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:

FLXA21-D-b-c-de-fg-hi-jk-LA-n-NN/qr/st/SCT/uvw/x/z. Analyzer.
IS / I / 1 / ABCD / T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C – IKE039-A12 P.1, IKE039-A12 P.1-1; Entity*
I / 0 / AEx ia / IIC / T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C – IKE039-A12 P.1, IKE039-A12 P.1-1; Entity*
* Approval as intrinsically safe applicable only to Certification Type = EA
NI / I / 2 / ABCD / T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C – IKE039-A12 P.1, IKE039-A12 P.1-1; NIFW
I / 2 / IIC T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C – IKE039-A12 P.1, IKE039-A12 P.1-1; NIFW
Type 4X, IP66
Entity Parameters / Nonincendive Field Wiring Parameters:

Housing assembly, supply and output circuit (terminals + and -):
Ui = 30 V
Ii = 100 mA
Pi = 0.75 W
Ci = 13 nF
Li = 0 mH

Measuring module input circuit (CN2 or CN3 on Back Board):
Uo = 13.65 V
Io = 50 mA
Po = 0.372 W
Co = 80 nF
Lo = 7.7 mH

PH, SC and DO Modules:
Ui = 13.92 V
Ii = 50 mA
Pi = 0.374 W
Ci = 40 nF

Li = 2.9 mH

Sensor input circuit (PH: terminals 11 through 19, SC: terminal 11 through 16, DO: terminals 11 through 18):

Uo = 11.76 V
Io = 116.5 mA
Po = 0.3424 W
Co = 100 nF
Lo = 1.7 mH

ISC Module:

Ui = 13.92 V
Ii = 50 mA
Pi = 0.374 W
Ci = 40 nF
Li = 7.7 mH

Sensor input circuit (terminals 11 through 17):

Uo = 11.76 V
Io = 60.6 mA
Po = 0.178 W
Co = 100 nF
Lo = 8 mH

b = Enclosure type - P, S, U or E
c = Display - S, D or N
de = Certification type - AB: Type n / nonincendive
EA: Intrinsically safe and nonincendive
fg = Input 1 - P1, C1, C5, D1, S1
hi = Input 2 - P1, C1, C5, D1, S1, NN
jk = Output – AN
n = SI unit setting in software – J, N
qr = Mounting parts – UM, U, PM
st = Hood – H6, H7, H8
uvw = Conduit adapter – CB4, CD4, CF4
z = Other optional specifications not relevant to certification

Equipment Ratings:

When configured with certification option EA - Intrinsically safe, Entity, Class I, Division 1, Groups A, B, C, D, T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C; Intrinsically safe, Class I, Zone 0, AEx ia IIC, T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C; Class I, Division 2, Groups A, B, C, D, T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C, including installation using nonincendive field wiring concept, Class I, Zone 2, Group IIC, T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C, including installation using nonincendive field wiring concept; Install per drawings IKE039-A12 P.1, IKE039-A12 P.1-1; Type 4X, IP66

When configured with certification option AB - Class I, Division 2, Groups A, B, C, D, T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C, including installation using nonincendive field wiring concept, Class I, Zone 2, Group IIC, T4, -20°C≤Ta≤55°C; T6, -20°C≤Ta≤40°C, including installation using nonincendive field wiring concept; Install per drawings IKE039-A12 P.1, IKE039-A12 P.1-1; Type 4X, IP66

FM Approved for:

Yokogawa Electric Corporation
Tokyo, Japan

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

Class 3600	2011
Class 3610	2010
Class 3611	2004
NEMA 250	1991
ANSI/ISA 60079-0	2009
ANSI/ISA 60079-11	2011

Original Project ID: 3039632 Approval Granted: June 8, 2012

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date

FM Approvals LLC

J. E. Marquedant
Group Manager, Electrical

8 June 2012
Date