



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX ExTC 17.0009X** Page 1 of 5 [Certificate history:](#)  
Issue 0 (2018-06-13)

Status: **Current** Issue No: 1

Date of Issue: 2022-07-12

Applicant: **Compac Industries Ltd**  
52 Walls Road  
Penrose  
Auckland 1061  
**New Zealand**

Equipment: **Compac COM50, COM125 and COM250 Meters and C5000 Encoder**

Optional accessory:

Type of Protection: **Intrinsic Safety 'i'**

Marking: **Ex ib IIA T4 Gb**  
**-40°C ≤ Tamb ≤ +70°C**

Approved for issue on behalf of the IECEx  
Certification Body:

**Justin Gavranich**

Position:

**Certification Authority**

Signature:  
(for printed version)

Date:  
(for printed version)

2022-07-12

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Ex Testing and Certification Pty Ltd**  
1/30 Kennington Drive  
Tomago NSW 2322  
Australia



TESTING & CERTIFICATION



# IECEX Certificate of Conformity

Certificate No.: **IECEX ExTC 17.0009X**

Page 2 of 5

Date of issue: 2022-07-12

Issue No: 1

Manufacturer: **Compac Industries Ltd**  
52 Walls Road  
Penrose  
Auckland 1061  
**New Zealand**

Manufacturing locations: **Compac Industries Ltd**  
52 Walls Road  
Penrose  
Auckland 1061  
**New Zealand**

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

#### TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[AU/EXTC/ExTR17.0012/00](#)

[AU/ExTC/ExTR22.0026/00](#)

Quality Assessment Report:

[AU/TSA/QAR08.0008/09](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX ExTC 17.0009X**

Page 3 of 5

Date of issue: 2022-07-12

Issue No: 1

**EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Compac Meters COM50, COM125, COM250 and C5000 Encoder are metallic enclosures with an internal encoder board. The COM50 contains a C1180 encoder board using Hall effect sensors on the positive displacement rotary vane shaft. The COM125 and COM250 meters use similar Hall effect sensors mounted on a C1163 encoder board. The C5000 Encoder uses a C1111 Encoder board using optical sensors to sense the position of the rotating shaft.

**SPECIFIC CONDITIONS OF USE: YES as shown below:**

Refer to Annexe for details.



# IECEX Certificate of Conformity

Certificate No.: **IECEX ExTC 17.0009X**

Page 4 of 5

Date of issue: 2022-07-12

Issue No: 1

**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**  
Refer to Annexe for details.



# IECEX Certificate of Conformity

Certificate No.: **IECEX ExTC 17.0009X**

Page 5 of 5

Date of issue: 2022-07-12

Issue No: 1

**Additional information:**

Job no: 21084

**Annex:**

[IECEX Certificate Annex Final.pdf](#)

# IECEX Certificate of Conformity



## Annexe



<b>Annexe for Certificate No.:</b>	<b>IECEX ExTC 17.0009X</b>	<b>Issue No.:</b>	<b>1</b>
------------------------------------	----------------------------	-------------------	----------

### Description:

As provided in 'Equipment' section of the certificate.

### Specific Conditions of Use pertaining to Issue 0 of this Certificate:

The following parameters must be observed when connecting in an intrinsically safe circuit:

<b><i>C5000 Encoder with CI111 board</i></b> (Pins 2, 4 and 6 wrt pin 1)	
U <sub>i</sub>	6 V
I <sub>i</sub>	235 mA
P <sub>i</sub>	1.1 W
L <sub>i</sub>	50 µH
C <sub>i</sub>	135 nF

<b><i>COM50 Meter with CI180 board</i></b> (Pins 2, 4 and 6 wrt pin 1)	
U <sub>i</sub>	6 V
I <sub>i</sub>	235 mA
P <sub>i</sub>	1.1 W
L <sub>i</sub>	50 µH
C <sub>i</sub>	6.2 µF

<b><i>COM125/COM250 Meters with CI163 board</i></b> (Pins 2, 4 and 6 wrt pin 1)	
U <sub>i</sub>	6 V
I <sub>i</sub>	235 mA
P <sub>i</sub>	1.1 W
L <sub>i</sub>	50 µH
C <sub>i</sub>	163 nF

Note that while the Encoder Boards are provided with a 2 metre cable, the parameters above consider cable lengths to the maximum extended length of 50 metres.

### Drawing list pertaining to Issue 0 of this Certificate:

<b>Manufacturer's Documents</b>				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
Installation & Safety Data for COM Meters and Encoder	AP398	3	A	2018-06-08
<b>CI111</b>				

# IECEX Certificate of Conformity



## Annexe



<b>Annexe for Certificate No.:</b>	<b>IECEX ExTC 17.0009X</b>	<b>Issue No.:</b>	<b>1</b>
------------------------------------	----------------------------	-------------------	----------

Title:	Drawing No.:	Pages	Rev. Level:	Date:
3 CHANNEL ENCODER CI111 ISSUE B (Circuit Schematic)	CI111	1 of 4	B1	2017-12-11
ENCODER (Top Overlay)	CI111	2 of 4	B	2003-05-08
ENCODER (Top Layer)	CI111	3 of 4	B	2003-05-08
ENCODER (Bottom Layer)	CI111	4 of 4	B	2003-05-08
CP-ENC-3CH (BOM)	CI111P	1	B2	2017-12-12
Rotary Encoder Assembly	SW107	Sht 8	C	2014-11-10
C5000 Control Unit Labels Optical Encoder	AP392	1 of 3	B	2018-06-08
<b>CI163</b>				
COM 125/250 ENCODER (Circuit Schematic)	CI163	1	C2	2017-12-11
COM250 Encoder PCB (Top Overlay)	CI163	2 of 4	C	2003-01-20
COM250 Encoder PCB (Top Layer)	CI163	3 of 4	C	2003-01-20
COM250 Encoder PCB (Bottom Overlay)	CI163	4 of 4	C	2003-01-20
CP-ENC-CI163 (BOM)	CI163P	1	C3	2017-12-12
<b>CI180</b>				
COM 50 SMART ENCODER (Circuit Schematic)	CI180	1 of 4	D1	2017-12-12
COM50 Smart Encoder PCB (Top Overlay)	CI180	2 of 4	D	2010-06-28
COM50 Smart Encoder PCB (Top Layer)	CI180	3 of 4	D	2010-06-28
COM50 Smart Encoder PCB (Bottom Layer)	CI180	4 of 4	D	2010-06-28
CP-ENC-CI180EW (BOM)	CI180P	1	D1	2017-12-12
<b>Common Drawings for CI163 and CI180</b>				

# IECEX Certificate of Conformity



## Annexe



Annexe for Certificate No.:

IECEX ExTC 17.0009X

Issue No.:

1

Title:	Drawing No.:	Pages	Rev. Level:	Date:
**Electrical Approvals Com Meter Encoder Assembly	SW052	Sheet 07	D	2013-10-22
C5000 Control Unit Labels COM Series Meters	AP392	2 of 3	B	2018-06-08
C5000 Control Unit Labels COM Series Meters with gland	AP392	3 of 3	B	2018-06-08

Note: \*\* Title editorially corrected in issue 1.

### Variations permitted by Issue 1 of this certificate:

- Equipment assessed to IEC60079-0:2017 and IEC60079-11:2011.
- New alternative housing for the COM50AL, COM125AL and COM250AL meters.

### Specific Conditions of Use pertaining to Issue 1 of this certificate:

The conditions remain unchanged from the prior issue.

### Drawings Associated with the Issue 1 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
Installation & Safety Data for COM Meters and Encoder	AP398	3	B	2021-05-14
C5000 Control Unit Labels Optical Encoder & COM aluminium bodies	AP392	1 of 3	C	2021-05-14
C5000 Control Unit Labels COM Series Meters	AP392	2 of 3	C	2021-05-14
C5000 Control Unit Labels COM Series Meters with gland	AP392	3 of 3	C	2021-05-14
Com Meters COM Meter Encoder Assembly	MAD0220A	1	A	2021-03-24