



Member of the FM Global Group

FM Approvals
1151 Boston Providence Turnpike
P.O. Box 9102 Norwood, MA 02062 USA
T: 781 762 4300 F: 781-762-9375 www.fmapprovals.com

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

5081-A-HT-67. Amperometric Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C – 1400195; Entity; NII/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C; DIP/II,III/1/EFG/T6 Ta = 70°C; Type 4X

Entity Parameters:

Vmax = 30V, Imax = 200mA, Pi = 0.9W, Ci = 27.8nF, Li = 0.

Output Field Sensor Terminals:

Vt = 13.02V, It = 120mA, Po = 192mW, Ca = 0.96μF, La = 2.5mH (Groups A/B)

Vt = 13.02V, It = 120mA, Po = 192mW, Ca = 5.99μF, La = 9.8mH (Groups C/D)

Vt = 13.02V, It = 120mA, Po = 192mW, Ca = 21.69μF, La = 19.8mH (Group D)

5081-P-HT-67. pH Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C – 1400199; Entity; NII/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C; DIP/II,III/1/EFG/T6 Ta = 70°C; Type 4X

Entity Parameters:

Vmax = 30V, Imax = 200mA, Pi = 0.9W, Ci = 27.8nF, Li = 0.

Output Field Sensor Terminals:

Vt = 13.02V, It = 120mA, Po = 192mW, Ca = 0.96μF, La = 2.5mH (Groups A/B)

Vt = 13.02V, It = 120mA, Po = 192mW, Ca = 5.99μF, La = 9.8mH (Groups C/D)

Vt = 13.02V, It = 120mA, Po = 192mW, Ca = 21.69μF, La = 19.8mH (Group D)

5081-C-HT-67. Contacting Conductivity Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C – 1400203; Entity; NII/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C; DIP/II,III/1/EFG/T6 Ta = 70°C; Type 4X

Entity Parameters:

Vmax = 30V, Imax = 200mA, Pi = 0.9W, Ci = 27.8nF, Li = 0.

Output Field Sensor Terminals:

Voc = 6.51V, Isc = 280mA, Po = 442mW, Ca = 12.05μF, La = 0.5mH (Groups A/B)

Voc = 6.51V, Isc = 280mA, Po = 442mW, Ca = 490.05μF, La = 2.0mH (Groups C/D)

Voc = 6.51V, Isc = 280mA, Po = 442mW, Ca = 9990.05μF, La = 3.7mH (Group D)

5081-A-FF-67. Amperometric Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C – 1400196; Entity; NI/II/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C; DIP/II,III/1/EFG/T6 Ta = 70°C; Type 4X

Entity Parameters:

Vmax = 30V, Imax = 300mA, Pi = 1.3W, Ci = 27.8nF, Li = 0.

Output Field Sensor Terminals:

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 0.96μF, La = 3.1mH (Groups A/B)

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 5.99μF, La = 12.3mH (Groups C/D)

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 21.69μF, La = 25.0mH (Group D)

5081-P-FF-67. pH Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C – 1400200; Entity; NI/II/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C; DIP/II,III/1/EFG/T6 Ta = 70°C; Type 4X

Entity Parameters:

Vmax = 30V, Imax = 300mA, Pi = 1.3W, Ci = 27.8nF, Li = 0.

Output Field Sensor Terminals:

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 0.96μF, La = 3.1mH (Groups A/B)

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 5.99μF, La = 12.3mH (Groups C/D)

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 21.69μF, La = 25.0mH (Group D)

5081-C-FF-67. Contacting Conductivity Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C – 1400204; Entity; NI/II/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C; DIP/II,III/1/EFG/T6 Ta = 70°C; Type 4X

Entity Parameters:

Vmax = 30V, Imax = 300mA, Pi = 1.3W, Ci = 27.8nF, Li = 0.

Output Field Sensor Terminals:

Voc = 6.51V, Isc = 302.59mA, Po = 365mW, Ca = 12.05μF, La = 0.4mH (Groups A/B)

Voc = 6.51V, Isc = 302.59mA, Po = 365mW, Ca = 490.05μF, La = 1.6mH (Groups C/D)

Voc = 6.51V, Isc = 302.59mA, Po = 365mW, Ca = 9990.05μF, La = 3.1mH (Group D)

Equipment Ratings:

Intrinsically Safe (Entity) for use in Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; Temperature Class T4 Ta = 70°C in accordance with Control Drawing Numbers 1400195, 1400196, 1400199, 1400200, 1400203, 1400204, 1400207, 1400208; Nonincendive for use in Class I, Division 2, Groups A, B, C, and D; Temperature Class T4 Ta = 70°C; Explosionproof for use in Class I, Division 1, Groups B, C and D; Temperature Class T6 Ta = 70°C in accordance with Control Drawing Numbers 1400217, 1400218; Dust-Ignitionproof for use in Class II and III, Division 1, Groups E, F and G; Temperature Class T6 Ta = 70°C in accordance with Control Drawing Numbers 1400217, 1400218 indoor and outdoor, Type 4X Hazardous (Classified) Locations.

5081-T-HT-67. Conductivity Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C –1400207; 1700463; Entity; NI/II/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C –1400217; DIP/II,III/1/EFG/T6 Ta = 70°C–1400217; Type 4X

Entity Parameters:

Vmax = 30V, Imax = 200mA, Pi = 0.9W, Ci = 27.8nF, Li = 0.

5081-T-FF-67. Conductivity Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C –1400208; 1700463; Entity; NI/II/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C –1400218; DIP/II,III/1/EFG/T6 Ta = 70°C–1400218; Type 4X

Entity Parameters:

$V_{max} = 30V$, $I_{max} = 300mA$, $P_i = 1.3W$, $C_i = 517pF$, $L_i = 0$.

Equipment Ratings:

Intrinsically Safe (Entity) for use in Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; Temperature Class T4 $T_a = 70^\circ C$ in accordance with Control Drawing Numbers 1400207, 1400208, 1700463; Nonincendive for use in Class I, Division 2, Groups A, B, C, and D; Temperature Class T4 $T_a = 70^\circ C$; Explosionproof for use in Class I, Division 1, Groups B, C and D; Temperature Class T6 $T_a = 70^\circ C$ in accordance with Control Drawing Numbers 1400217, 1400218; Dust-Ignitionproof for use in Class II and III, Division 1, Groups E, F and G; Temperature Class T6 $T_a = 70^\circ C$ in accordance with Control Drawing Numbers 1400217, 1400218; indoor and outdoor, Type 4X Hazardous (Classified) Locations.

5081-C-FI-67. Amperometric Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 $T_a = 70^\circ C$ – 1400289; Entity, FISCO; NI/II/2/ABCD/T4 $T_a = 70^\circ C$; XP/II/1/BCD/T6 $T_a = 70^\circ C$; DIP/II,III/1/EFH/T6 $T_a = 70^\circ C$; Type 4X

FISCO Parameters:

Group IIC/ABCDEFGH

$V_{max} = 17.5V$, $I_{max} = 360mA$, $P_{max} = 2.52W$, $C_i = 5nF$, $L_i = 10\mu H$

Group IIB/CDEFG

$V_{max} = 17.5V$, $I_{max} = 380mA$, $P_{max} = 5.32W$, $C_i = 5nF$, $L_i = 10\mu H$

Entity Parameters Output Field Sensor Terminals:

$V_{oc} = 6.51V$, $I_{sc} = 280mA$, $P_o = 442mW$, $C_a = 12.05\mu F$, $L_a = 0.5mH$ (Groups A/B)

$V_{oc} = 6.51V$, $I_{sc} = 280mA$, $P_o = 442mW$, $C_a = 490.05\mu F$, $L_a = 2.0mH$ (Groups C/D)

$V_{oc} = 6.51V$, $I_{sc} = 280mA$, $P_o = 442mW$, $C_a = 9990.05\mu F$, $L_a = 3.7mH$ (Group D)

5081-T-FI-67. Conductivity Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 $T_a = 70^\circ C$ –1400284; FISCO; NI/II/2/ABCD/T4 $T_a = 70^\circ C$; XP/II/1/BCD/T6 $T_a = 70^\circ C$ –1400218; DIP/II,III/1/EFH/T6 $T_a = 70^\circ C$ –1400218; Type 4X

FISCO Parameters:

Group IIC/ABCDEFGH

$V_{max} = 17.5V$, $I_{max} = 360mA$, $P_{max} = 2.52W$, $C_i = 5nF$, $L_i = 10\mu H$

Group IIB/CDEFG

$V_{max} = 17.5V$, $I_{max} = 380mA$, $P_{max} = 5.32W$, $C_i = 5nF$, $L_i = 10\mu H$

5081-P-FI-67. pH Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 $T_a = 70^\circ C$ –1400287; FISCO; NI/II/2/ABCD/T4 $T_a = 70^\circ C$; XP/II/1/BCD/T6 $T_a = 70^\circ C$ –1400218; DIP/II,III/1/EFH/T6 $T_a = 70^\circ C$ –1400218; Type 4X

FISCO Parameters:

Group IIC/ABCDEFGH

$V_{max} = 17.5V$, $I_{max} = 360mA$, $P_{max} = 2.52W$, $C_i = 5nF$, $L_i = 10\mu H$

Group IIB/CDEFG

$V_{max} = 17.5V$, $I_{max} = 380mA$, $P_{max} = 5.32W$, $C_i = 5nF$, $L_i = 10\mu H$



Member of the FM Global Group

5081-A-FI-67. Amperometric Transmitter.

IS/I,II,III/1/ABCDEFGH/T4 Ta = 70°C – 1400292; Entity, FISCO; NI/II/2/ABCD/T4 Ta = 70°C; XP/II/1/BCD/T6 Ta = 70°C; DIP/II,III/1/EFG/T6 Ta = 70°C; Type 4X

FISCO Parameters:

Group IIC/ABCDEFGH

Vmax= 17.5V, Imax= 360mA, Pmax = 2.52W, Ci = 5nF, Li = 10μH

Group IIB/CDEFG

Vmax= 17.5V, Imax= 380mA, Pmax = 5.32W, Ci = 5nF, Li = 10μH

Entity Parameters Output Field Sensor Terminals:

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 0.96μF, La = 3.1mH (Groups A/B)

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 5.99μF, La = 12.3mH (Groups C/D)

Voc = 13.02V, Isc = 105.64mA, Po = 147mW, Ca = 21.69μF, La = 25.0mH (Group D)

Equipment Ratings:

Intrinsically Safe (Entity, FISCO) for use in Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; Temperature Class T4 Ta = 70°C in accordance with Control Drawing Numbers 1400289, 1400284, 1400287, 1400292 Nonincendive for use in Class I, Division 2, Groups A, B, C, and D; Temperature Class T4 Ta = 70°C; Explosionproof for use in Class I, Division 1, Groups B, C and D; Temperature Class T6 Ta = 70°C; Dust-Ignitionproof for use in Class II and III, Division 1, Groups E, F and G; Temperature Class T6 Ta = 70°C; indoor and outdoor, Type 4X Hazardous (Classified) Locations.

FM Approved for:

Emerson Process Management
Rosemount Analytical, Inc.
Irvine, CA 92606 USA



Member of the FM Global Group

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

Class 3600	1998
Class 3610	1999
Class 3611	1999
Class 3615	1989
Class 3810	1989
Supplement # 1	1995
ANSI/NEMA 250	1991

Original Project ID: 3013686

Approval Granted: November 8, 2002

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
3016023	07/31/2003		
3020900	12/23/2004		
3022282	12/30/2004		
Re-issue	11/23/2011		

FM Approvals LLC

Timothy Adam
Technical Team Manager

Re-issued

November 23, 2011
Date