



Certificate of Compliance

Certificate: 1110996 (LR 99673-4)

Master Contract: 183951

Project: 1139177

Date Issued: October 27, 2000

Issued to: Smar Equipamentos Industriais Ltda.
Rua Dr. Pio Duffles, 1350
Sertaozinho
Estado de Sao Paulo
BRAZIL
Attention: Mr. Benedito Sinastre

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



Issued by: R. Wildish

Signature: 

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

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

Model TT301, TT302 and TMT165 Series Temperature Transmitters; supply 12-42V dc, 4-20mA; enclosure Type 4X.

Class I, Div. 2, Groups A, B, C and D; Class II, Div. 2, Groups E, F and G; Class III:

Model TT301, TT302 and TMT165 Series Temperature Transmitters, supply 12-42V dc, 4-20mA; enclosure Type 4X.



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CLASS 2258 03 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

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

Model TT301 Series Temperature Transmitters, supply 12-42V dc, 4-20mA; Enclosure Type 4X; intrinsically safe when connected through CSA Certified Diode Safety Barrier, 28V max, 300 ohms min, per SMAR Installation drawing 102A0436.

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, Div. 1:

Model TT301 Series Temperature Transmitters, supply 12-42V dc, 4-20mA; Enclosure Type 4X; intrinsically safe with Entity parameters at terminals "+" and "-" of, $V_{max} = 28V$, $I_{max} = 110mA$, $C_i = 5 nF$, $L_i = 0$, when connected through CSA Certified Safety Barriers as per SMAR Installation drawing 102A0436.

Model TT302 Series Temperature Transmitters, supply 12-42V dc, 4-20mA; Enclosure Type 4X; intrinsically safe with Entity parameters at terminals "+" and "-" of, $V_{max} = 24V$, $I_{max} = 250mA$, $C_i = 5 nF$, $L_i = 0$; having output terminals ("1, 2, 3 & 4") with entity parameters of: $V_{oc} = 8.25V$, $I_{sc} = 85.6 mA$, $C_a = 5.5\mu F$, $L_a = 4.8 mH$; when connected as per SMAR Installation drawing 102A0553; T-Code T3C @ Max Ambient 40 Deg C.

Model TMT165 Series Temperature Transmitters, supply 12-42V dc, 4-20mA; Enclosure Type 4X; intrinsically safe with Entity parameters at terminals "+" and "-" of, $V_{max} = 24V$, $I_{max} = 250mA$, $C_i = 5 nF$, $L_i = 0$; having output terminals ("1, 2, 3 & 4") with entity parameters of: $V_{oc} = 8.25V$, $I_{sc} = 85.6 mA$, $C_a = 5.5\mu F$, $L_a = 4.8 mH$; when connected as per Installation drawing 14 09 00 112; T-Code T3C @ Max Ambient 40 Deg C.

APPLICABLE REQUIREMENTS

CSA Std C22.2 No.	25-1966	-	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
CSA Std C22.2 No.	30-M1986	-	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA-C22.2 No.	94-M91	-	Special Purpose Enclosures
CSA Std C22.2 No.	142-M1987	-	Process Control Equipment
CAN/CSA-C22.2 No.	157-92	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CSA Std C22.2 No.	213-M1987	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations



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MARKINGS

- CSA Monogram;
- Company name;
- Model number;
- Serial number;
- Electrical rating;
- Hazardous locations designation;
- Special purpose enclosure designation, "TYPE 4X";
- Maximum ambient;
- The Symbol Exia;
- The words "INTRINSICALLY SAFE";
- Temperature Code Rating; "Temp. Code T3C" (Model TT302 only);
- A statement re Intrinsically Safe, ie. Reference to Installation drawing;
- Caution re keeping cover tight while circuits are live;
- Caution re substitution of components;
- Caution 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.*

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Product Certification History

Project	Date	Description
1139177	Oct. 27/2000	Update to include "Output Entity" parameters for the model TT302; and to include Private Label, model TMT165.
1110996	July 25, 2000	Update to include revised drawings.
-12	July 21, 1999	Update to include Model TT302.
-11	March 4, 1999	Update to include revised drawings, and coverage for Entity Certification.
-10	Apr. 18, 1997	Modifications to Report drawings.
-4	Feb. 10, 1995	Original Certification - Model TT301.