

TYPE EXAMINATION CERTIFICATE



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

[3]

Type Examination Certificate Number: **DEMKO 11 ATEX 7928686X Rev. 0**

[4]

Equipment: **Programmable Logic Controller Models, 1715-AENTR Processor, 1715-A2A Dual Processor Backplane, 1715-A3IO I/O Backplane, 1715-IB16D Digital Input, 1715-IF16 Analog Input, 1715-OF8I Analog Output, 1715-OB8DE Digital Output, 1715-TASIB16D Digital Input Termination Assembly, 1715-TADIB16D Digital Input Termination Assembly, 1715-TASIF16 Analog Input Termination Assembly, 1715-TADIF16 Analog Input Termination Assembly, 1715-TASOB8DE Digital Output Termination Assembly, 1715-TADOB8DE Digital Output Termination Assembly, 1715-TASOF8 Analog Output Termination Assembly, 1715-TADOF8 Analog Output Termination Assembly.**

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Manufacturer: **Rockwell Automation/Allen Bradley**

[6]

Address: **1201 S 2nd St., Milwaukee, WI. 53204, USA**

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This equipment 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 equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of **Category 3** equipment, which is 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 no. **11CA29711-11ATEX7928686X**

[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:

EN 60079-0:2009

EN 60079-15:2010

[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 Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

[12]

The marking of the equipment or protective system shall include the following:

 **II 3G Ex nA IIC T4 Gc**

Certification Manager
Jan-Erik Storgaard

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

Date of issue: 2011-09-14

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 11 ATEX 7928686X Rev. 0
Report: 11CA29711-11ATEX7928686X

[15]

Description of Equipment:

These devices are low-power, open-type programmable logic controllers that are intended for installation in an ultimate enclosure. The 1715 Programmable Logic Controller Series consist of the following Models:

Model	Description
1715-A2A	Dual Processor Backplane
1715-A3IO	I/O Backplane
1715-AENTR	Processro Module
1715-IB16D	Digital Input Module, 16 Channel
1715-IF16	Analog Input Module, 16 Channel
1715-OF8I	Analog Output Module, 8 Channel
1715-OB8DE	Digital Output Module
1715-TASIB16D	Termination Assembly – 16 Channel Simplex Digital Input TA
1715-TADIB16D	Termination Assembly – 16 Channel Dual Digital Input TA
1715-TASIF16	Termination Assembly – 16 Channel Simplex Analog Input
1715-TADIF16	Termination Assembly – 16 Channel Dual Analogue Input
1715-TASOB8DE	Termination Assembly – 8 Channel Simplex Digital Output
1715-TADOB8DE	Termination Assembly – 8 Channel Dual Digital Output
1715-TASOF8	Termination Assembly – 8 Channel Simplex Analog Output
1715-TADOF8	Termination Assembly – 8 Channel Dual Analog Output

Model 1715-A2A Dual Processor Backplane is for use with Model 1715-AENTR Processor. Model 1715-A3IO I/O Backplane is for use with all other Models. Subject devices are all marked Ex nA IIC T4 Gc.

Temperature range

Model 1715-AENTR: The ambient temperature range is -25 °C to +60 °C

All other Models: The ambient temperature range is -25 °C to +70 °C

Electrical Ratings

Model	Backplane Ratings		Input/Output Ratings
	Voltage(Vdc)	Current (mA)	
1715-A2A	18-32	10.4A (400mA per slot)	-
1715-A3IO	18-32	9.6A (400mA per slot)	-
1715-AENTR	18-32	380	-
1715-IB16D	18-32	260	Input: 0-32Vdc @ 6.5 mA
1715-IF16	18-32	260	Input: 18-32Vdc @ 24 mA
1715-OF8I	18-32	260	Output: 18-32Vdc/0-20mA
1715-OB8DE	18-32	165	Output: 18-32Vdc @0.5A, Pilot Duty 16VA, 1.5A Inrush
1715-TASIB16D	0-32	6.5	-
1715-TADIB16D	0-32	6.5	-
1715-TASIF16	18-32	0-24	-
1715-TADIF16	18-32	0-24	-
1715-TASOB8DE	18-32	500	-
1715-TADOB8DE	18-32	500	-
1715-TASOF8	18-32	0-24	-
1715-TADOF8	18-32	0-24	-

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Schedule
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Report: 11CA29711-11ATEX7928686X

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Description Documents

Project Report No.: 11CA29711-11ATEX7928686X (Hazardous Location Testing)

Drawings:

Description:	Drawing No.:	Rev. Level:	Date:
Model 1715-A2A Marking Label (7 Pages)	10000107238	00	2011-09-01
Model 1715-A3IO Marking Label (7 Pages)	10000107239	00	2011-09-01
Model 1715-AENTR Marking Label (8 Pages)	10000104967	00	2011-09-01
Model 1715-IB16D Marking Label (8 Pages)	10000104957	00	2011-09-01
Model 1715-IF16 Marking Label (8 Pages)	10000104894	00	2011-09-01
Model 1715-OF8I Marking Label (8 Pages)	10000104962	00	2011-09-01
Model 1715-OB8DE Marking Label (8 Pages)	10000104959	00	2011-09-01
Model 1715-TASIB16D Marking Label (7 Pages)	10000107240	00	2011-09-01
Model 1715-TADIB16D Marking Label (7 Pages)	10000107243	00	2011-09-01
Model 1715-TASIF16 Marking Label (7 Pages)	10000107246	00	2011-09-01
Model 1715-TADIF16 Marking Label (7 Pages)	10000117026	00	2011-09-01
Model 1715-TASOB8DE Marking Label (7 Pages)	10000107244	00	2011-09-01
Model 1715-TADOB8DE Marking Label (7 Pages)	10000107245	00	2011-09-01
Model 1715-TASOF8 Marking Label (7 Pages)	10000137652	00	2011-09-01
Model 1715-TADOF8 Marking Label (7 Pages)	10000137653	00	2011-09-01
Series 1715 Installation Instructions (94 Pages)	1715-UM001A-EN-P	-	2011-09

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Special conditions for safe use:

- Models 9110 and 9111: The ambient temperature range is -25 °C to +60 °C.
- All other Models: The ambient temperature range is -25 °C to +70 °C.
- Subject devices are to be installed in an ATEX Certified, IP54, tool accessible enclosure that has been evaluated to the requirements of EN 60079-0: 2009 and EN60079-15: 2010. Enclosure is to be marked with the following: "Warning - Do not open when energized". After installation of subject devices into the enclosure, access to termination compartments shall be dimensioned so that conductors can be readily connected. Grounding conductor should have a minimum cross sectional area of 3.31 mm².
- Subject devices are for use in an area of not more than pollution degree 2 in accordance with IEC 60664-1.
- Subject devices are to use conductors with a minimum conductor temperature rating of 85°C.
- Subject devices are to be installed in the vertical orientation only.

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Essential Health and Safety Requirements

Met by compliance with the standards EN 60079-0:2009, EN 60079-15:2010.