IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx ExTC 18.0016X

Issue No: 0

Certificate history:
Issue No. 0 (2019-01-29)

Status: **Current**

Date of Issue: **2019-01-29**

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

Equipment: **Compac Coriolis Meters - V50 and KG100**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking:

Ex ib IIA T4 Gb

-40°C ≤ Tamb ≤ +70°C

Approved for issue on behalf of the IECEx Certification Body: James Bes

Position: Certifying Authority

Signature:
(for printed version)

Date: 2019-01-29

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 the Official IECEx Website.

Certificate issued by:

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

TESTING & CERTIFICATION

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

Additional Manufacturing location(s):

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 apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-0 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*This Certificate **does not** indicate compliance with electrical 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 Report:

AU/EXTC/ExTR18.0014/00

Quality Assessment Report:

AU/TSA/QAR08.0008/06

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Compac V50 and KG100 Meters are Coriolis flow meters.

The V50 Meter enclosure is made from polycarbonate or polycarbonate/ABS. External connection to the V50 Meter is made via an integral cable up to 5 metres in length terminated with a 10 pin receptacle. An extension cable extending the total length of cable to 50 metres may also be used.

The KG100 Meter enclosure is made from zinc coated mild steel (Zintex) with a powder coat finish. The KG100 Meter may be fitted with either a CI508 or CI520 Adaptor board.

External connection to the KG100 Meter (with CI508) is made via an integral 6 core cable up to 5 metres in length terminated with a 10 pin receptacle. An extension cable extending the total length of cable to 50 metres may also be used for the KG100 Meter (with CI508).

External connection to the KG100 Meter (with CI520) is made via an integral 15 core cable up to 5 metres in length terminated with a 5 pin connector (J200 - for factory programming only), an 18 pin connector (J201) and a 10 pin connector (J202). An extension cable extending the total length of cable to 10 meters may also be used for the KG100 Meter (with CI520).

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annexe for details.

Annex:

IECEx ExTC 18.0016X-0 Annexe Final.pdf

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Annexe

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Description (Cont'd from certificate):

Refer to certificate

Conditions of Certification pertaining to Issue 0 of this Certificate:

The following parameters shall be considered when connecting the equipment to an intrinsically safe circuit:

V50 Meter J1 (Doc CI225 Schematics Sht 5)	
Ui	6 V
Ii	235 mA
Pi	1.1 W
Li	50 µH
Ci	137 µF

KG100 Meter (with CI508) J201 (Doc CI508 Schematics Sht 2)	
Ui	6 V
Ii	235 mA
Pi	1.1 W
Li	50 µH
Ci	137 µF

KG100 Meter (with CI520)	
J201 (Doc CI520 Schematics Sht 2)	
Ui	17.5 V
Ii	1.7 A
Pi	29.75 W
Li	10 µH
Ci	3 nF
J202 (Doc CI520 Schematics Sht 2)	
Ui	6 V
Ii	235 mA
Pi	1.05 W
Li	10 µH
Ci	146 µF

For the KG100 with CI520 Adaptor board, programming connector J200 (5 pin connector) shall not be connected in the hazardous area and is only used for factory programming.

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Annexe

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Drawing list pertaining to Issue 0 of this Certificate:

Manufacturer's Documents

Title:	Drawing No.:	Pages	Rev. Level:	Date:
Drawings common to V50 and KG100 Coriolis Meters				
Coriolis Meter - MSP *(Schematic)*	CI225	Sheets 1 to 5 of 9	D	2018-09-03
Coriolis Meter - MSP *(Top Overlay)*	CI225	Sheet 6 of 9	D	2018-09-03
Coriolis Meter - MSP *(Top Layer)*	CI225	Sheet 7 of 9	D	2018-09-03
Coriolis Meter - MSP *(Bottom Layer)*	CI225	Sheet 8 of 9	D	2018-09-03
Coriolis Meter - MSP *(Bottom Overlay)*	CI225	Sheet 9 of 9	D	2018-09-03
CP-MICRO-CI225 *(BOM)*	CI225P	1	D	2018-09-03
Coriolis Meter - DSP *(Schematic)*	CI226	Sheets 1 to 6 of 13	D	2018-09-03
Coriolis Meter - DSP *(Top Overlay)*	CI226	Sheet 7 of 13	D	2018-09-03
Coriolis Meter - DSP *(Top Layer)*	CI226	Sheet 8 of 13	D	2018-09-03
Coriolis Meter - DSP *(Mid Layer 1)*	CI226	Sheet 9 of 13	D	2018-09-03
Coriolis Meter - DSP *(Mid Layer 2)*	CI226	Sheet 10 of 13	D	2018-09-03
Coriolis Meter - DSP *(Bottom Layer)*	CI226	Sheet 11 of 13	D	2018-09-03
Coriolis Meter - DSP *(Bottom Overlay)*	CI226	Sheet 12 of 13	D	2018-09-03
Coriolis Meter - DSP *(Epoxy mask)*	CI226	Sheet 13 of 13	D	2018-09-03

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Title:	Drawing No.:	Pages	Rev. Level:	Date:
CP-DSP-CI226 *(BOM)*	CI226P	1	D	2018-09-03
Meter Display *(Schematic)*	CI516	Sheet 1 of 5	A	2018-05-15
Compac Meter Display *(Top Overlay)*	CI516	Sheet 2 of 5	A	2018-05-15
Compac Meter Display *(Top Layer)*	CI516	Sheet 3 of 5	A	2018-05-15
Compac Meter Display *(Bottom Layer)*	CI516	Sheet 4 of 5	A	2018-05-15
Compac Meter Display *(Bottom Overlay)*	CI516	Sheet 5 of 5	A	2018-05-15
Meter *(BOM)*	CI516P	1	A	2018-05-15
C5000 Control Unit Labels *(V50 & KG100 Meter)*	AP392	Sheets 6 and 7	B	2019-01-24
V50 Coriolis Meter Drawings				
Rigid Flex Connector *(Schematic)*	CI231	Sheet 1 of 7	C	2018-09-03
Rigid Flexi Connector *(Top Overlay)*	CI231	Sheet 2 of 7	C	2018-09-03
Rigid Flexi Connector *(Top Layer)*	CI231	Sheet 3 of 7	C	2018-09-03
Rigid Flexi Connector *(Flex Top Layer)*	CI231	Sheet 4 of 7	C	2018-09-03
Rigid Flexi Connector *(Flex Bottom Layer)*	CI231	Sheet 5 of 7	C	2018-09-03
Rigid Flexi Connector *(Bottom Layer)*	CI231	Sheet 6 of 7	C	2018-09-03
Rigid Flexi Connector *(Bottom Overlay)*	CI231	Sheet 7 of 7	C	2018-09-03
CP-RFLEXI-CI231 *(BOM)*	CI231P	1	C	2018-09-03

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Title:	Drawing No.:	Pages	Rev. Level:	Date:
Installation & Safety Data for V50 Meter	AP400	2	A	2019-01-22
LPG Meter *(Overall Dimension - Sh 1, Assembly - Sh 2 and Seal Details - Sh 3)*	MAD0048B	3	B	2015-10-12
KG100 Coriolis Meter Drawings				
KG100 Adaptor *(Schematic)*	CI508	Sheets 1 and 2 of 5	B	2018-09-04
KG100 Adaptor *(Top Overlay)*	CI508	Sheet 3 of 5	B	2018-09-04
KG100 Adaptor *(Top Layer)*	CI508	Sheet 4 of 5	B	2018-09-04
KG100 Adaptor *(Bottom Layer)*	CI508	Sheet 5 of 5	B	2018-09-04
CP-C5K-KG-ADPT *(BOM)*	CI508P	1	B	2018-09-04
KG100 Adaptor *(Schematic)*	CI520	Sheets 1 to 4 of 8	A	2018-08-31
KG100 Adaptor *(Top Overlay)*	CI520	Sheet 5 of 8	A	2018-08-31
KG100 Adaptor *(Top Layer)*	CI520	Sheet 6 of 8	A	2018-08-31
KG100 Adaptor *(Bottom Layer)*	CI520	Sheet 7 of 8	A	2018-08-31
KG100 Adaptor *(Bottom Overlay)*	CI520	Sheet 8 of 8	A	2018-08-31
CP-C5K-4K-KG-ADP *(BOM)*	CI520P	2	A	2018-08-31
Rigid Flexi Connector *(Top Layer)*	CI263	Sheet 3 of 7	B	2018-08-30
Rigid Flexi Connector *(Flexi-Top Layer)*	CI263	Sheet 4 of 7	B	2018-08-30

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Title:	Drawing No.:	Pages	Rev. Level:	Date:
Rigid Flexi Connector *(Flexi-Bottom Layer)*	CI263	Sheet 5 of 7	B	2018-08-30
Rigid Flexi Connector *(Bottom Layer)*	CI263	Sheet 6 of 7	B	2018-08-30
CP-MTR-TMPFLX *(BOM)*	CI263P	1	B	2018-08-31
Installation & Safety Data for KG100 Meter with CI508	AP401	2	A	2019-01-22
Installation & Safety Data for KG100 Meter with CI520	AP404	3	A	2019-01-24
KG100 Meter - Display assembly	ASM0057B	1	B	2108-10-09
350 BAR KG Meter *(Materials - Sh 1 and Overall Dimensions - Sh 2 & 3)*	MAD0028B	3	B	2014-10-20
Coriolis Meter Wiring	AP403	5	A	2018-10-29