



FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

EXA ISC202S-ab. Inductive Conductivity Transmitter

IS / I / 1 / ABCD / T6 Ta = 40°C; T4 Ta = 55°C-FF1-ISC202S-00, pages 3, 7 and 8 of 10; FISCO/Entity;
 Type 4/IP65

Entity Parameters:

ISC202S-A		ISC202S-F		ISC202-P
	ENTITY	ENTITY	FISCO	ENTITY
Input	Terminals +/-Orange	Terminals +/-Green	Terminals +/-Green	Terminals +/-Green
Vmax	31.5V	24V	17.5V	24V
I _{max}	100mA	250mA	380mA	250mA
Pi	1.2W	1.2W	5.32W	1.2W
Li	22nF	737pF	737pF	737pF
Ci	22µH	2.6µH	2.6µH	2.6µH

NI / I / 2 / ABCD / T6 Ta = 40°C; T4 Ta = 55°C - FF1-SC202S-00, pages 4, 9 and 10 of 10; Field
 Parameters; Type 4X/IP65

	ISC202S-N	ISC202S-B	ISC202-D
Input	Terminals +/- Orange	Terminals +/- Green	Terminals +/- Green
Vmax	31.5V	32V	32V
I _{max}	4-20mA		
Ci	22nF	737pF	737pF
Li	22µH	2.6µH	2.6µH

a = A (Intrinsically Safe, 4-20mA & Hart), B (Non-incendive, Foundation Fieldbus), F (Intrinsically Safe, Foundation Fieldbus), N (Non-incendive, 4-20mA & Hart), D (Non-incendive, Profibus PA version) or P (Intrinsic safety, Profibus PA version).

b = Options with no relevant impact on the type of the explosion protection, (e.g. calibration, software options, temperature compensation etc.).

Equipment Ratings:

Evaluated as Intrinsically Safe, with FISCO/Entity parameters for use in Class I, Division 1, Groups ABCD in accordance with manufacturer's Control Drawing nos. FF1-ISC202S-00, pages 3, 7 and 8 of 10; Nonincendive for Class I, Division 2, Groups ABCD in accordance with manufacturer's Control Drawing nos. FF1-ISC202S-00, pages 4, 9 and 10 of 10 outdoor Type 4/IP65 hazardous (classified) locations.

Approved for:

Yokogawa Europe B.V.
Databankweg 20, 3821 AL, Amersfoort, The Netherlands



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

Class 3600	1998
Class 3610	1999
Class 3611	1999
Class 3810 Suppl. # 1	1995
NEMA-250	1991

Original Project ID: 3017980

FM Approval Granted: December 10, 2003

Subsequent Revision Reports / Date FM Approval Amended

Report Number	Date	Report Number	Date
3022598	<i>Jan 6, 2005</i>		

FM Global Technologies LLC


Robert L. Martell, Jr.
Assistant Vice President
FM Approvals

Jan 6, 2005
Date