CERTIFICATE OF CONFORMITY



1. HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS

2. Certificate No:

3. Equipment: (Type Reference and Name)

FM19US0015X

Field Connex Fieldbus Power System.

Listing - 1

HD2-DM-B Diagnostic Module HD2-DM-BU Diagnostic Module

Listing - 2

FBTA-228-BPFB-a Motherboard
FBTA-228-BPFB-8 Motherboard
FBTA-228-BPFB-R-4R Motherboard
FBTA-228-BPFB-R-8R Motherboard

MB-FB-1R Motherboard MB-FB-2R Motherboard MB-FB-4 Motherboard

MB-FB-4.GEN Motherboard MB-FB-4.YO, Motherboard

MB-FB-4R Motherboard MB-FB-4R.GEN Motherboard MB-FB-4R.HO.SC Motherboard MB-FB-4R.YO Motherboard MB-FB-a Motherboard

MB-FB-a Motherboard
MB-FB-GT Motherboard
MB-FB-GTR Motherboard
MBHD-FB-4R Motherboard
MBHD-FB-4R.YO Motherboard

MBHD-FB-a Motherboard
HD2-FBCL-1.500 Power Conditioner Module
HD2-FBPS-1.25.360 Power Supply Module
KLD2-FBPS-1.25.360 Power Supply Module
HD2-GTB-2PA Profibus DP/PA Segment Coupler
HD2-GTR-4PA Profibus DP/PA Segment Coupler

Listing - 3

HD2-DM-A Diagnostic Module, HD2-DM-A.RO Diagnostic Module

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

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HD2-DM-AU Diagnostic Module HD2-FBPS-1.17.500 Power Supply Module HD2-FBPS-1.23.500 Power Supply Module HD2-FBPS-1.500 Power Supply Module **HCD2-FBPS-1.23.500 Power Supply Module HCD2-FBPS-1.500 Power Supply Module HCD2-FBPS-1.25* Power Supply Module** MBHD-FB1-4R Motherboard MBHD-FB1-4R.YO Motherboard **MBHC-FB-4 Motherboard MBHC-FB-4.1 Motherboard** MBHC-FB-4.HSC Motherboard MBHC-FB-4.HSC.1 Motherboard MBHC-FB-4.YO Motherboard MBHC-FB-4.YO.1 Motherboard **MBHC-FB-4R Motherboard** MBHC-FB-4R.1 Motherboard MBHC-FB-4R.HSC Motherboard MBHC-FB-4R.HSC.1 Motherboard MBHC-FB-4R.YO Motherboard MBHC-FB-4R.YO.R Motherboard MBHC-FB-4R.YO.1 Motherboard **MBHC-FB-8R Motherboard** MBHC-FB-8R.1 Motherboard MBHC-FB-8R.HSC Motherboard MBHC-FB-8R.HSC.1 Motherboard MBHC-FB-8R.HSC.R Motherboard MBHC-FB-8R.HSC.R.1 Motherboard MBHC-FB-8R.RH Motherboard MBHC-FB-8R.RH.1 Motherboard MBHC-FB-8R.RH.R Motherboard MBHC-FB-8R.RH.R.1 Motherboard MBHC-FB-8R.YO Motherboard MBHC-FB-8R.YO.1 Motherboard MBHC-FB-8R.YO.R Motherboard

4. Name of Listing Company:

Address of Listing Company:

PepperI+Fuchs GmbH

Lilienthalstrasse 200 Mannheim D-68307 Germany

6. The examination and test results are recorded in confidential report number:

3024816 dated 3rd March 2006

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

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Class 3600:2011, Class 3611:2004, Class 3810:1989 + Supplement 1:1995, ANSI/ISA-12.12.02:2003

- 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.

FM Approvals

Certificate issued by:

9.8. Marquershoot

J. E. Marquedant

VP, Manager - Electrical Systems

FM Approvals

09 September 2019

Date

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10. Equipment Ratings:

Listing - 1

Nonincendive for Class I, Division 2, Groups A, B, C and D, Tambient = -40°C to +70°C; sparking for Class I, Zone 2, Group IIC, Tambient = -40°C to +70°C hazardous (classified) indoor locations.

Listing - 2

Nonincendive for Class I, Division 2, Groups A, B, C and D, Tambient = -40°C to +60°C; sparking for Class I, Zone 2, Group IIC, Tambient = -40°C to +60°C hazardous (classified) indoor locations.

Listing – 3

Nonincendive for Class I, Division 2, Groups A, B, C and D, Tambient = -40°C to +70°C; sparking for Class I, Zone 2, Group IIC, Tambient = -40°C to +70°C hazardous (classified) indoor locations.

11. The marking of the equipment shall include:

Listing - 1

Class I, Division 2, Groups A, B, C and D T4 Ta = -40° C to $+70^{\circ}$ C AEx nA nC IIC T4 Ta = -40° C to $+70^{\circ}$ C

Listing - 2

Class I, Division 2, Groups A, B, C and D T4 Ta = 60° C AEx ec IIC T4 Ta = 60° C

Listing - 3

Class I, Division 2, Groups A, B, C and D T4 Ta = 70°C

AEx ec IIC T4 Ta = 70°C

12. Description of Equipment:

General - The FieldConnex Power Hub system is a unified systems platform for the power supply of fieldbus networks according to IEC 61158-2. It allows connection of multiple fieldbus segments to Foundation Fieldbus HI host systems.

Construction - The Modules are housed within molded plastic shells. The Motherboards are housed within molded plastic half-shells with exposed faces. The equipment requires installation within a cabinet or final enclosure capable of accepting Class I, Division 2 or Class I, Zone 2 wiring methods, as applicable..

Ratings - The equipment is designed to operate over an ambient temperature range of -40°C to +60°C.

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The equipment operates from a DC supply voltage with a lower limit of 19V to an upper limit of 30V to 35V (depending upon module)

Field Connex Fieldbus Power System.

HD2-DM-B Diagnostic Module HD2-DM-BU Diagnostic Module

Field Connex Fieldbus Power System.

FBTA-228-BPFB-a Motherboard

a = Connection type - Any combination of alphanumeric characters.

FBTA-228-BPFB-8 Motherboard

FBTA-228-BPFB-R-4R Motherboard

FBTA-228-BPFB-R-8R Motherboard

MB-FB-1R Motherboard

MB-FB-2R Motherboard

MB-FB-4 Motherboard

MB-FB-4.GEN Motherboard

MB-FB-4.YO Motherboard

MB-FB-4R Motherboard

MB-FB-4R.GEN Motherboard

MB-FB-4R.HO.SC Motherboard

MB-FB-4R.YO Motherboard

MB-FB-a Motherboard

MB-FB-GT Motherboard

MB-FB-GTR Motherboard

MBHD-FB-4R Motherboard

MBHD-FB-4R.YO Motherboard

MBHD-FB-a Motherboard

a = Connection type - Any combination of alphanumeric characters.

HD2-FBCL-1.500 Power Supply Module

HD2-FBPS-1.25.360 Power Supply Module

KLD2-FBPS-1.25.360 Power Conditioner Module

HD2-GTB-2PA Profibus DP/PA Segment Coupler

HD2-GTR-4PA Profibus DP/PA Segment Coupler

Field Connex Fieldbus Power System.

HD2-DM-A Diagnostic Module

HD2-DM-A.RO Diagnostic Module

HD2-DM-AU Diagnostic Module

HD2-FBPS-1.17.500 Power Supply Module

HD2-FBPS-1.23.500 Power Supply Module

HD2-FBPS-1.500 Power Supply Module

HCD2-FBPS-1.23.500 Power Supply Module

HCD2-FBPS-1.500 Power Supply Module

HCD2-FBPS-1.25* Power Supply Module

*can be replaced by any combination of alphanumeric characters

MBHD-FB1-4R Motherboard

MBHD-FB1-4R.YO Motherboard

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MBHC-FB-4 Motherboard

MBHC-FB-4.1 Motherboard

MBHC-FB-4.HSC Motherboard

MBHC-FB-4.HSC.1 Motherboard MBHC-FB-4.YO Motherboard

MBHC-FB-4.YO.1 Motherboard

MBHC-FB-4R Motherboard

MBHC-FB-4R.1 Motherboard

MBHC-FB-4R.HSC Motherboard

MBHC-FB-4R.HSC.1 Motherboard

MBHC-FB-4R.YO Motherboard

MBHC-FB-4R.YO.R Motherboard

MBHC-FB-4R, YO.1 Motherboard

MBHC-FB-8R Motherboard

MBHC-FB-8R.1 Motherboard

MBHC-FB-8R.HSC Motherboard

MBHC-FB-8R.HSC.1 Motherboard

MBHC-FB-8R.HSC.R Motherboard

MBHC-FB-8R.HSC.R.1 Motherboard

MBHC-FB-8R.RH Motherboard

MBHC-FB-8R.RH.1 Motherboard

MBHC-FB-8R.RH.R Motherboard

MBHC-FB-8R.RH.R.1 Motherboard

MBHC-FB-8R.YO Motherboard

MBHC-FB-8R.YO.1 Motherboard

MBHC-FB-8R-YO.R Motherboard

13. Specific Conditions of Use:

- 1 In Class I, Division 2 installations, the subject equipment shall be mounted within a tool-secured enclosure which is capable of accepting one or more of the Class I, Division 2 wiring methods specified in the National Electrical Code (ANSI/NFPA 70).
- 2 In Class I, Zone 2 installations, the subject equipment shall be mounted within a tool-secured enclosure which is capable of accepting one or more of the Class I, Zone 2 wiring methods specified in the National Electrical Code (ANSI/NFPA 70). Where installed in outdoor or potentially wet locations, the enclosure shall, at a minimum, meet the requirements of IP54. Where installed in dry indoor locations, the enclosure shall, at a minimum, meet the requirements of IP4X.

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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Details of the supplements to this certificate are described below:

Date	Description
3 rd March 2006	Original Issue.
22 nd March 2019	Supplement 16: Report Reference: – RR217288 dated 22 nd March 2019 Description of the Change: Model extention and conversion of the certificate into the new format.
09 September 2019	Supplement 17: Report Reference: – RR219583 dated 09 September 2019 Description of the Change: Add MBHC-FB-8R-YO.R model



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