

Certificate of Compliance

Certificate: 1234595

Master Contract: 151079

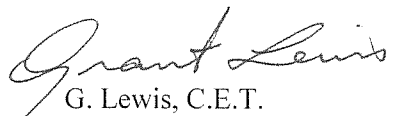
Project: 1234595


Date Issued: August 16, 2001

Issued to: **ENDRESS + HAUSER GmbH & CO.**
Hauptstrasse 1
D-79689, Maulburg
GERMANY
Attention: Mr. Dieter Benz

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



Issued by: 
G. Lewis, C.E.T.

Authorized by: 
Brian Rossborough
Operations Manager

PRODUCTS

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

[Ex ia] IIC: Class I, Zone 0:

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

- FTL325P and FTL325N Intrinsically Safe Power Supply for Level Limit Transmitters, ratings per table with optional relay contacts rated 250V AC/40V DC, 2.0 A; provides intrinsically safe circuits when connected per installation Drawing Number 960511-0071 (FTL325P) or 960512-0071 (FTL325N); entity parameters per table.

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Project: 1234595

Date: August 16, 2001

Model FTL325..	Electrical Ratings			Entity Parameters (per Channel)					
	Volts	Hz	mA	Voc/Uo (V)	Isc/Io (mA)	Po (mW)	Groups	La/Lo (mH)	Ca/Co (μF)
P-S.A1	85-250	50/60	39	14.6	97	633	A,B/ IIC	0.5	0.3
P-S.A3	85-250	50/60	72					1.0	0.2
P-S.E1	20-30	50/60	115					1.0	1.0
	20-60	DC	83						
P-S.E3	20-30	50/60	235				5.0	0.5	
	20-60	DC	152						
N-S.A1	85-250	50/60	39	12.0	34	154	A,B/ IIC	0.5	0.5
N-S.A3	85-250	50/60	58					1.0	0.45
N-S.E1	20-30	50/60	90					1.0	2.0
	20-60	DC	60						
N-S.E3	20-30	50-60	172				5.0	1.5	
	20-60	DC	135						

These barriers must be installed in suitable enclosures in a non-hazardous location and provide intrinsically safe circuits for switches, thermocouples, non-inductive resistive devices or CSA Certified entity equipment when installed per manufacturers control drawings. Maximum safe area voltage not to exceed 250 Vrms.

APPLICABLE REQUIREMENTS

- CAN/CSA-E79-0-95 - Electrical Apparatus for Explosive Gas Atmospheres--Part 0: General Requirements
- CAN/CSA-E79-11-95 - Electrical Apparatus for Explosive Gas Atmospheres--Part 11: Intrinsic Safety "i"
- 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

Supplement to Certificate of Compliance

Certificate: 1234595

Master Contract: 151079

*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
1234595	Aug 16/2001	Original Certification.



Certificate of Compliance

Certificate: 1234595 (LR 53988)

Master Contract: 151079

Project: 1995730

Date Issued: 2008/04/08

Issued to: Endress + Hauser GmbH + Co. KG
Hauptstrasse 1
Maulburg, Baden-Wuerttemberg 79690
Germany
Attention: Mr. Stefan Muth

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



Issued by: Edward Foo, C.E.T.

Authorized by: Patricia Pasemko, Operations
Manager

PRODUCTS

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

[Ex ia] IIC: Class I, Zone 0:

Class I, Div. 2 Groups A, B, C & D Associated Apparatus for

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

- FTL325P and FTL325N Intrinsically Safe Power Supply for Level Limit Transmitters, ratings per table with



Certificate: 1234595 (LR 53988)

Master Contract: 151079

Project: 1995730

Date Issued: 2008/04/08

optional relay contacts rated 250V AC/40V DC, 2.0 A; provides intrinsically safe circuits when connected per installation Drawing Number 960006046 (FTL325P) or 960006074 (FTL325N); entity parameters per table in the descriptive report.

APPLICABLE REQUIREMENTS

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

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

CAN/CSA-E60079-0:02 - Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements

CAN/CSA-E60079-11:02 - Electrical Apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"



Supplement to Certificate of Compliance

Certificate: 1234595

Master Contract: 151079

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
1995730	2008/04/08	Update to include Class I, Div. 2 certification

History

1234595	August 16, 2001	Original Certification.
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Supplement Notes

Certificate of Compliance

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Master Contract: 151079(LR 53988)

Project: 2387221

Date Issued: January 12, 2011

Issued to: Endress + Hauser GmbH + Co. KG
Hauptstrasse 1
D-79689, Maulburg
GERMANY
Attention: Mr. Andreas Steffan

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



Eric Giusti

Issued by: Eric Giusti

PRODUCTS

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

[Ex ia] IIC: Class I, Zone 0:
Class I, Div. 2, Groups A, B, C & D Associated Apparatus for
Class I, Groups A, B, C & D; Class II, Groups E, F, G; Class III:

- FTL325P and FTL325N Intrinsically Safe Power Supply for Level Limit Transmitters, ratings per table with optional relay contacts rated 250V AC/40V DC, 2.0 A; provides intrinsically safe circuits when connected per installation Drawing Number 960006046 (FTL325P) or 960006074 (FTL325N); entity parameters per table below.

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Project: 2387221



Master Contract: 151079

Date Issued: January 12, 2011

Model FTL325...	Electrical Ratings			Entity Parameters (per Channel)					
	Volts	Hz	mA	Voc/Uo (V)	Isc/Io (mA)	Po (mW)	Groups	La/Lo (mH)	Ca/Co (µF)
P-S.A1	85-250	50/60	39	14.6	97	633	A,B/ IIC	0.5	0.3
P-S.A3	85-250	50/60	72					1.0	0.2
P-S.E1	20-30	50/60	115					1.0	1.0
	20-60	DC	83						
P-S.E3	20-30	50/60	235				5.0	0.5	
	20-60	DC	152						
N-S.A1	85-250	50/60	39	12	34	154	A,B/ IIC	0.5	0.5
N-S.A3	85-250	50/60	58					1.0	0.45
N-S.E1	20-30	50/60	90					1.0	2.0
	20-60	DC	60						
N-S.E3	20-30	50-60	172				5.0	1.5	
	20-60	DC	135						

These barriers must be installed in suitable enclosures in a non-hazardous location or Class I, Division 2, Group A, B, C, D location and provide intrinsically safe circuits for switches, thermocouples, non-inductive resistive devices or CSA Certified entity equipment when installed per manufacturers control drawings. Maximum safe area voltage not to exceed 250 Vrms.

APPLICABLE REQUIREMENTS

- CAN/CSA-C22.2 No. 0-M91 - General Requirements – Canadian Electrical Code, Part II
- 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
- CAN/CSA-E60079-0:02 - Electrical Apparatus for Explosive Gas Atmospheres--Part 0: General Requirements
- CAN/CSA-E60079-11:02 - Electrical Apparatus for Explosive Gas Atmospheres--Part 11: Intrinsic Safety "i"



CSA INTERNATIONAL

Supplement to Certificate of Compliance

Certificate: 1234595

Master Contract: 151079 (LR 53988)

*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
2387221	January 12, 2011	Update to report 1400814 to include new casting compounds for transformers
1995730	April 8, 2008	Update to include Class I, Div. 2 certification
1234595	Aug.16, 2001	Original Certification.



Certificate of Compliance

Certificate: 1234595

Master Contract: 151079

Project: 70101957

Date Issued: 2016-12-02

Issued to: Endress + Hauser GmbH + Co. KG
Hauptstrasse 1
Maulburg, Baden-Württemberg 79690
GERMANY
Attention: Stefan Probst

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



Issued by: *Anil Sodhi*
Anil Sodhi

PRODUCTS

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

[Ex ia] IIC: Class I, Zone 0:

Class I, Div. 2, Groups A, B, C & D Associated Apparatus for

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

- FTL325P and FTL325N Intrinsically Safe Power Supply for Level Limit Transmitters, ratings per table with optional relay contacts rated 250V AC/40V DC, 2.0 A; provides intrinsically safe circuits when connected per installation Drawing Number 960006046 (FTL325P) or 960006074 (FTL325N); entity parameters per table below.



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Project: 70101957

Master Contract: 151079
Date Issued: 2016-12-02

Model FTL325...	Electrical Ratings			Entity Parameters (per Channel)								
	Volts	Hz	mA	Voc/Uo (V)	Isc/Io (mA)	Po (mW)	Groups	La/Lo (mH)	Ca/Co (µF)			
P-S.A1	85-250	50/60	39	14.6	97	633	A,B/ IIC	0.5	0.3			
P-S.A3	85-250	50/60	72					1.0	0.2			
P-S.E1	20-30	50/60	115					C,D/ IIB,IIA	1.0	1.0		
	20-60	DC	83				5.0		0.5			
P-S.E3	20-30	50/60	235				12	34	154	A,B/ IIC	0.5	0.5
	20-60	DC	152								1.0	0.45
N-S.E1	20-30	50/60	90	C,D/ IIB,IIA	1.0	2.0						
	20-60	DC	60		5.0	1.5						
N-S.E3	20-30	50-60	172	20-60	DC	135						

These barriers must be installed in suitable enclosures in a non-hazardous location or Class I, Division 2, Group A, B, C, D location and provide intrinsically safe circuits for switches, thermocouples, non-inductive resistive devices or CSA Certified entity equipment when installed per manufacturers control drawings. Maximum safe area voltage not to exceed 250 Vrms.

APPLICABLE REQUIREMENTS

- CAN/CSA-C22.2 No. 0-2010 - General Requirements – Canadian Electrical Code, Part II
- CAN/CSA-C22.2 No. 61010-1-12 - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
- CSA Std C22.2 No. 213-M1987 - Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
- CAN/CSA-C22.2 No 60079-0-15 - Explosive Atmospheres - Part 0: Equipment – General Requirements
- CAN/CSA C22.2 No. 60079-11:14 - Explosive Atmospheres - Part 11: Equipment protection by Intrinsic safety "i"



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
70101957	2016-12-02	Update to CSA Report 1234595 to include a new switching power supply for FTL 325P/N***.
2387221	2011-01-12	Update to report 1400814 to include new casting compounds for transformers
1995730	2008-04-08	Update to include Class I, Div. 2 certification
1234595	2001-08-16	Original Certification