



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:

### **SC202S - a - b / c / d. CONDUCTIVITY / RESISTIVITY TRANSMITTER.**

IS / I / 1 / ABCD / T4 Ta = 55°C Entity - IKE026-A10; Type 4X

I / 0 / AEx ia IIC T4 Ta = 55°C Entity - IKE026-A10; Type 4X

NI / I / 2 / ABCD / T4 Ta = 55°C; NIFW - IKE026-A10; Type 4X

I / 2 / IIC T4 Ta = 55°C; NIFW - IKE026-A10; Type 4X

Input Entity Parameters:  $U_i = 31.5$  V,  $I_i = 100$  mA,  $P_i = 1.2$  W,  $C_i = 22$  nF,  $L_i = 35$   $\mu$ H.

Field Sensor Terminals 11 through 16:  $U_o = 14.4$  V,  $I_o = 10$  mA,  $P_o = 35.5$  mW,  $C_o = 59.36$  nF,  $L_o = 340$  mH

Nonincendive Field Wiring Parameters for Type of Protection N:  $U_i = 31.5$  V,  $C_i = 22$  nF,  $L_i = 35$   $\mu$ H

Field Sensor Terminals 11 through 16:  $U_o = 14.4$  V,  $I_o = 10$  mA,  $C_o = 1.71$   $\mu$ F,  $L_o = 600$  mH

a = Type A, N

b = Language J or E

c = Option U, PM, H, H2, SCT, AFTG, ANSI, 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;

Nonincendive for Class I, Division 2, Groups A, B, C, and D; Class I, Zone 2, Group IIC

### FM Approved for:

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

IFM029-C02 P. /

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: 3029866

Approval Granted: August 20, 2007

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
070904	<i>SEPTEMBER 26, 2007</i>		

FM Approvals LLC



Roger L. Allard  
Assistant Vice President

*SEPTEMBER 26, 2007*  
Date

IFM029-C02 P. 2