

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.fmglobal.com

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

PH202S-abcd. pH Transmitter.

IS / I / 1 / ABCD / T6 Ta = 40°C; T4 Ta = 55°C; I/O/AEx ia IIC T6 Ta = 40°C; T4 Ta = 55°C; Entity - IKE024-A10 P.4-1 to P4-4; NI / I / 2 / ABCD / T6 Ta = 40°C; T4 Ta = 55°C; I/2/IIC T6 Ta = 40°C; T4 Ta = 55°C; Nonincendive Field Wiring - IKE024-A10 P.4-1 to P4-4; Type 4X Entity Parameters: Vmax = 31.5 V, Imax = 100 mA, Pi = 1.2 W, Ci = 22 nF, Li = 35 μ H. Field Sensor Terminals 11 through 17: Vt = 14.4 V, It = 32.3 mA, Po = 0.116W, Ca = 600 nF, La = 34 mH Nonincendive Field Wiring Parameters for Type of Protection N: VMax = 31.5 V, Ci = 22 nF, Li = 35 μ H Field Sensor Terminals 11 through 17: Vt = 14.4 V, It = 32.3 mA, Po = 0.116W, Ca = 2.29 μ F, La = 64.96 mH a = Type E, C, U and/or N b = Language J or E c = Option Ü, PM, H, H2, SCT, AFTG, ANSI and/or X1 d = Other options which do not affect intrinsic safety or nonincendive

Equipment Ratings:

Intrinsically Safe (Entity) for use in Class I, Division 1, Groups A, B, C and D, Class I, Zone 0, AEx ia IIC, in accordance with manufacturer's Control Drawing No. IKE024-A10 P.4-1 to P.4-4, Nonincendive for Class I, Division 2, Groups A, B, C, and D; Class I, Zone 2, Group IIC; Temperature Class T6 at Ta = 40°C and T4 at Ta = 55°C in accordance with Control Drawing No. IKE024-A10 P. 4-1 to P. 4-4; indoor, Type 4X Hazardous (Classified) Locations.

FM Approved for:

Yokogawa Electric Corporation 2-9-32 Nakacho, Musashino-shi Tokyo, 180-8750 Japan

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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	2004
Class 3810	2005
ANSI/NEMA 250	2003

Original Project ID: 3028779

Approval Granted:

Subsequent Revision Reports / Date Approval Amended

Report Number

Date

Report Number

Date

070808

SEPTEMBER 26, 2007

FM Approvals LLC

Roger L. Allard

Assistant Vice President

SEPTEMBER 26,2007

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