

Certificate of Compliance

Certificate: 1078546

Master Contract: 183951

Project: 2052420

Date Issued: 2008/12/19

Issued to: Smar Equipamentos Industriais Ltda.

Rua Dr Pio Dufles 1350
Sertaozinho
Estado de Sao Paulo, São Paulo .
Brazil
Attention: Mr. Ricardo Leite

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



Issued by: Ron Wildish

Authorized by: Patricia Pasemko, Operations
Manager

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:

Models FY290, FY301, FY302 and FY303 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; MWP 100 psi.

Models SP301, SP302 and SP303 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; MWP 100 psi.

Models TP290, TP301, TP302 and TP303 Position Transmitters; input supply 12-42V dc, 4-20mA; Enclosure



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Type 4/4X.

Models FP302 and FP303 Fieldbus-to-Pressure Converter Transmitters; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; MWP 30 psi.

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

Models FY290, FY301, FY302 and FY303 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; MWP 100 psi.

Models SP301, SP302 and SP303 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; MWP 100 psi.

Models TP290, TP301, TP302 and TP303 Position Transmitters; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X.

Models FP302 and FP303 Fieldbus-to-Pressure Converter Transmitters; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; MWP 30 psi.

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

Class I, Div. 2, Groups A, B, C and D:

Model FY302 and FY303 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; non-incendive with Fieldbus/FNICO Entity parameters at terminals "+" and "-" of $V_{max} = 24V$, $I_{max} = 570\text{ mA}$, $P_{max} = 9.98W$, $C_i = 5\text{ nF}$, $L_i = 12\text{mH}$; when connected as per SMAR Installation drawing 102A0836; T-Code T3C @ Max Ambient 40 Deg C; MWP 100 psi.

Model SP302 and SP303 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; non-incendive with Fieldbus/FNICO Entity parameters at terminals "+" and "-" of $V_{max} = 24V$, $I_{max} = 570\text{ mA}$, $P_{max} = 9.98\text{ W}$, $C_i = 5\text{ nF}$, $L_i = 12\text{mH}$; when connected as per SMAR Installation drawing 102A1016; T-Code T3C @ Max Ambient 40 Deg C; MWP 100 psi.

Model FP302 and FP303 Fieldbus-to-Pressure Converter Transmitters; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; non-incendive with Fieldbus/FNICO Entity parameters at terminals "+" and "-" of $V_{max} = 24V$, $I_{max} = 570\text{ mA}$, $P_{max} = 9.98W$, $C_i = 5\text{ nF}$, $L_i = 12\text{mH}$; when connected as per SMAR Installation drawing 102A0835; T-Code T3C @ Max Ambient 40 Deg C; MWP 100 psi.

Model TP302 and TP303 Position Transmitters; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; non-incendive with Fieldbus/FNICO Entity parameters at terminals "+" and "-" of $V_{max} = 24V$, $I_{max} = 570\text{ mA}$, P_{max}



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= 9.98 W, Ci = 5 nF, Li = 12mH; when connected as per SMAR Installation drawing 102A0834; T-Code T3C @ Max Ambient 40 Deg C.

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 FY290 and FY301 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; intrinsically safe with Entity parameters, Vmax =28V, Imax =110mA, Ci = 5 nF, Li = 12mH, when connected through CSA Certified Safety Barriers as per SMAR Installation drawing 102A0833; T-Code T3C @ Max Ambient 40 Deg C; MWP 100 psi.

Model SP301 Valve Positioner; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; intrinsically safe with Entity parameters, Vmax =28V, Imax =110mA, Ci = 5 nF, Li = 12mH, when connected through CSA Certified Safety Barriers as per SMAR Installation drawing 102A1015; T-Code T3C @ Max Ambient 40 Deg C; MWP 100 psi.

Model FY302 and FY303 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; intrinsically safe with Fieldbus/FISCO Entity parameters at terminals "+" and "-" of, Vmax =24V, Imax =380mA, Pmax = 5.32W, Ci = 5 nF, Li = 10uH; when connected as per SMAR Installation drawing 102A0836; T-Code T3C @ Max Ambient 40 Deg C; MWP 100 psi.

Model SP302 and SP303 Valve Positioners; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; intrinsically safe with Fieldbus/FISCO Entity parameters at terminals "+" and "-" of, Vmax =24V, Imax =380mA, Pmax = 5.32W, Ci = 5 nF, Li = 10uH; when connected as per SMAR Installation drawing 102A1016; T-Code T3C @ Max Ambient 40 Deg C; MWP 100 psi.

Model FP302 and FP303 Fieldbus-to-Pressure Converter Transmitters; input supply 12-42V dc, 4-20mA; Enclosure Type 4X; intrinsically safe with Fieldbus/FISCO Entity parameters at terminals "+" and "-" of, Vmax =24V, Imax =380mA, Pmax = 5.32W, Ci = 5 nF, Li = 10uH; when connected as per SMAR Installation drawing 102A0835; T-Code T3C @ Max Ambient 40 Deg C; MWP 100 psi.

Model TP290 and TP301 Position Transmitters; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; intrinsically safe with Entity parameters, Vmax =28V, Imax =110mA, Ci = 5 nF, Li = 12mH, when connected through CSA Certified Safety Barriers as per SMAR Installation drawing 102A0832; T-Code T3C @ Max Ambient 40 Deg C.

Model TP302 and TP303 Position Transmitters; input supply 12-42V dc, 4-20mA; Enclosure Type 4/4X; intrinsically safe with Fieldbus/FISCO Entity parameters at terminals "+" and "-" of, Vmax =24V, Imax =380mA, Pmax = 5.32W, Ci = 5 nF, Li = 10uH; when connected as per SMAR Installation drawing 102A0834; T-Code T3C @ Max Ambient 40 Deg C.

Note: Only models with stainless steel external fittings are Certified as Type 4X.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-M91 - General Requirements – Canadian Electrical Code, Part II



CSA INTERNATIONAL

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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



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

Project	Date	Description
2052420	2008/12/19	Update to include; addition of FISCO parameters, addition of Non-Incendive versions, alternative enclosure material alloys and numerous drawing and report text revisions.
1515080	2004/10/01	Alternate Construction covering Drawing Revisions and increase pressure rating for model FP302 and FP303 and add models SP301, SP302 and SP303

History

1078546 October 22, 2004 Original Certification - Models FY290, FY301, FY302, FY303, SP301, SP302, SP303, TP290, TP301, TP302, TP303, FP302 and FP303