

# **Certificate of Compliance**

Certificate: 70012655 Master Contract: 204015

**Project:** 80092220 **Date Issued:** 2021-10-20

**Issued To:** ABB Automation GmbH

Stierstädter Strasse 5

Frankfurt am Main, Hesse, 60488

Germany

**Attention: Horst Straka** 

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:** David Steinfeld David Steinfeld







#### **PRODUCTS**

CLASS 8721 06 - ELECTRICAL LABORATORY EQUIPMENT CLASS 8721 86 - ELECTRICAL LABORATORY EQUIPMENT Certified to US Standards

Advance Optima / EasyLine Continuous Gas Analyzers

Type **AO2000 Series** 

Models **AO2020** ID No.: 24041-21**ABCDE**0000**F**,

**AO2040** ID No.: 24041-22**ABCDE**0000**F** or 24041-26**ABCDE**0000**F**;

Rated AC 100-240 V; 50...60 Hz, 187 VA.

A may be 0,1,2,3,4,5,6,7,8 numbers of measuring components included in system

**B** may be 0,1,2,3,4,5,6 not relevant for this certification **C** may be 0 = not marked, 1 = IP20, 2 = IP54, 4 = IP40



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**D** may be 0 = without, 1 = with Power supply connection, 2 = with Power supply and DC 24V connection, 3 = with external DC 24V connection; connection for energy supply [mains or DC 24V]

**E** may be 0 =without, 1 =with housing purge 2 =with special housing purge

**F** may be 0,1,2,3,4,5,6,7 numbers of enclosures in the system

# Type **AO2000-OEM Series**:

Limas23 EGA; ID No.: 24941-33ABCDE10001

Rated DC 24 V; max. 280 W (100 W control supply + 180 W heater supply);

Fidas24 EGA; ID No.: 24841-33ABCDE50001

Rated DC 24 V, max.40 W, AC 115/230 V; 325 VA; 50...60 Hz.

A may be 0,1,2,3,4,5,6 numbers of measuring components included in system

**B** may be 0 not relevant for this certification

C may be 0 = without, 1 = IP20, 4 = IP40

**D** may be 0 =without, 1 =with Power supply connection, 3 =with external DC 24V connection;

connection for energy supply [mains or DC 24V]

**E** may be 0 = without, 1 = with housing purge



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## Type **EL3000 Series**:

Models **EL3020** ID No.: 24042-11**ABCDE**0000**F**,

EL3040 ID No.: 24042-12ABCDE0000F, EL3060 ID No.: 24042-15ABCDE0000F

Rated AC 100-240 V; 50...60 Hz, 187 VA.

**EL3010-IPA/IPA2** ID No.: 24043-64ABCDE0000F,

Rated AC 100...240 V; 50...60 Hz, 100 VA.

**EL3010-C** ID No.: 24043-73**ABCDE**0000**F** 

**EL3010-C** (Fidas24)

Rated DC 24 V, MAX.40 W, AC 115/230 V; 325 VA; 50...60 Hz.

EL3010-C (Uras26) DC 24 V, max.95 W.

**EL3010-C (Magnos206)** 

DC 24 V, max. 50 W.

EL3010-C (Limas23)

DC 24 V, max.115 W.

EL3060-Uras26

DC 24 V, max.95 W.

A may be 0,1,2,3,4,5,6 numbers of measuring components included in system

**B** may be 0,1,2,3,4 not relevant for this certification

C may be 0 = not marked, 1 = IP20, 2 = IP54, 3 = IP65, 4 = IP40

 $\mathbf{D}$  may be 0 = without, 1 = with Power supply connection, 3 = with external DC 24V connection; for energy supply [mains or DC 24V]

**E** may be 0 =without, 1 =with housing purge

**F** may be 1 numbers of enclosures in the system

#### Notes:

- 1. The above models are connected with a detachable cord set, non-detachable (if IP-Option used).
- 2. Equipment Class I, Pollution Degree 2, and Overvoltage Category II.
- 3. Mode of operation: Continuous
- 4. Environmental Conditions: Extended: 5 to  $50^{\circ}$ C (depends on installed certified module), Altitude: 2000 m max, RH  $\leq$  75% non-condensing

## **APPLICABLE REQUIREMENTS**

CSA C22.2 No. 61010-1-12, UPD1:2015, UPD2:2016 Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements

UL 61010-1, 3<sup>rd</sup> Edition (2016)

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



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## **CONDITIONS OF ACCEPTABILITY**

- (1) Equipment is only to be installed by trained persons familiar with the installation, set-up, operation and maintenance of comparable devices and certified as being capable of such work.
- (2) Any investigation on the effect of gases measurements and performances of the unit has to be evaluated at initial startup as well as safety handling of the liquids / gases used within the unit.
- (3) All products which has to be supplied externally (non mains supplied) are required to be supplied by certified power supply only providing reinforced or double insulation for protection against electric shock with output voltages below the limits of 6.3.1 of 61010-1 or 30 Vr.m.s. and 42.4 Vpeak or 60 Vd.c..
- (4) Conditions of Acceptability of certified modules has to be considered separately.
- (5) If the equipment is used in potentially explosive atmospheres, evaluation of EX-protection has to be conducted additionally.
- (6) Performance characteristics are not part of this evaluation.
- (7) If at any time there is a conflict between the system safety provisions and any relevant local (national or regional) requirements, the local requirements always take precedence.



# 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
80092220	2021-10-20	Update of cCSAus Certificate 70012655 Rev. 70046858 for Continuous Gas Analyzer Advance Optima / Easy Line, Type AO2000 Series, AO2000-OEM Series, EL3000 Series to add additional module combination to be used within Models EL3020 and EL3040 according to 61010-1 3rd Edition and update of LOCC without additional testing.
000070046858	2017-02-25	Update of cCSAus certification 70012655 of AO2000 to integrate new EL3000 Series, AO2000-OEM Series and measuring modules Caldos25, Caldos27, Magnos206, Magnos27, Magnos28, Zo23, Fidas24, Uras26 to 61010 3rd Edition.
000070012655	2015-10-07	cCSAus certification of AO2000 Series with measuring module LIMAS21 to 61010 3rd Edition.