	1	E	9/98	Root
TC8201-103/E	2 to 9	E	9/98	Circuit
TC8201-103/E	10	D	8/98	Circuit
CI8201	1	3	12/98	Parts list
CI8201	2	3	12/98	Parts list
CI8200	1	3	12/98	General Assembly
AD8201-106/A	1 and 2	A	10/98	Circuit board 714 Side 1/2 Layout
AD8201-103/A	1 to 3	A	10/98	Circuit board 713A/B Side 1/2 Layout
CI8201-PCB714		1	10/98	Circuit board 714 Track Layout Side 1/2 Power + Ground
CI8201-PCB713		1	10/98	Circuit board 713A/B Track Side 1/2 Power + Ground
CI8201-1		2	12/98	Marking PID
CI8000-12	1	2	12/98	TFR83 Transformer
CI8000-12	2	1	12/98	TFR83 Transformer
CI8220-057	1	1	12/98	Segregation pcb

This certificate may only be reproduced in its entirety and without any change, schedule included.

BASEEFA List Keywords
2ISOLBAR



1 **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment or Protective System**
3 **Intended for use in Potentially explosive atmospheres**
4 **Directive 94/9/EC**

5 Supplementary EC-Type Examination Certificate Number: **BAS98ATEX7207U/1**

6 Component: **8201-HI-IS, 8 CHANNEL IS AI, 4-20mA WITH HART**

7 Manufacturer: **MEASUREMENT TECHNOLOGY LIMITED**

8 Address: **Power Court, Luton, Bedfordshire, LU1 3JJ**

9 This supplementary certificate extends EC-Type Examination Certificate No. BAS98ATEX7207U to apply to components designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This Supplementary Certificate shall be held with the original Certificate.

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 0703/02/265

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire. SK17 9JN. United Kingdom
Tel: 01298 28000 Fax: 01298 28244



I M CLEARE
DIRECTOR
20 May 1999



Schedule

13

14 SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX7207U/1

Description of the Variation to the Component

VARIATION 1.1

To permit the following changes to the 8201-HI-IS, 8 Channel IS AI, 4-20mA with HART:-

- a) the addition and removal of a number of diodes, capacitors and resistors.
- b) changes in value of a number of resistors.
- c) the addition of an inductor.
- d) the addition of shield p.c.b. 770.
- e) the addition of a number of p.c.b. connectors.
- f) modification of the printed circuit boards to accommodate these changes.
- g) the existing certified manufacturing drawings are replaced by certification drawings.

These changes do not affect the intrinsic safety assessment.

Report Nos.

99(C)0237

SCHEDULE OF LIMITATIONS

As original certificate.

Essential Health and Safety Requirements

See original certificate.

DRAWINGS

Number	Sheet	Issue	Date	Description
CI8201	1 & 2	4	3.99	Safety Components Parts List
CI8201-2	1 to 11	1	3.99	Circuit Diagram (Replaces TC8201-103\E Sheets 1 to 10)
CI8201-3	1 to 3	1	4.99	Component Layout p.c.b. 713 A/B (Replaces AD8201-103\A Sheets 1 to 3)
CI8201-4	1 to 2	1	4.99	Component Layout p.c.b. 714 (Replaces AD8201/106\A Sheets 1 and 2)
CI8201-5	1	1	4.99	General Assembly (Replaces TC8200 Sheet 1)



Schedule

13

14 SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX7207U/1

Number	Sheet	Issue	Date	Description
CI8201-PCB770 (Replaces CI8220-057 Sheet 1)	1	1	4.99	Shield p.c.b.
CI8201-PCB713	1	2	4.99	Circuit Board 713A/B Track Layout Side 1/2, Power and Ground Planes
CI8201-PCB714	1	2	4.99	Circuit Board 714 Track Layout Side 1/2, Power and Ground Planes

This certificate may only be reproduced in its entirety and without any change, schedule included.



1 **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment or Protective System**
Intended for use in Potentially explosive atmospheres
Directive 94/9/EC

3 Supplementary EC-Type Examination Certificate Number: **BAS98ATEX7207U/2**

4 Component: **8201-HI-IS, 8 CHANNEL IS AI, 4-20mA WITH HART**

5 Manufacturer: **MEASUREMENT TECHNOLOGY LIMITED**

6 Address: **Power Court, Luton, Bedfordshire, LU1 3JJ**

7 This supplementary certificate extends EC-Type Examination Certificate No. BAS98ATEX7207U to apply to components designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This Supplementary Certificate shall be held with the original Certificate.

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 0703/02/265

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire. SK17 9JN, United Kingdom
Tel: 01298 28000 Fax: 01298 28244



I M CLEARE
DIRECTOR
28 March 2000



13

Schedule

14 SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX7207U/2

Description of the Variation to the Component

VARIATION 2.1

To permit the following changes to the 8201-HI-IS, 8 Channel IS AI 4-20mA with HART:-

minor modifications local to IC909 on Side Two of the top p.c.b.

an increase in the value of R220, R227 and R234 from 1.8k Ω 5% 0.5W to 3.3k Ω 5% 0.5W.

minor changes to the circuit diagram.

These changes do not affect the intrinsic safety assessment.

Report No.

None

Schedule of Limitations

As original certificate.

Essential Health and Safety Requirements

See original certificate.

DRAWINGS

Number	Sheet	Issue	Date	Description
CI8201-2	1 to 11	2	12.99	Circuit Diagram
CI8201-3	1 to 3	2	12.99	Component Layout p.c.b. 713 A/B
CI8201	1 & 2	5	12.99	Parts List

This certificate may only be reproduced in its entirety and without any change, schedule included.



1 **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment or Protective System**
3 **Intended for use in Potentially explosive atmospheres**
4 **Directive 94/9/EC**

5 Supplementary EC-Type Examination Certificate Number: **BAS98ATEX7207U/3**

6 Component: **8201-HI-IS, 8 CHANNEL IS AI, 4-20mA WITH HART**

7 Manufacturer: **MEASUREMENT TECHNOLOGY LIMITED**

8 Address: **Luton, Bedfordshire, LU1 3JJ**

9 This supplementary certificate extends EC-Type Examination Certificate No. BAS98ATEX7207U to apply to components designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

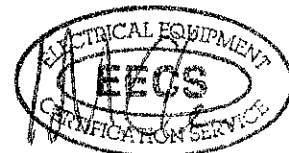
This Supplementary Certificate shall be held with the original Certificate.

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 0703/02/265

BASEEFA Certification Report No. 99(C)0681 dated 11 July 2000
(held on EECS 0703/02/284)

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire. SK17 9JN. United Kingdom
Tel: 01298 28000 Fax: 01298 28244

I M CLEARE
DIRECTOR
3 August 2000



Schedule

13

14 **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX7207U/3**

Description of the Variation to the Component

VARIATION 3.1

To permit the value of the input fuse FS1 to be increased from 750mA to 1A in the 8201-HI-IS, 8 Channel IS AI, 4-20mA with HART, Analogue Input Module.

This change does not affect the intrinsic safety assessment.

Report No.

99(C)0681

Schedule of Limitations

As original certificate.

Essential Health and Safety Requirements

See original certificate.

DRAWINGS

Number	Sheet	Issue	Date	Description
CI8201	1& 2	6	7.00	Safety Components Parts List

This certificate may only be reproduced in its entirety and without any change, schedule included.



1 **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment or Protective System**
3 **Intended for use in Potentially explosive atmospheres**
4 **Directive 94/9/EC**

5 Supplementary EC-Type Examination Certificate Number: **BAS98ATEX7207U/4**

6 Component: **8201-HI-IS, 8-CHANNEL IS AI, 4-20mA WITH HART**

7 Manufacturer: **MEASUREMENT TECHNOLOGY LIMITED**

8 Address: **Power Court, Luton, Bedfordshire, LU1 3JJ**

9 This supplementary certificate extends EC-Type Examination Certificate No. BAS98ATEX7207U to
10 apply to components designed and constructed in accordance with the specification set out in the
11 Schedule of the said Certificate but having any variations specified in the Schedule attached to this
12 certificate and the documents therein referred to.

This Supplementary Certificate shall be held with the original Certificate.

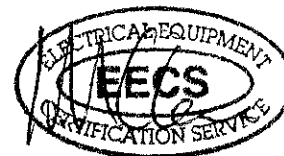
This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 0703/02/265

This certificate is granted subject to the general conditions of the Electrical
Equipment Certification Service. It does not necessarily indicate that the apparatus
may be used in particular industries or circumstances.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire, SK17 9JN, United Kingdom
Tel: +44(0)1298 28000 Fax: +44(0)1298 28244
internet: www.basefa.com e-mail: basefa.info.eecs@hsl.gov.uk



I M CLEARE
DIRECTOR
19 February 2001



Schedule

13

14 **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX7207U/4**

Description of the Variation to the Component

VARIATION 4.1

To permit minor changes to the certification label.

Report No.

None

Schedule of Limitations

See original certificate.

Essential Health and Safety Requirements

See original certificate.

DRAWINGS

Number	Sheet	Issue	Date	Description
CI8201-1	-	3	10.00	8201-HI-IS Certification Label

This certificate may only be reproduced in its entirety and without any change, schedule included.



1 **SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment or Protective System**
3 **Intended for use in Potentially explosive atmospheres**
4 **Directive 94/9/EC**

5 Supplementary EC-Type Examination Certificate Number: **See Schedule**

6 Component: **See Schedule**

7 Manufacturer: **MEASUREMENT TECHNOLOGY LIMITED**

8 Address: **Luton, Bedfordshire, LU1 3JJ**

9 This supplementary certificate extends the EC-Type Examination Certificates listed in the Schedule to apply to components designed and constructed in accordance with the specifications set out in the Schedules of the said Certificates but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

A copy of this Supplementary Certificate shall be attached to each of the original Certificates.

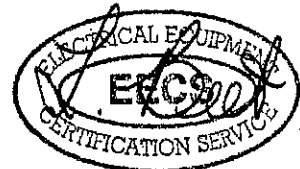
This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: See Schedule

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire, SK17 9JN, United Kingdom
Tel: +44(0)1298 28000 Fax: +44(0)1298 28244
Internet: www.baseefa.com e-mail: baseefa.info.eecs@hsl.gov.uk



pp I M CLEARE
DIRECTOR
21 February 2002



13

Schedule

14

SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE

Description of the Variation to the Component

VARIATION See Schedule

To permit the option to use a polyester resin based ink for marking the certification details on the units as an alternative to the acrylic based ink originally specified. The original assessment is not affected by this change.

<u>Certificate No.</u>	<u>Supplement No.</u>	<u>Variation No.</u>	<u>Component Title</u>	<u>File No.</u>
BAS98ATEX7204U	/7	7.1	8215-DO-IS	EECS 0703/02/262
BAS98ATEX7205U	/6	6.1	8204-AO-IS	EECS 0703/02/263
BAS98ATEX7206U	/4	4.1	8220-DI-IS	EECS 0703/02/264
BAS98ATEX7207U	/5	5.1	8201-HI-IS	EECS 0703/02/265
BAS98ATEX7208U	/4	4.1	8922-RB-IS	EECS 0703/02/266
BAS98ATEX7209U	/5	5.1	8920-PS-DC	EECS 0703/02/267
BAS99ATEX7316U	/5	5.1	8205-TI-IS 8206-TI-IS	EECS 0703/02/277
BAS00ATEX7202U	/2	2.1	8223-PI-IS	EECS 0703/02/294
BAS01ATEX7185U	/2	2.1	8202-HO-IS	EECS 0703/02/297

Report No.

None.

Schedule of Limitations

See original certificates.

Essential Health and Safety Requirements

See original certificates.

DRAWING

Number	Issue	Date	Description
*CI8000-5	1	01.02	Label printing inks

*held on BASEEFA Certificate No BAS98ATEX7209U on file No. EECS 0703/02/267

This certificate may only be reproduced in its entirety and without any change, schedule included.



1 SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

**2 Component Intended for use on/in an Equipment
Intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: BAS98ATEX7207U/6

4 Component: 8201-HI-IS, 8 Channel IS AI, 4-20mA with HART

5 Manufacturer: Measurement Technology Limited

6 Address: Power Court, Luton, Bedfordshire, LU1 3JJ

7 This supplementary certificate extends EC - Type Examination Certificate No. BAS98ATEX7207U to apply to components designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa (2001) Ltd., Notified Body Number 1180, is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate it has issued.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. 0703

Project File No. 05/0676

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa (2001) Ltd
Registered in England No. 4305578 at the above address

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa (2001) Ltd.



13

Schedule

14

Certificate Number BAS98ATEX7207U/6

15 **Description of the variation to the Component**

Variation 6.1

The intrinsically safe output may be connected to apparatus used in the presence of combustible dust and certified 'D'. Therefore in accordance with ExNB Interpretation/Clarification Sheet No. 99/11/075/CS, the apparatus may be additionally marked 'D'.

⊕ II (1) GD [EEx ia] IIC (-40°C ≤ T_a ≤ +70°C).

16 **Report Number**

None.

17 **Schedule of Limitations**

None additional to those listed previously

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
CI8201-1	1	4	5.05	8201-HI-IS Certification Label Details



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment**
3 **Intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **BAS98ATEX7207U/7**

4 Component: **8201-HI-IS, 8 Channel IS AI, 4-20mA with HART**

5 Manufacturer: **GE Fanuc Intelligent Platforms**

6 Address: **The Village, Building 240, Butterfield, Luton, LU2 8DL**
(Formerly held by Measurement Technology Limited, Power Court,
Luton, Bedfordshire, LU1 3JJ)

7 This supplementary certificate extends EC - Type Examination Certificate No. BAS98ATEX7207U to apply to components designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa, Notified Body Number 1180, is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate it has issued.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **6198 (was 0703)**

Project File No. **08/0803**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number BAS98ATEX7207U/7

15 Description of the variation to the Component

Variation 7.1

To permit the specified cold resistance of Fuse FS1, 1A to be reduced from 0.118 Ohms to 0.116 Ohms and Fuse FS2, 250mA to be reduced from 0.81 ohms to 0.4554 ohms. These changes do not affect the original assessment.

16 Report Number

None

17 Schedule of Limitations

None additional to those listed previously

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
CI8201	1&2	7	10.08	8201-HI-IS List of components essential to safety.

This drawing is common to BAS99ATEX7110U/9



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment**
Intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC

3 Supplementary EC - Type Examination Certificate **See Schedule**
Number:

4 Component: **See Schedule**

5 Manufacturer: **GE Fanuc Intelligent Platforms**

6 Address: **Butterfield, Luton, LU2 8DL**

7 This supplementary certificate extends the EC - Type Examination Certificates listed in the Schedule to apply to components designed and constructed in accordance with the specification set out in the Schedules of the said Certificates but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

A copy of this Supplementary Certificate shall be attached to each of the original Certificates.

This certificate may only be reproduced in its entirety, without any change, Schedule included.

Baseefa Customer Reference No. **6198**

Project File No. **09/0581**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

A handwritten signature in black ink, appearing to read "R S Sinclair".

R S SINCLAIR

Baseefa
Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.

DIRECTOR
On behalf of
Baseefa



Schedule

Description of the variation to the Component

Certificate No.	Supplement No.	Component Type
BAS98ATEX7204U	9	8215-DO-IS, 4 Channel IS DO Solenoid Driver
BAS98ATEX7205U	9	8204-AO-IS, 8 Channel IS AO, 4-20 mA
BAS98ATEX7206U	6	8220-DI-IS, 16 Channel IS DI Switch / Proximity Detector
BAS98ATEX7207U	8	8201-HI-IS, 8 Channel IS AI, 4-20 mA with HART
BAS98ATEX7208U	6	8922-RB-IS, Railbus Isolator with Railbus Isolator Carrier
BAS98ATEX7209U	8	8920-PS-DC, IS System Power Supply, d.c. Input with Module Carrier
BAS98ATEX7210U	7	87XX Module Carriers
BAS98ATEX7211U	12	862X IS Field Terminal
BAS99ATEX7316U	6	8205-TI-IS, 8 Channel IS, Thermocouple Input Module 8206-TI-IS, 8 Channel IS, RTD Input Module
BAS00ATEX7202U	5	8223-PI-IS, 2-Channel Pulse Input Module
BAS01ATEX7185U	5	8202-HO-IS, 8 Channel IS AO, 4-20 mA with HART
BAS01ATEX7346U	2	8230-AI-IS, 8 Channel IS Analogue Input Module

Report No.

None

Schedule of Limitations

See original certificates

Essential Health and Safety Requirements

See original certificates

Drawings and Documents

Number	Sheet	Issue	Date	Description
CI 8200-15	1	1	07.09	Optional encapsulants and alternative address prefixes



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment**
3 **Intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **BAS98ATEX7207U/9**

4 Component: **8201-HI-IS, 8 Channel IS AI, 4-20mA with HART**

5 Manufacturer: **GE Fanuc Intelligent Platforms**

6 Address: **The Village, Building 240, Butterfield, Luton, LU2 8DL**

7 This supplementary certificate extends EC - Type Examination Certificate No. BAS98ATEX7207U to apply to components designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa, Notified Body Number 1180, is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate it has issued.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. 6198

Project File No. 09/0906

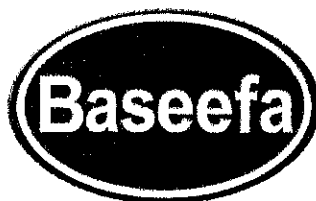
This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.

A handwritten signature in black ink, appearing to read "R S Sinclair".

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



13 **Schedule**

14 **Certificate Number BAS98ATEX7207U/9**

15 **Description of the variation to the Component**

Variation 9.1

To permit a change in the type (but not the rating) and mounting arrangement of fuse FS4. This change does not affect the original assessment.

16 **Report Number**

None

17 **Schedule of Limitations**

None additional to those listed previously

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
CI8201-10	1	1	11.09	Modification to 8201-HI-IS to replace fuse FS4 by an alternative with larger body.

This drawing is common to BAS99ATEX7110U/11



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment**
Intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC

3 Supplementary EC - Type Examination Certificate Number: **BAS98ATEX7207U/10**

4 Component: **8201-HI-IS, 8 Channel IS AI, 4/20mA with HART**

5 Manufacturer: **GE Fanuc Intelligent Platforms**

6 Address: **The Village, Building 240, Butterfield, Luton, LU2 8DL**

7 This supplementary certificate extends EC - Type Examination Certificate No. BAS98ATEX7207U to apply to components designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa, Notified Body Number 1180, is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate it has issued.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. 6198

Project File No. 10/0291

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.

A handwritten signature in black ink, appearing to read "R S Sinclair".

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number BAS98ATEX7207U/10

15 Description of the variation to the Component

Variation 10.1

To permit minor changes to the PCB layouts not affecting the original assessment.

As a result of the PCB changes, the modification detailed on Drawing No. CI8201-10 is not applicable to the latest revision of PCB714.

16 Report Number

None.

17 Schedule of Limitations

None additional to those listed previously

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
AD8201-103/5 (Replaces Drawing No. CI8201-3, Issue 2)	1 to 3	5	11.09	PCB Assembly (PCB713)
AD8201-106/4 (Replaces Drawing No. CI8201-4, Issue 1)	1 & 2	4	11.09	PCB Assembly (PCB714)
CI8201-PCB713	1 of 1	3	12.09	8201-HI-IS Analogue Input Module with HART PCB Track Layout – Top and Bottom PCB's
CI8201-PCB714	1 of 1	3	12.09	8201-HI-IS Analogue Input Module with HART PCB Track Layout – Middle PCB
CI8201-11	1 of 1	1	04.10	Information on Comparative Tracking Index of Conformal Coating used in 8201-HI-IS

These drawings are common to BAS99ATEX7110U/12



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Component Intended for use on/in an Equipment**
3 **Intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **BAS98ATEX7207U/11**

4 Component: **8201-HI-IS, 8 Channel IS AI, 4/20mA with HART**

5 Manufacturer: **GE Intelligent Platforms**
(formerly GE Fanuc Intelligent Platforms)

6 Address: **2500 Austin Drive, Charlottesville, Virginia 22911, USA**
(formerly Butterfield, Luton, LU2 8DL)

7 This supplementary certificate extends EC - Type Examination Certificate No. BAS98ATEX7207U to apply to components designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa, Notified Body Number 1180, is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate it has issued.

This certificate may only be reproduced in its entirety, without any change, schedule included.



Baseefa Customer Reference No. **6623**

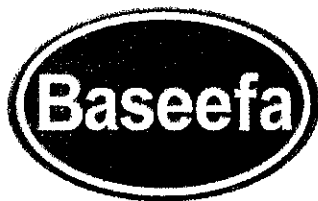
Project File No. **10/0571**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.



R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number BAS98ATEX7207U/11

15 Description of the variation to the Component

Variation 11.1

To permit minor drawing changes not affecting the original assessment.

16 Report Number

None

17 Schedule of Limitations

None additional to those listed previously

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
CI8000-12	1 & 2	3	5.10	EFD20 I.S. Transformer TFR83
CI8200-10	1 to 3	3	7.10	Revised Label Information for 8000 2/1 Product made by GE Intelligent Platforms - Baseefa
CI 8200-15	1 of 1	2	07.10	Optional Encapsulant and Alternative Address Prefixes