

TYPE EXAMINATION CERTIFICATE



[1]

[2]

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

[3]

Type Examination Certificate Number: **DEMKO 12 ATEX 1116807X Rev. 1**

[4]

Equipment: **CompactLogix 5370, Model L2 Controllers Series**

[5]

Manufacturer: **Rockwell Automation**

[6]

Address: **1201 South 2nd Street, Milwaukee, WI 53204-2496, USA**

[7]

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. **4786969546**

[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 60079-0:2012+A11:2013

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 3 G Ex nA IIC T4 Gc

Certification Manager

Jan-Erik Storgaard

Certification Body

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

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AB Spares

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[14]

Schedule
TYPE EXAMINATION CERTIFICATE No.
DEMKO 12 ATEX 1116807X Rev. 1
Report: 4786969546

[15]

Description of Equipment:

CompactLogix 5370, Model L2 Controllers consists of 1769-L24ER-QB1B, 1769-L24ER-QBFC1B and 1769-L27ERM-QBFC1B. They are open-type programmable logic controllers intended for installation into an end-user provided enclosure. All Models provide digital outputs and inputs, while Models 1769-L24ER-QBFC1B and 1769-L27ERM-QBFC1B also provide High Speed Counter (HSC) digital outputs and inputs as well as analog outputs and inputs. Models 1769-L24ER-QBFC1B and 1769-L27ERM-QBFC1B only differ in software.

The below table indicates types of boards installed in the subject models utilize:

Model Name	CPU	Power Supply	DC Input/ Output (DIO)	Analog Input/ Output (Analog)	HSC
1769-L24ER-QB1B	X	X	X	-	-
1769-L24ER-QBFC1B	X	X	X	X	X
1769-L27ERM-QBFC1B	X	X	X	X	X

The optical radiation output of the apparatus with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 94/9/EC is not covered in this certificate.

Temperature range

The ambient temperature range is: 0°C to +60°C. Model 1769-L24ER-QB1B is derated at 60°C. Models 1769-L24ER-QBFC1B, 1769-L27ERM-QBFC1B are derated at 55°C and 60°C as specified in Electrical Data section.

Electrical data

Model	Type	Ambient Temperature		
		40°C	55°C	60°C
1769-L24ER-QB1B	Supply	24 Vdc, 2.1 A		
	Backplane Out	1.54 A @ 5 Vdc, 0.95 A @ 24 Vdc		
	DC Input (16 input points) per channel	10-28.8 Vdc	-	10-26.4 Vdc
	DC Output (16 input points) per channel- FET Sourcing, Pilot Duty	0.834 A, 24 Vdc	-	0.5 A, 24Vdc
1769-L24ER-QBFC1B, 1769-L27ERM-QBFC1B	Supply	24Vdc, 2.1A		
	Backplane Out	1.00 A @ 5 Vdc, 0.8 A @ 24 Vdc		
	DC Input (16 input points) per channel	10-28.8 Vdc	10-27.0 Vdc	10-26.4 Vdc
	DC Output (16 output points) per channel - FET Sourcing, Pilot Duty	0.834 A, 24 Vdc	0.584 A, 24 Vdc	0.5 A, 24Vdc
	Analog Input	V: +/-10V, I: 0-20mA, C: +/-100mV, RTD: 0-3000Ω		
	Analog Output	+/-10V, 0-20mA		
	High Speed Counter (HSC) Input	2.6-30 Vdc	2.6-26.4 Vdc	2.6-5 Vdc
	High Speed Counter (HSC) Output (4 channels)	1A/channel, 4A/module, 30 Vdc	0.5A/channel, 2A/module, 30 Vdc	0.25A/channel, 1A/module 30 Vdc

Routine tests

No routine tests are necessary.

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

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Special conditions for safe use:

- The devices shall be mounted in an ATEX certified enclosure with a minimum ingress protection rating of at least IP54 and used in an environment of not more than Pollution Degree 2. The enclosure must utilize a tool removable cover or door.
- Model 1769-L24ER-QB1B is derated at 60°C. Models 1769-L24ER-QBFC1B, 1769-L27ERM-QBFC1B are derated at 55°C and 60°C.
- USB Port - The USB port is intended for temporary local programming purposes only and not intended for permanent connection and do not use the USB port in hazardous locations.



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Essential Health and Safety Requirements

Met by compliance with the standards EN 60079-0:2012+A11:2013, EN 60079-15:2010.