



Certificate of Compliance

Certificate: 2117513

Master Contract: 188909

Project: 2569938

Date Issued: 2013-09-24

Issued to: Knick Elektronische Messgeräte GmbH & Co. KG
Beuckestrasse 22
D-14163 Berlin
GERMANY
Attention: Mr. R Roessler

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



Issued by: E Giusti
E Giusti

PRODUCTS

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

Class I,II,III Div 2, GP A,B,C,D,E,F,G T4, Ta = 65 °C, Type 4X

Ex nA II T4, Ta = 65 °C, Type 4X

DIP A22, Class II and III, Division 2, Groups E, F and G, Type 4X

Analyzing Unit Stratos® Pro Type A20.B-.- and Type A21.B-.- consists of the front unit A2..., a measuring module MK- and an enclosure. As options, display and analog output (4 - 20 mA current signal with or without HART) are available.

Class I,II,III Div 2, GP A,B,C,D,E,F,G T4, Ta = 55 °C, Type 4X

Ex nA II T4, Ta = 55 °C, Type 4X

DIP A22, Class II and III, Division 2, Groups E, F and G, Type 4X

Analyzing Unit Stratos® Pro Type A40.B-./ and Type A41.B-./ consists of the front unit A4..., a measuring module MK- and an enclosure. As options, display and analog output (4 - 20 mA current signal with or without HART) are available.



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CLASS – 2258-82 PROCESS CONTROL EQUIPMENT - For Hazardous Locations against U.S. Standards

Class I,II,III Div 2, GP A,B,C,D,E,F,G T4, Ta = 65 °C, Type 4X
AEx nA II T4, Ta = 65 °C, Type 4X
Class II and III, Zone 22, AEx tD 22 T85 °C, Type 4X

Analyzing Unit Stratos® Pro Type A20.B-.-and Type A21.B-.-consists of the front unit A2... a measuring module MK- and an enclosure. As options, display and analog output (4 - 20 mA current signal with or without HART) are available.

Class I,II,III Div 2, GP A,B,C,D,E,F,G T4, Ta = 55 °C, Type 4X
AEx nA II T4, Ta = 55 °C, Type 4X
Class II and III, Zone 22, AEx tD 22 T85 °C, Type 4X

Analyzing Unit Stratos® Pro Type A40.B-./ and Type A41.B-./: it consists of the front unit A4..., a measuring module MK- and an enclosure. As options, display and analog output (4 - 20 mA current signal with or without HART) are available.

CLASS – 2258-04 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations
CLASS – 2258-84 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations
against U.S. Standards

IS, Class I,II,III Div 1, GP A,B,C,D,E,F,G T4, Ta = 65 °C, Entity, Type 4X
AIS Class I,II,III Div 1, GP A,B,C,D,E,F,G T4, Ta = 65 °C, Entity, Type 4X
Class I, Zone 1, AEx ia IIC T4, Ta = 65 °C, Entity, Type 4X

Analyzing Unit Stratos® Pro Type A20.X-.- and Type A21.X-.- consists of the front unit A2... a measuring module MK- and an enclosure. Intrinsically Safe entity parameters are defined in Control Drawings listed in the table below. As options, display and analog output (4 - 20 mA current signal with or without HART) are available.



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The modelcode of the Analyzing Unit Stratos® Pro Type A2...-.-. is build up out the following:

	A	2	.	.	.	-	.		-	.	
2-wire / 4-20 mA	A	2									
Communication:											
No			0								
HART			1								
PROFIBUS *)			2								
Foundation Fieldbus FF *)			3								
Version number											
Version				1							
Approvals											
General safety						N					
ATEX / IECEx / FM / CSA Zone 2, Division 2						B					
ATEX / IECEx / FM / CSA Zone 1/0, Division 1						X					
Other approvals						Z					
Measuring channel 1 / Measuring channel 2											
Memosens pH/Redox										MSPH	
Memosens Cond										MSCOND	
Memosens CondI										MSCONDI	
Memosens Oxy										MSOXY	
Double-COND										CC	
pH / Redox										PH	
Conductivity, 2-/4-electroded										COND	
Conductivity, electrodeless										CONDI	
Oxygen										OXY	
Carbon dioxide *)										CO2	
Options											
Without 2 nd current output											0
With 2 nd current output											1
TAN options											
HART											A
Logbook											B
Extended logbook											C
Trace oxygen measurement											D
Current input + 2 digital inputs											E
ISM digital											F

*) These measurement channel options are future options and not yet part of this approval.



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The modelcode of the Analyzing Unit Stratos® Pro Type A4...-./ is build up out the following:

	A	4	.	.	.	-	.	/	.	
4-wire / 20...254 V AC/DC	A	4								
Communication:										
No			0							
HART			1							
Version number										
Version				1						
Approvals										
General safety						N				
ATEX / IECEx / FM / CSA Zone 2, Division 2						B				
Measuring channel										
Memosens pH/Redox						MSPH		0		
Memosens pH/Redox / pH/Redox						MSPH		MSPH		
Memosens pH/Redox / Oxy						MSPH		MSOXY		
Memosens Cond						MSCOND		0		
Memosens Cond / Cond						MSCOND		MSCOND		
Memosens CondI						MSCONDI		0		
Memosens Oxy						MSOXY		0		
Double-COND						CC		0		
pH / Redox						PH		0		
Conductivity, 2-/4-electroded						COND		0		
Conductivity, electrodeless						CONDI		0		
Oxygen						OXY		0		
Carbon dioxide *)						CO2		0		
TAN options										
HART										A
Logbook										B
Extended logbook										C
Trace oxygen measurement										D
Current input + 2 digital inputs										E
ISM digital										F

*) These options are future options and not yet part of this approval.



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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-M91 (R2011)	General Requirements Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 157 (R2012)	Intrinsically Safe and Non-incendive Equipment for use in Hazardous Locations.
CAN/CSA-C22.2 No. 213-M1987 (R2013)	Non-Incendive Electrical Equipment for use in Class I, Division 2 Hazardous Locations.
CAN/CSA-C22.2 No.94-M91 (R2011)	Special purpose enclosures
C22.2 NO. 142-M1987 (R2009)	Process Control Equipment.
CAN/CSA-C22.2 NO. 60079-0: 2011	Electrical apparatus for explosive gas atmospheres;
CAN/CSA-60079-11 (R2011)	Electrical apparatus for explosive gas atmospheres;
CAN/CSA-60079-15 (R2012)	Electrical apparatus for explosive gas atmospheres;
CAN/CSA-61241-1-1 (R2012)	Electrical apparatus for use in the presence of combustible dust
	Part 1-1: Electrical apparatus protected by enclosures and surface temperature limitations
ANSI/ISA 12.12.01: 2013	Non Incendive Electrical equipment for use in class I and II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations
ANSI/UL Standard 913: 2011	Intrinsically Safe Apparatus and Associated Apparatus For Use in Class I, II and III, Div. 1 Hazardous (Classified) Locations
ANSI/ISA-60079-11: 2007	Part 11: Intrinsic Safety “i”
ANSI/ISA-60079-0: 2011	Part 0: General requirements.
ANSI/ISA-60079-15: 2012	Part 15: Type of protection “n”
ISA-61241-0: 2006	Electrical Apparatus for Use in Zone 20, 21 and 22 Hazardous (classified) Locations – General Requirements.
ISA-61241-1-1: 2006	Electrical Apparatus for Use in Zone 20, 21 and 22 Hazardous (classified) Locations – Protection by Enclosures “tD”
UL Standard 508. 2012	Industrial Control Equipment
NEMA 250 2003	Enclosures for Electrical Equipment (1000 Volts Maximum)

MARKINGS

- (1) Submitter's name, trademark
- (2) Catalogue / Model designation.
- (3) Date code / Serial number traceable to month and year of manufacture.
- (4) The cCSAus Monogram
- (5) Reference to control drawings
- (6) Certificate number CSA.08.2117513
Type A20.B-.-.and Type A21.B-.-.:
- (7) The words “Class I,II,III Div 2, GP A,B,C,D,E,F,G T4 and/or Ex nA II T4 and/or AEx nA II T4, Ta = 65 °C and/or DIP, Class II and III, Division 2, Groups E, F and G and/or Class II and III, Zone 22, AEx tD 22 T85 °C”
- (8) Maximum ambient temperature Ta = +65 °C
- (9) Type 4X
Type A40.B-./ and Type A41.B-./:



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- (10) The words “Class I,II,III Div 2, GP A,B,C,D,E,F,G T4 and/or Ex nA II T4 and/or AEx nA II T4 and/or DIP, Class II and III, Division 2, Groups E, F and G and/or Class II and III, Zone 22, AEx tD 22 T85 °C”
- (11) Maximum ambient temperature $T_a = +55$ °C
- (12) Type 4X
Type A20.X-.-. and Type A21.X-.-.:
- (13) The words “IS, Class I,II,III Div 1, GP A,B,C,D,E,F,G T4 and/or AIS Class I,II,III Div 1, GP A,B,C,D,E,F,G T4 and/or Class I, Zone 1, AEx ia IIC T4”
- (14) Maximum ambient temperature $T_a = +65$ °C
- (15) Type 4X

For complete markings details see the label drawings of the main circuitry or the module.



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
2569938	September 24, 2013	Update to report 2117513 to cover update drawings/ part list, C12 and C19 values and minor component modifications.
2365241	November 24, 2012	Minor change to the A2 main circuitry
2280683	June 29, 2010	Update with addition of Class II and III, Zone 22, Type 4X and minor change to the A2 main circuit
2117513	July 3, 2009	Original Certification of Analyzing Unit Stratos® Pro Type A20.X-.-, Type A21.X-.-, Type A20.B-.-, Type A21.B-.-, Type A40.B-.- or Type A41.B-.