

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM19US0056X
3. **Equipment:** 9410 Power Control Unit
(Type Reference and Name)
4. **Name of Listing Company:** PR electronics A/S
5. **Address of Listing Company:** Lerbakken 10
Roende
DK-8410
Denmark
6. The examination and test results are recorded in confidential report number:

3034431 dated 26th January 2009
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2018, FM Class 3611:2018, FM Class 3810:2018, ANSI/ISA-12.12.01-2015, ANSI/ISA 60079-0:20013, ANSI/ISA 60079-15:2013, ANSI/ISA 61010-1:2012
8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

Certificate issued by:



J.E. Marquedant
VP, Manager, Electrical Systems

28 June 2019

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
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SCHEDULE



US Certificate Of Conformity No: FM19US0056X

10. **Equipment Ratings:**

Nonincendive for use in Class I, Division 2, Groups A, B, C, D Hazardous (Classified) Locations.
Nonsparking for use in Class I, Zone 2, Group IIC Hazardous (Classified) Locations.

11. **The marking of the equipment shall include:**

Class I Division 2, Groups A, B, C, D; T4,
Class I, Zone 2, AEx nA nC IIC T4
Ta = -20°C to +60°C

12. **Description of Equipment:**

General – The PR electronics 9410 is the Power Control Unit for the 9000 series when mounted on the Power Rail 9400. Its basic function is to feed power to the Power Rail and collect the status signal from 9000 series modules installed on the power rail. The 9410 is equipped with diodes which enable it to switch power to a backup supply in case of a fault in the normal supply. Power, backup power and the 9400 status signal is connected to the power rail status relay which is energized only when all three signals are good. The power to the Power Rail is limited by an electronic current limiter which will turn off, if current consumption rises above 5 Amps. A green LED on the front of the module indicates that the voltage levels of the supply and any backup supply are within specifications. A red alarm LEC indicates that the Power Rail Status Relay is de-energized because of a power supply failure or a power rail status alarm.

Ratings - The equipment is rated for use in a process temperature range of -20°C to +60°C.

13. **Specific Conditions of Use:**

1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

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SCHEDULE



US Certificate Of Conformity No: FM19US0056X

Details of the supplements to this certificate are described below:

Date	Description
28 th June 2019	<u>Supplement 1:</u> Report Reference: - PR452213 dated 28 th June 2019 Description of the Change: Update the standards to current editions. Update certificate to latest format.

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CERTIFICATE OF CONFORMITY



1. **HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
2. **Certificate No:** FM19CA0029X
3. **Equipment:** 9410 Power Control Unit
(Type Reference and Name)
4. **Name of Listing Company:** PR electronics A/S
5. **Address of Listing Company:** Lerbakken 10
Roende
DK-8410
Denmark
6. The examination and test results are recorded in confidential report number:

3034431 dated 26th January 2009
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

CSA-C22.2 No. 213-2015, CSA-C22.2 No. 60079-0:2015,
CSA-C22.2 No. 60079-15: 2016, CAN/CSA-C22.2 No. 61010-1:2012
8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
10. **Equipment Ratings:**

Nonincendive for use in Class I, Division 2, Groups A, B, C, D Hazardous Locations. Nonsparking for use in Group IIC Gc Hazardous Locations.
11. The marking of the equipment shall include:

Certificate issued by:

J. E. Marquedant
VP, Manager, Electrical Systems

13 May 2020

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

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SCHEDULE



Canadian Certificate Of Conformity No: FM19CA0029X

Class I Division 2, Groups A, B, C, D; T4,

Ex nA nC IIC T4 Gc

Ta = -20°C to +60°C

12. Description of Equipment:

General – The PR electronics 9410 is the Power Control Unit for the 9000 series when mounted on the Power Rail 9400. Its basic function is to feed power to the Power Rail and collect the status signal from 9000 series modules installed on the power rail. The 9410 is equipped with diodes which enable it to switch power to a backup supply in case of a fault in the normal supply. Power, backup power and the 9400 status signal is connected to the power rail status relay which is energized only when all three signals are good. The power to the Power Rail is limited by an electronic current limiter which will turn off, if current consumption rises above 5 Amps. A green LED on the front of the module indicates that the voltage levels of the supply and any backup supply are within specifications. A red alarm LEC indicates that the Power Rail Status Relay is de-energized because of a power supply failure or a power rail status alarm.

Ratings - The equipment is rated for use in a process temperature range of -20°C to +60°C.

13. Specific Conditions of Use:

1. In Class I, Division 2 installations, the subject equipment shall be mounted within a too-secured enclosure which is capable of accepting one or more of the Class I, Division 2 wiring methods specified in the Canadian Electrical Code (C22.1).
2. In Zone 2 installations, the subject equipment shall be mounted within a tool secured enclosure which is capable of accepting one or more of the Zone 2 wiring methods specified in the Canadian Electrical Code (C22.1). Where installed in outdoor or potentially wet locations, the enclosure shall, at a minimum, meet the requirements of IP54.
3. In Zone 2 installations, the installer shall ensure protection of supply terminals against transient voltages exceeding 140% of the rated supply voltage.
4. Install in environments rated Pollution Degree 2 or better; overvoltage category I or II.
5. It is the responsibility of the manufacturer to provide warning markings in French where required by local jurisdictions.

14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals Canadian Certification Scheme.

15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

16. Certificate History

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SCHEDULE



Canadian Certificate Of Conformity No: FM19CA0029X

Details of the supplements to this certificate are described below:

Date	Description
28 th June 2019	<u>Supplement 1:</u> Report Reference: - PR452213 dated 28 th June 2019 Description of the Change: Update the standards to current editions. Update certificate to latest format.
13 th May 2020	<u>Supplement 2:</u> PR452213 dated 28 th June 2019 Description of the Change: Correction of typographical error to the original project number

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