



CSA INTERNATIONAL

# Certificate of Compliance

**Certificate:** 1393920 (LR 203012)

**Master Contract:** 203012

**Project:** 2132161

**Date Issued:** 2009/02/05

**Issued to:** ABB Automation Products GmbH

72 Schillerstrasse  
Minden, 32425  
Germany  
Attention: Mr. Ralf Schaffer

*The products listed below are eligible to bear the CSA Mark shown*



**Issued by:** Marin Banu, P. Eng.

**Authorized by:** Patricia Pasemko, Operations  
Manager

## **PRODUCTS**

**CLASS 2258 02** - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For  
Hazardous Locations

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

Class I, Div 1, Groups C and D; Class II, Div 1, Groups E, F and G; Class III

- Model TZIDC-200, Positioner; input rated 30V dc max, 4-20mA; control pressure 0 to 6 bars(0 to 90 psi); T 5, max ambient 85 Deg C.



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CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

Class I, Div 1, Groups A, B, C and D; Class II, Div 1, Groups E, F and G; Class III

- Series TZIDC-200 Positioner; input rated 30V dc max, 4-20mA; control pressure 0 to 6 bars(0 to 90 psi); intrinsically safe with entity parameters of:

Terminals 11/12: V max = 30V, I max = 104mA, Ci = 6.6nF, Li = 0uH, Pi=1W;

Terminals 81/82: V max = 30V, I max = 110mA, Ci = 3.7nF, Li = 0uH; Pi=1W;

Terminals 83/84: V max = 30V, I max = 96mA, Ci = 3.7nF, Li = 0uH; Pi=1W;

Terminals 31/32: V max = 30V, I max = 110mA, Ci = 6.6nF, Li = 0uH; Pi=1W;

Terminals 41/42: V max = 30V, I max = 96mA, Ci = 4.2nF, Li = 0uH; Pi=1W;

Terminals 51/52: V max = 30V, I max = 96mA, Ci = 4.2nF, Li = 0uH; Pi=1W;

Terminals Limit 2 41/42: V max = 15.5V, I max = 52mA, Ci =20nF, Li =30uH; Pi=1W;

Terminals Limit 1 51/52: V max = 15.5V, I max = 52mA, Ci =20nF, Li =30uH; Pi=1W;

when installed per installation Drawing No 901176; Temperature Code T5; Max Ambient 180F (82 C).

- Model V18348-a0b4d3efghi. TZIDC-200 Positioner

Where a=Case/Mounting 1, 2, 3, 4, 5 or 6

b=Operation panel and display 0 or 1

d=Output/Safe Protection 1, 2, 3, 4,5 or 7

e= Option module for analog or digital position feedback 0, 1, 2, 3, or 4

f=Mechanical kit(prox switches) for digital position feedback 0, 1 and 2.

g=Parameter setting/bus address 1 or 2

h=Design(vernish/coding) 1 or 2

i=Device identification label 0, 1 or 2

- Model V18348-a0b2d3efghi. TZIDC-200 Positioner

Where a=Case/Mounting 1, 2, 3, 4, 5 or 6



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b=Operation panel and display 0 or 1

d=Output/Safe Protection 1, 2, 3, 4,5 or 7

e=Option module for analog or digital position feedback 0, 1, 2, 3, or 4

f=Mechanical kit (prox switches) for digital position feedback/microswitches (only for XP) 0, 1, 2 and 3

g=Parameter setting/bus address 1 or 2

h=Design(vernish/coding) 1 or 2

i=Device identification label 0, 1 or 2

#### **APPLICABLE REQUIREMENTS**

- |                                      |   |   |
|--------------------------------------|---|---|
| CSA Std C22.2 No. 0-19991 (R 2006)   | - | General Requirements – Canadian Electrical Code, Part II                              |
| CAN/CSA-C22.2 No 25-1966 (R 2004)    | - | Enclosures for use in Class II Groups E, F and G Hazardous Location                   |
| CSA Std C22.2 No. 30-M1986 (R 2003)  | - | Explosion-Proof Enclosures for Use in Class I Hazardous Locations                     |
| CAN/CSA-C22.2 No 94-M91 (R 2006)     | - | Special Purpose Enclosures  |
| CSA Std C22.2 No 142-M1987 (R 2004)  | - | Process Control Equipment   |
| CAN/CSA-C22.2 No 157-92 (R 2006)     | - | Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations         |
| CSA Std C22.2 No. 213-M1987 (R 2004) | - | Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations |

#### **MARKINGS**

##### FOR EXPLOSION-PROOF PROTECTION

- CSA Monogram
- Submitter's Name
- Model Number



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- Serial Number
- Electrical Rating
- Hazardous Location Designation
- Special Purpose Enclosure Designation, "Type 4X"
- Maximum Ambient
- Warning: Keep cover tight while circuits are live.

FOR INTRINSICALLY SAFE PROTECTION

- CSA Monogram
- Submittor's Name
- Model Number
- Serial Number
- Electrical Rating
- Hazardous Location Designation
- Entity Parameters (V max, I max, Ci, Li, Pi)
- Special Purpose Enclosure Designation, "Type 4X"
- Maximum Ambient
- The symbol "Exia"
- The words "INTRINSICALLY SAFE/SECURITE INTRINSEQUE"
- Reference to Installation Instructions
- A statement re: Substitution of components may impair intrinsic safety.
- Caution statement re: Disconnection of Circuits...



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
2132161	2009/02/05	Update of Report 1393920 for TZIDC-200 Positioners to include new components and new PCB layout.
2057792	2008/08/30	Update Report 1393920 to accept revised circuit boards and new coating.
<b>History</b>		
1393920	2003/12/19	Original Certificate