



Member of the FM Global Group

FM Approvals
1151 Boston Providence Turnpike
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

FFblue/HW#EX. Foundation Fieldbus to Bluetooth Interface

IS/I/1/ABCD/T4 Ta = -20°C to 55°C – cdwgffblue20131004; IP20; Entity;
IS/I/1/CD/T4 Ta = -20°C to 55°C – cdwgffblue20131004; IP20; FISCO;
I/O/AEx ia IIC/T4 Ta = -20°C to 55°C – cdwgffblue20131004; IP20; Entity;
I/O/AEx ia IIB/T4 Ta = -20°C to 55°C – cdwgffblue20131004; IP20; FISCO;
NI/I/2/ABCD/T4 Ta = -20°C to 55°C – cdwgffblue20131004; NIFW; IP20

Entity / NIFW Parameters:

Ui = 24V, Ii = 250mA, Ci = 0, Li = 10µH

FISCO Parameters:

Ui = 17.5V, Ii = 380mA, Pi = 5.32W, Ci = 0, Li = 10µH

Special Conditions of Use:

1. Only Duracell Procell MN1500, Alkaline-Manganese Dioxide (Zn/MnO₂), Size: AA (LR6), 1.5 V (Nom), may be used in the apparatus.

Equipment Ratings:

Intrinsically Safe for Class I, Division 1, Groups A, B, C and D (Entity), Groups C and D (FISCO), Temperature Class T4 $-20 \leq Ta \leq +55^{\circ}\text{C}$ in accordance with Control Drawing cdwgffblue20131004; Class I, Zone 0, AEx ia IIC (Entity), IIB (FISCO), Temperature Class T4 $-20 \leq Ta \leq +55^{\circ}\text{C}$ in accordance with Control Drawing cdwgffblue20131004; Nonincendive with Nonincendive Field Wiring Parameters for use in Class I, Division 2, Groups A, B, C and D, Temperature Class T4 $-20 \leq Ta \leq 55^{\circ}\text{C}$ in accordance with Control Drawing cdwgffblue20131004; IP20; hazardous (classified) locations.

FM Approved for:

Softing Industrial Automation GmbH
Haar, Germany

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

3047975

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This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

FM3600	2011
FM3610	2010
FM3611	2004
FM3810	2005
ANSI/ISA-60079-0	2005
ANSI-ISA-60079-11	2011
IEC-60529	2004

Original Project ID: 3047975

Approval Granted: March 20, 2014

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
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FM Approvals LLC

James E. Marquedant
Group Manager

20 March 2014

Date



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CERTIFICATE OF COMPLIANCE

HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

FFblue/HW#EX. Foundation Fieldbus to Bluetooth Interface

IS/I/1/ABCD/T4 Ta = -20°C to 55°C – cdwgffblue20131004; IP20; Entity;
IS/I/1/CD/T4 Ta = -20°C to 55°C – cdwgffblue20131004; IP20; FISCO;
I/O/Ex ia IIC/T4 Ta = -20°C to 55°C – cdwgffblue20131004; IP20; Entity;
I/O/Ex ia IIB/T4 Ta = -20°C to 55°C – cdwgffblue20131004; IP20; FISCO;
NI/I/2/ABCD/T4 Ta = -20°C to 55°C – cdwgffblue20131004; NIFW; IP20

Entity / NIFW Parameters:

Ui = 24V, li = 250mA, Ci = 0, Li = 10µH

FISCO Parameters:

Ui = 17.5V, li = 380mA, Pi = 5.32W, Ci = 0, Li = 10µH

Special Conditions of Use:

1. Only Duracell Procell MN1500, Alkaline-Manganese Dioxide (Zn/MnO₂), Size: AA (LR6), 1.5 V (Nom), may be used in the apparatus.

Equipment Ratings:

Intrinsically Safe for Class I, Division 1, Groups A, B, C and D (Entity), Groups C and D (FISCO), Temperature Class T4 -20 ≤ Ta ≤ +55°C in accordance with Control Drawing cdwgffblue20131004; Class I, Zone 0, Ex ia IIC (Entity), IIB (FISCO), Temperature Class T4 -20 ≤ Ta ≤ +55°C in accordance with Control Drawing cdwgffblue20131004; Nonincendive with Nonincendive Field Wiring Parameters for use in Class I, Division 2, Groups A, B, C and D, Temperature Class T4 -20 ≤ Ta ≤ 55°C in accordance with Control Drawing cdwgffblue20131004; IP20; hazardous locations.

FM Approved for:

Softing Industrial Automation GmbH
Haar, Germany

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

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

CSA-C22.2 No. 157	2012
C22.2 No. 213	2013
C22.2 No. 142	2009
CAN C22.2 No. 61010-1	2004
CAN/CSA-E60079-0	2007
CAN/CSA-E60079-11	2011
CAN/CSA-C22.2 No. 60529	2010

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FM Approvals LLC



James E. Marquedant
Group Manager

20 March 2014
Date