

# **Certificate of Compliance**

Certificate: 70000407 Master Contract: 215727

**Project:** 70000407 **Date Issued:** January 24, 2014

Issued to: DEHN + SÖHNE GmbH + Co.KG

Hans-Dehn-Strasse 1

**NEUMARKT/OBERPFALZ, 92318** 

**GERMANY** 

Attention: Mr. J. Birkl

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only



E. Giusti Issued by: E. Giusti

## **PRODUCTS**

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations CLASS 2258-82 - PROCESS CONTROL EQUIPMENT – For Hazardous Locations – Certified To U.S. Standards

Class I,II,III Div 2, GP A,B,C,D,E,F,G T5 ... T6, Ta = 80 °C

Class I, Zone 2, AEx nA IIC T5 ... T6

Ex nA IIC T5

Ex tc IIIC T85°C

Class II, Zone 20, AEx tc IIIC T 85°C

The surge suppression device type DEHNpipe DPI CD EXI... serves to limit occasional surge voltages.

Ambient temperature range: -40 °C to +80 °C

#### Electrical data

Part-no.	Type	Rated Voltage Uc
929 961	DPI CD EXI 24 M	32 Vdc
929 963	DPI CD EXI 24 N	32 Vdc

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929 950	DPI CD EXI 2x24 M	36 Vdc
929 951	DPI CD EXI 2x24 N	36 Vdc
929 952	DPI CD EXI 2x48 M	58 Vdc
929 953	DPI CD EXI 2x48 N	58 Vdc

CLASS 2258 04 – PROCESS CONTROL EQUIPMENT – Intrinsically safe entity-For Hazardous Locations CLASS 2258 84 – PROCESS CONTROL EQUIPMENT – Intrinsically safe entity For Hazardous Locations – certified to U.S

IS, Class I Div 1, GP A,B,C,D T5 ... T6, Ta =  $70 \,^{\circ}$ C /80 °C, Entity Class I, Zone 1, AEx ia[ia] IIC T5 ... T6, Ta =  $70 \,^{\circ}$ C /80 °C, Entity

Class II, Division 1; Groups E, F and G

Ex ta IIIC T85°C

Class II, AEx ta IIIC T85°C

The surge suppression device type DEHNpipe DPI CD EXI... serves to limit occasional surge voltages in intrinsically safe circuits. They are intrinsically safe as per Control Drawing 1775 or 1491.

Ambient temperature range: -50 °C to +80 °C for temperature class T5,

-50 °C to +70 °C for temperature class T6.

#### Electrical data

Part-no.	Type	Entity Parameters
929 961	DPI CD EXI 24 M	Input circuit (Red + and Black -): Ui (Vmax)= 30 V; Ii (Imax)= 550 mA; Pi = 3 W; Ci = 0 nF; Li = 0 $\mu$ H;
929 963	DPI CD EXI 24 N	or Ui (Vmax)= 17,5 V; Ii (Imax)= 380 mA; Pi = 5,32 W; Ci = 0 nF; Li = 0 $\mu$ H.
929 950	DPI CD EXI 2x24 M	Input circuit (X1, X2, X3, X4 and X5): Ui (Vmax)= 30 V; Ii (Imax)= 550 mA; Pi = 3 W; Ci = 0 nF; Li = 0 µH;
929 951	DPI CD EXI 2x24 N	or Ui = 17,5 V; Ii (Imax)= 380 mA; Pi = 5,32 W; Ci = 0 nF; Li = 0 µH.
929 952	DPI CD EXI 2x48 M	Input circuit (X1, X2, X3, X4 and X5): Ui (Vmax)= 58 V; Ii (Imax)= 550 mA; Pi = 3 W; Ci = 0 nF; Li = 0 µH;
929 953	DPI CD EXI 2x48 N	or Ui (Vmax)= 17,5 V; Ii (Imax)= 380 mA; Pi = 5,32 W; Ci = 0 nF; Li = 0 μH.

The dielectric strength of at least 500 V of the intrinsically safe circuits of the surge suppression device DEHNpipe DPI CD EXI... is limited only by the overvoltage protection.

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## APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 157-92 (R2012) 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** 

ANSI/UL Standard 913 (2006) Intrinsically Safe Apparatus and Associated Apparatus for Use in

Class I, II, and III, Division 1, Hazardous (Classified) Locations

ANSI/UL Standard 1604 - Electrical Equipment for Use in Class I and II, Division 2, and

Class III Hazardous (Classified) Locations

CAN/CSA-C22.2 No. 60079-0-11 Electrical Apparatus for Explosive Gas Atmospheres - Part 0:

ANSI/ISA-60079-0 (2009) General Requirements

CAN/CSA-E60079-11-11 - Electrical apparatus for explosive gas atmospheres; Part 11:

ANSI/ISA-60079-11(2007); Intrinsic Safety "i"

CAN/CSA E60079-15-12 Electrical Apparatus for explosive gas atmospheres - Part 15:

ANSI/ISA-60079-15 (12.12.02)-2009 Type of protection "n"

CAN/CSA-C22.2 No. 60079-31:12 Explosive atmospheres — Part 31: Equipment dust ignition

protection by enclosure "t"

ANSI/ISA-60079-31 (12.10.03)-2009 Explosive Atmospheres – Part 31:Equipment Dust Ignition

Protection by Enclosure "t"

C22.2 No. 142-M1987 (R2004) Process Control Equipment

UL 61010-1-02 Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use – Part 1: General Requirements

### **MARKINGS**

The following marking is marked with laser printing on the enclosure of the surge voltage protection unit.

- (1) Submittor's name, trademark
- (2) Catalogue / Model designation.
- (3) Complete electrical rating (amps, hertz, and volts).
- (4) Date code / Serial number traceable to month and year of manufacture.
- (5) The cCSAus Monogram
- (6) Certificate number CSA.13.70000407
- (7) Reference to control drawings
- (8) The words "Class I,II Div 1 and Class I,II,III Div 2 and Class I, Zone 1, Zone 2 and Class I, Zone 1, Zone 22"

Note - Jurisdictions in Canada may require these markings to also be provided in French language. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".

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