CSA INTERNATIONAL

Certificate of Compliance

Certificate: 1662790 **Master Contract:** 220331

Project: 1805798 **Date Issued:** June 21, 2006

Issued to: **Mettler-Toledo GmbH**
Im Hackacker 15
Urdorf, 8902
SWITZERLAND

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

Issued by: Carole Lemay

Authorized by: Hélène Vaillancourt
Operations Manager

PRODUCTS

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

Class I, Division 1, Groups A, B, C and D

Ex ib [ia] IIC

Transmitters Models 2100/2XH, 7100/2XH and Models 4100/2XH, input rated 30V, 4-20 mA, intrinsically safe devices provides intrinsically safe outputs to simple apparatus, ph, conductivity and oxygen probes when connected per control drawings 194.120-170, 194.220-190 and 194.320-190, 194.401-120. Maximum Ambient Temperature 55°C, Temperature Code T4.

For all models the input entity parameters are:

Terminals	Ui, Vmax	Ii, Imax	Pi, Pmax	Ci	Li
10, 11 or 14,15	30V	100mA	0.8W	32.4nF	0.24mH

Output entity parameters are:

2100/2XH

Terminals

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1/2, 4, 5, 6	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	10V	10mA	25mW	3µF	250mH
IIB (gr. C)	10V	10mA	25mW	9µF	1H
IIC (gr. D)	10V	10mA	25mW	24µF	1H

Terminals					
7, 8	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	5V	3mA	4mW	100µF	1H
IIB (gr. C)	5V	3mA	4mW	300µF	1H
IIC (gr. D)	5V	3mA	4mW	800µF	1H

Terminals					
17, 18, 19	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	10V	14mA	35mW	3µF	170mH
IIB (gr. C)	10V	14mA	35mW	9µF	620mH
IIC (gr. D)	10V	14mA	35mW	24µF	1H

Terminals					
Combined outputs	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	10V	27mA	66mW	3µF	44mH
IIB (gr. C)	10V	27mA	66mW	9µF	180mH
IIC (gr. D)	10V	27mA	66mW	24µF	350mH

Model 7100/2XH

Terminals					
1, 2, 3, 4, 5, 6	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	10V	143mA	357mW	3µF	1.3mH
IIB (gr. C)	10V	143mA	357mW	9µF	5mH
IIC (gr. D)	10V	143mA	357mW	24µF	10mH

Terminals					
7,8	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	5V	3mA	4mW	100µF	1H
IIB (gr. C)	5V	3mA	4mW	300µF	1H
IIC (gr. D)	5V	3mA	4mW	800µF	1H

Terminals					
Combined Outputs	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	10V	146mA	365mW	3µF	1.3mH
IIB (gr. C)	10V	146mA	365mW	9µF	5mH
IIC (gr. D)	10V	146mA	365mW	24µF	10mH

Model 7100/2XH

Terminals					
1, 2, 3, 4, 5, 6	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La

IIC (gr A, B)	9V	111mA	139mW	4µF	1.5mH
IIB (gr. C)	9V	111mA	139mW	12µF	6mH
IIC (gr. D)	9V	111mA	139mW	32µF	12mH

Terminals					
7,8	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	5V	3.5 mA	5mW	100µF	1H
IIB (gr. C)	5V	3.5 mA	5mW	300µF	1H
IIC (gr. D)	5V	3.5 mA	5mW	800µF	1H

Terminals					
Combined Outputs	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	9V	114.5mA	144mW	4µF	1.5mH
IIB (gr. C)	9V	114.5mA	144mW	12µF	6mH
IIC (gr. D)	9V	114.5mA	144mW	32µF	12mH

Model 4100/2XH

Terminals					
1/2, 4, 5, 6	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	10V	10mA	25mW	3µF	250mH
IIB (gr. C)	10V	10mA	25mW	9µF	1H
IIC (gr. D)	10V	10mA	25mW	24µF	1H

Terminals					
7,8	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	5V	1mA	2mW	100µF	1H
IIB (gr. C)	5V	1mA	2mW	300µF	1H
IIC (gr. D)	5V	1mA	2mW	800µF	1H

Terminals					
Combined Outputs	Uo, Vsc	Io, Isc	Po	Co, Ca	Lo, La
IIC (gr A, B)	10V	11mA	28mW	3µF	250mH
IIB (gr. C)	10V	11mA	28mW	9µF	1H
IIC (gr. D)	10V	11mA	28mW	24µF	1H

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

- NI, Class I, Division 2, Groups A, B, C and D, with IS circuits extending into Division 1; Enclosure 4X;
  or
  AIS, Class I, Zone 1, Ex me ib [ia] IiC T4; Enclosure 4X;
  or
  NI, Class I, Zone 2, Ex nA [ia] IIC; Enclosure 4X;
  Ambient temperature -20C...+50C

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Project: 1752689 **Date:** January 18, 2006

The Protos Measuring System consists of the following units:

Model Code:	Description:
M 700X S/VPW	VariPower 100-230 Vac power supply, enclosure made of polished stainless steel
M 700X S/24B	24 Vac/dc power supply, polished stainless steel enclosure
M 700X C/VPW	VariPower 100-230 Vac power supply, enclosure made of polyester coated steel
M 700X C/24V	24 Vac/dc power supply, enclosure made of polyester coated steel

Door Type Model Code:	Description:
FRONT 700 XS-015	Door, made of polished stainless steel
FRONT 700 XC-015	Door, made of coated steel

Module Type Model Code:	Description:
PH 2700 X	pH measurement with glass electrodes or ISFET sensors

Module Type Model Code:	Description:
Cond 7700 X	conductivity measurment with 2 and 4 electrodes / sensors
Cond Ind 7700 X	inductive conductivity measurement with 2 and 4 electrodes sensors

Module Type Model Code:	Description:
O2 4700 X	oxygen measurement in liquids, standard application
O2 4700 X ppb	oxygen measurement in liquids, trace measurements

Module Type Model Code:	Description:
EC 700 X	pH measurement with glass electrodes, supply and control of retractable probe
control unit Type Unical 9000-X***	

Module Type Model Code:	Description:
Out 700 X	output module, provides analog and switch outputs

Module Type Model Code:	Description:
PID 700 X	PID controller

Module Type Model Code:	Description:
PA 700 X	Interface for Profibus-PA (MPB-IS)
FF 700 X	Interface for Foundation Fieldus (FF-H1)

The Protos Measuring System consists of the following units:

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The Protos Measuring System consists of the following units:

Model Code:	Description:
pH 2700i X	pH measurement with pH glass electrodes or pH-ISFET sensors
CO2 5700i X	Carbon dioxide measurement
O2 4700i X	oxygen measurement in liquids, standard application
O2 4700i X ppb	oxygen measurement in liquids, trace measurements

MARKINGS

Markings are done on CSA accepted type labels as per drawings 230.040-130 and 230.040-140.

Listee's name and/or CSA file number 220331, model designation, complete electrical rating in volts, hertz, hp, amps, serial number or date coding, and the CSA Mark appear in a permanent manner on each unit.

CSA INTERNATIONAL

Supplement to Certificate of Compliance

Certificate: 1662790 **Master Contract:** 220331

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	
1805798	June 21, 2006	Submittor Models:	Listee Models:
		PH 3400 X-035	Ph 2700i X
		CO2 3400 X-130	CO2 5700i X
		OXY 3400 X-065	O2 4700i X
		OXY 3400 X-066	O2 4700i X ppb
1752689	Janaury 18, 2006	Submittor Models:	Listee Models:
		BASE 3400 XS/VPW	M 700X S/VPW
		BASE 3400 XS/24V	M 700X S/24V
		BASE 3400 XC/VPW	M 700X C/VPW
		BASE 3400 XC/24V	M 700X C/24V
		FRONT 3400 XS-015	FRONT 700 XS-015
		FRONT 3400 XC-015	FRONT 700 XC-015
		PH 3400 X-032	pH 2700 x
		COND 3400 X-041	Cond 7700 X
		CONDI 3400 X-051	Cond Ind 7700 X
		OXY 3400 X-062	O2 4700 X
		OXY 3400 X-063	O2 4700 X ppb
		OUT 3400 X-071	Out 700 X
		PID 3400 X-121	PID 700 X
		COMPA 3400 X-081	PA 700 X
		COMFF 3400 X-085	FF 700 X
		PHU 3400 X-110	EC 700 X

1662790 May 18, 2005

Original Report No	Model No.	Listee Model No.
188909-1606678	22*1X pH	2100/2XH
	22*1X Cond	7100/2XH
	22**X Condl	7100/2XH
	221*X Oxy	4100/2XH