

# CERTIFICATE OF COMPLIANCE

## HAZARDOUS LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

**PH450G-a-b/c/d/e pH and Redox converter**

NI / I / 2 / ABCD / T6; Ta = 55 °C – NFM016-A9 P.1; NIFW; Type 4X

Nonincendive field wiring parameters

Terminals	Vt	It	Ca	La
Sensor	11V	149mA	7.6µF	2.9mH

a = Power; A: AC version (100...240VAC), D: DC version (12...24VDC)

b = Type; U: FM version

c = Mounting Hardware; UM: Universal mounting kit (panel, pipe, wall)

d = Tag Plate; SCT: Stainless steel tag plate

e = Hood; HS: Awning hood (stainless steel)

*Special Conditions of Use:*

- At Ta = +55 °C Maximum Current rating for Relay Contacts S1-S4 is 4A,  
At Ta = +40 °C Maximum Current rating for Relay Contacts S1-S4 is 5A

**SC450G-a-b/c/d/e Conductivity/Resistivity converter**

NI / I / 2 / ABCD / T6; Ta = 55 °C – NFM016-A9 P.1; NIFW; Type 4X

Nonincendive field wiring parameters

Terminals	Vt	It	Ca	La
Sensor	11V	842mA	7.6µF	91µH

a = Power; A: AC version (100...240VAC), D: DC version (12...24VDC)

b = Type; U: FM version

c = Mounting Hardware; UM: Universal mounting kit (panel, pipe, wall)

d = Tag Plate; SCT: Stainless steel tag plate

e = Hood; HS: Awning hood (stainless steel)

*Special Conditions of Use:*

- At Ta = +55 °C Maximum Current rating for Relay Contacts S1-S4 is 4A,  
At Ta = +40 °C Maximum Current rating for Relay Contacts S1-S4 is 5A



Member of the FM Global Group

**ISC450G-a-b/c/d/e Inductive Conductivity converter**

NI / I / 2 / ABCD / T6; Ta = 55 °C – NFM016-A9 P.1; Type 4X

a = Power; A: AC version (100...240VAC), D: DC version (12...24VDC)

b = Type; U: FM version

c = Mounting Hardware; UM: Universal mounting kit (panel, pipe, wall)

d = Tag Plate; SCT: Stainless steel tag plate

e = Hood; HS: Awning hood (stainless steel)

*Special Conditions of Use:*

1. At Ta = +55 °C Maximum Current rating for Relay Contacts S1-S4 is 4A,

At Ta = +40 °C Maximum Current rating for Relay Contacts S1-S4 is 5A

**Equipment Ratings:**

Nonincendive for use in Class I, Division 2, Groups A, B, C, and D Hazardous (Classified) Locations with nonincendive field wiring (except ISC450G), NEMA Type 4X.

**FM Approved for:**

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



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

Class 3600	1998
Class 3611	2004
Class 3810	2005
NEMA250	2003


Original Project ID: 3029902

Approval Granted: August 20, 2007

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
3031000	September 18, 2007		
090114	April 10, 2009		

FM Approvals LLC

  
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Jim Marquedant  
Group Manager

10 April 2009  
Date