[1] # TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

[3] Type Examination Certificate Number: **DEMKO 02 ATEX 0208440U**

[4] Equipment: **Remote Terminal Unit**
**Process Automation Controller**

[5] Manufacturer: **Bristol Babcock Inc.**

[6] Address: **1100 Buckingham St. Watertown, CT 06795 USA**

[7] This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S certifies that this component has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 3 components intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential report number **0208440.**

[9] Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to
Standards: **EN50021:1999 Electrical Apparatus for Potentially Explosive Atmospheres**

[10] 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.

[11] This Type examination certificate relates only to the design, examination and tests of the specified component in accordance with the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:

**Ex II 3 G  EEx nL IIC  $T_{amb}$ 70°C**

On behalf of UL International Demko A/S  Herlev, 2002 12.20

Karina Christiansen
Certification Manager

**UL International Demko A/S**
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[13] # Schedule

[14] ## TYPE EXAMINATION CERTIFICATE No. DEMKO 02 ATEX 130949U

[15] Description of Component:

Open Type devices that employ a scalable, modular hardware design. Units contain a Backplane that supports up to 2, 4 or 8 I/O modules. Each ControlWave Programmable Controller is comprised of a Backplane Board (mounted in the Chassis), a Power Supply Module, a CPU Module and from 0 to 8 I/O Modules. All system modules plug into the Backplane Board (2, 4, or 8 I/O versions). Each I/O Module provides the circuitry and field interface hardware necessary to interconnect the assigned field I/O circuits. Additionally the CPU Board implements a Port-80 Display consisting of two TI TIL311 Displays. Isolated power is generated and regulated by the Power Supply/Sequencer Module that provides +3.3 V dc, +5 V dc, +12 V dc (optional) and –12 V dc (optional) from a bulk 10.6 to 20 V dc or 20.7 to 30 V dc source.

| | |
|---|---|
| **Model/Type ref.:** | Programmable Controller, ControlWave |
| **Rated current or power:** | 1650 mA at 12Vdc and 6800 mA at 12/24 Vdc (field)<br>850 mA at 24 Vdc and 3600 mA at 12/24 Vdc (field) |
| **Rated voltage:** | 12/24 V dc |

[16] Descriptive Documents

[16.1] Drawings

| Document Description | Document Number | Revision Level |
|---|---|---|
| PCB Assembly, 2 Slot I/O Backplane | 392974-00-2 | A |
| PCB Assembly, 4 Slot I/O Backplane | 392973-00-6 | A |
| PCB Assembly, 8 Slot I/O Backplane | 392972-00-0 | A |
| Power Supply Module Assembly | 721657-01-0 | B |
| BOM – Power Supply/Sequencer Module | 392924-01-3 | D |
| PCB Board Assembly – Power Supply Board Mother Board | 392924-00-5 | A |
| BOM – ControlWave PSSM | 392989-01-8 | C |
| PCB Assembly – Power Supply Daughter Board | 392989-00-0 | A |
| CPU Module Assembly | 721658-02-4 | B |
| PCB Assembly – DO | 392964-00-7 | A |
| PCB Assembly – Universal Input | 392967-00-6 | B |
| PCB Assembly – AI | 392985-00-4 | A |
| PCB Assembly – CPU | 392962-00-4 | A |
| PCB Assembly – CPU COMM Board | 392986-00-0 | B |
| PCB Assembly – CPU Back-Up Battery | 392992-00-0 | A |
| I/O Module Assembly – AO (4-20 mA) | 721655-02-5 | A |
| PCB Assembly – AO (4-20 mA) | 392966-00-0 | A |
| I/O Module Assembly – AO (1-5 Vdc) | 721655-03-3 | A |
| PCB Assembly – AO (1-5 Vdc) | 392991-00-4 | A |
| I/O Module Assembly – AI, DI, DO | 721655-01-7 | A |

| | | |
|---|---|---|
| LED Board – AI | 392968-02-9 | D |
| PCB Assembly – DI | 392963-00-0 | A |
| PCB Assembly – AI (4-20 mA) | 392965-00-3 | A |
| PCB Assembly – I/O LED | 392968-00-2 | A |
| Label – Power Supply | 721662-00-5 | C |
| Label – CPU | 721661-00-9 | E |
| Label – Chassis | 721663-00-1 | C |
| Label – I/O | 721660-00-2 | D |
| Printed Circuit Board Design For Manufacturing | 900081-63-5 | A (pages 2,4) |

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

[16.2] Report No.: 130949

[17] Special Conditions for Safe Use

[17.1] Controller must be installed in an enclosure rated IP54 or higher.

18] Essential Health and Safety Requirements

Concerning EHSR that are not addressed by the standards listed in this certificate have been identified and individually assessed in Report No. 130949.

On behalf of UL International Demko A/S

Herlev, 2002.12.20

Karina Christiansen
Certification Manager