

CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM21US0035X
- Equipment:** PReTRANS 5116B
(Type Reference and Name) Programmable Transmitter
- Name of Listing Company:** PR Electronics A/S
- Address of Listing Company:** Lerbakken 10
Roende
DK-8410
Denmark
- The examination and test results are recorded in confidential report number:

3023092 dated 3rd August 2005
- 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 3610:2010, FM Class 3611:2018, FM Class 3810:1989,
ANSI/UL 12.12.01:2017, ANSI/UL 60079-0:2019, ANSI/ISA 60079-11:2009
- 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.
- 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.
- Equipment Ratings:**

Nonincendive for Class I, Division 2, Groups A, B, C and D with intrinsically safe outputs for Class I, II, III Division 1, Groups A, B, C, D, E, F, G; Suitable for Class I, Zone 2, Group IIC, Intrinsically safe for Class I, Zone 1, AEx [ia Ga] IIC hazardous (classified) locations with an ambient temperature rating of -20°C to +60°C.

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

8 April 2021

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



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11. The marking of the equipment shall include:

Class I, Division 2, Groups A, B, C, D; T6 Ta = 60°C

Class I, Zone 2 IIC; T6 Ta = 60°C

Intrinsically Safe outputs for Class I, Division 1, Groups A, B, C, D, E, F, G - 5116QF01 Entity

Class I, Zone 0, AEx [ia] IIC - 5116QF01 Entity

12. **Description of Equipment:**

General - The Programmable Transmitter, Type 5116B, converts signals from a temperature sensor or from a variable resistor or from a current sink (loop supply included) into an analogue output of 4-20 mA, or 0-1 V or 0-10 V. The programmable transmitter is located outside the hazardous area; only the intrinsically safe circuits may extend into the hazardous area. The Programmable Transmitter has a degree of protection of IP20. The connections are provided with a mechanical key system.

Ratings - Ambient temperature range -20 °C to +60 °C

Electrical data

Supply (terminals 31, 33):

U = 21.6 ... 253 Vac or 19.2 ... 300 Vdc; Pmax = 3.0 W; Um = 253 Vac.

Analog output (terminal 11, 12, 13, 14):

I = 0/4 ... 20 mAdc; U = 0 ... 10 Vdc; Um = 253 Vac.

Relay outputs (terminals 21, 22 and terminals 23, 24):

Um = 253 Vac.

Communication interface circuit (connection J101 at the front): Um = 60 Vdc.

The communication interface circuit may only be applied, when the Programmable Transmitter, Type 5116B, is not connected to hazardous area.

Entity Parameters

Terminals: 51, 52, 53, 54: Voc = 28 V, Isc = 93 mA, Po = 650 mW, Ca = 75 nF, La = 3 mH

Terminals: 51, 52, 53: Voc = 7.5 V, Isc = 2.2 mA, Po = 4.2 mW, Ca = 6 µF, La = 1,000 mH

Terminals: 41, 42, 43, 44: Voc = 7.5 V, Isc = 2.2 mA, Po = 4.2 mW, Ca = 6 µF, La = 1,000 mH

PRetrans 5116B Programmable Transmitter

13. **Specific Conditions of Use:**

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1. The PReTrans 5116B Programmable Transmitter shall be installed in compliance with the enclosure, mounting, and spacing, and segregation requirement of the ultimate application.

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

Details of the supplements to this certificate are described below:

Date	Description
3 rd August 2005	Original issue.
8 th April 2021	<u>Supplement 2:</u> Report Reference: RR226726 dated 8 th April 2021. Description of the Change: Update the FM3600, FM3611 and ANSI-ISA 60079-0 standards to current editions. Added ANSI/UL 12.12.01:2017. Update certificate to latest format.

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