

Certificate of Compliance

Certificate: 1138768

Master Contract: 203012

Project: 2413770

Date Issued: May 5, 2011

Issued to: ABB Automation Products GmbH

72 Schillerstrasse

Minden, 32425

Germany

Attention: Wolfgang Lasarzik

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



Ron Wildish

Issued by: Ron Wildish

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

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

Model 22/06-XX, 22/06-6X I/P, E5-EX/US and E5-EX/US-SS converters and Model TZIM Positioner; input rated 4-20mA, 40V dc max; Temp Coded T3C.

Note: These devices (ie. those Certified for Class I, only) are for installation in suitable enclosures as acceptable to the local authority having jurisdiction.

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

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

Models 22/06-99, 22/06-99-X, 22/06-66, 22/06-67, 22/06-68, 22/06-69 and E5-IS/US. I/P converters; input rated 4-20mA, 40V dc max; Intrinsically safe when connected through one CSA Certified zener barrier, rated 32 Vmax, 400 ohms min; 30 Vmax, 330 ohms min.; 29.5 Vmax, 305 ohms min.; 28 Vmax, 270 ohms min; 25 Vmax, 200 ohms min; 22 Vmax, 150 ohms min; or 12 Vmax, 40 ohms min; when connected per ABB Connection Diagram 900842; Temp Coded T3C.

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

Models 22/06-99, 22/06-99-X, 22/06-66, 22/06-67, 22/06-68, 22/06-69 and E5-IS/US. I/P converters; input rated 4-20mA, 40V dc max; Intrinsically safe when connected through one CSA Certified zener barrier, rated



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33 Vmax, 200 ohms min; 30 Vmax, 150 ohms min.; or 28 Vmax, 120 ohms min; when connected per ABB Connection Diagram 900842; Temp Coded T3C.

Class I, Div. 1, Groups A, B, C and D:

Model 22/06-XX, 22/06-6X I/P and E5-IS/US converters and Model TZIM Positioner; input rated 4-20mA, 40V dc max; Intrinsically safe when connected to one CSA Certified Zener barrier rated 32 Vmax, 400 ohms min; 30 Vmax, 330 ohms min.; 29.5 Vmax, 305 ohms min.; 28 Vmax, 270 ohms min; 25 Vmax, 200 ohms min; 22 Vmax, 150 ohms min; 12 Vmax, 40 ohms min; when connected per ABB Connection Diagram 900842; Temp Coded T3C.

Model TZIM Positioner; input rated 4-20mA, 40V dc max; Intrinsically safe when connected to one CSA Certified Zener barrier, rated 32 Vmax, 400 ohms min; 30 Vmax, 330 ohms min.; 29.5 Vmax, 305 ohms min.; 28 Vmax, 270 ohms min; 25 Vmax, 200 ohms min; 22 Vmax, 150 ohms min.; 12 Vmax, 40 ohms min.; when connected per ABB Connection Diagram 900988; Temp Coded T3C.

Class I, Div. 1, Groups C and D:

Model 22/06-XX, 22/06-6X I/P and E5-IS/US converters and Model TZIM Positioner; input rated 4-20mA, 40V dc max; Intrinsically safe when connected to one CSA Certified Zener barrier, rated 33 Vmax, 200 ohms min; 30 Vmax, 150 ohms min.; or 28 Vmax, 120 ohms min; when connected per ABB Connection Diagram 900842; Temp Coded T3C.

Model TZIM Positioner; input rated 4-20mA, 40V dc max; Intrinsically safe when connected to one CSA Certified Zener barrier, rated 33 Vmax, 200 ohms min; 30 Vmax, 150 ohms min.; or 28 Vmax, 120 ohms min; when connected per ABB Connection Diagram 900988; Temp Coded T3C.

Note: These devices (ie. those Certified for Class I, only) are for installation in suitable enclosures as acceptable to the local authority having jurisdiction.

APPLICABLE REQUIREMENTS

C22.2 No. 0-10 - General Requirements – Canadian Electrical Code, Part II

C22.2 No. 142-M1987 - Process Control Equipment

C22.2 No. 157-92 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations

C22.2 No. 213-M1987 - Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations

CSA Approved

ABB Automation Products
Control Document No. 900842
for I/P-Converter Type 22/06-XX

Hazardous Area
Class I, Division 1, Groups C, D

I/P-circuit resistance
 $R_i = 260 \text{ ohms} \pm 10\%$
at 20°C , TCR $+0.4\%/1\text{K}$

Intrinsically safe circuit
 V_{max} , R_{min} , see table below

Nonhazardous Area

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Safety barrier

Characteristic: direct or reverse acting
 $0(4) \dots 20 \text{ mA}$ or $20 \dots 0(4) \text{ mA}$

Note: Location is allowed in Class II, III,
Division 1, Group E, F, G, for models 22/06-66,
22/06-67, 22/06-68, 22/06-69 only.
An approved seal must be used at the enclosure conduit
opening to maintain Intrinsic Safe circuit integrity.

Hazardous Area
Class I, Division 1
Groups C, D
BARRIER PARAMETERS

max. voltage (V_{max})	min. resistance (R_{min})
33	200
30	150
28	120

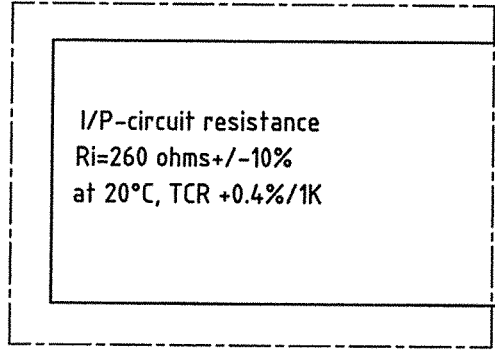
No revision can be made without CSA notification

Werkstückkanten nach DIN 6784 ohne Angaben		Allgemeintoleranzen DIN 7168 - m - C		bis 6 $\pm 0,1$	über 6 bis 30 $\pm 0,2$	über 30 bis 120 $\pm 0,3$	über 120 bis 400 $\pm 0,5$	über 400 $\pm 0,8$
Technische Oberfläche nach DIN ISO 1302		Vorschrift: Längenmaße:		Winkelmaße:				
1995		Tag	Name	Rev. 2 (20.03.00)				
Gezeichnet		23.05.	Thieme.	Benennung:				
Geprüft		20.03.00	W/M.	Connection Diagram				
Normgepr.				I/P-Converter 22/06-XX				
Paß- maße	Ab- maße	ABB Automation		Ident-Nr.		900842 CSA		Blatt von 3/4

CSA Approved

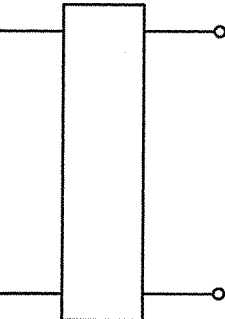
ABB Automation Products
Control Document No. 900842
for I/P-Converter Type 22/06-XX

Hazardous Area
Class I, Division 1, Groups A, B, C, D



Intrinsically safe circuit
 $V_{\text{max}} = , R_{\text{min}} = ,$ see table below

Nonhazardous Area



Characteristic: direct or reverse acting
 $0(4) \dots 20 \text{ mA}$ or $20 \dots 0(4) \text{ mA}$

Note: Location is allowed in Class II, III,
Division 1, Group E, F, G, for models 22/06-66,
22/06-67, 22/06-68, 22/06-69 only.
An approved seal must be used at the enclosure conduit
opening to maintain Intrinsic Safe circuit integrity.

Hazardous Area
Class I, Division 1
Groups A, B, C, D
BARRIER PARAMETERS

max. voltage (V_{max})	min. resistance (R_{min})
32	400
30	330
29.5	305
28	270
25	200
22	150
12	40

No revision can be made without CSA notification

Werkstückkanten nach DIN 6784 ohne Angaben		Allgemeintoleranzen DIN 7168 - m - C		bis 6 $\pm 0,1$	über 6 bis 30 $\pm 0,2$	über 30 bis 120 $\pm 0,3$	über 120 bis 400 $\pm 0,5$	über 400 $\pm 0,8$
Technische Oberfläche nach DIN ISO 1302		Vorschrift: Längenmaße:		Winkelmaße:				
				Rev. 2 (20.03.00)				
1995	Tag	Name	Maßstab	Benennung:				
Gezeichnet	23.05.	Thieme		Connection Diagram				
Geprüft	20.03.00	W. A.		I/P-Converter 22/06-XX				
Normgepr.								
Paß- maße	Ab- maße	ABB Automation		Ident-Nr.		900842 CSA		TKM Blatt von 4/4