

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 18 ATEX 8329 X

Issue: 00

- (4) Equipment: **User Interface and Controller Model C5000 PINPad**
- (5) Manufacturer: **Compac Industries Ltd**
- (6) Address: **52 Walls Road, Penrose, Auckland 1061, New Zealand**

- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex 8329.00/18

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079-0:2018

EN 60079-11:2012

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



II 2 G Ex ib IIA T4 Gb -40°C ≤ Tamb ≤ +70°C (PINPad + Card Reader)
II (2) G [Ex ib Gb] IIA -40°C ≤ Tamb ≤ +70°C (PINPad + HID Reader)

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2019-04-01

Dipl.-Ing. Klauspeter Graffi

This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
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(13) Annex

(14) **EU Type Examination Certificate**
TÜV 18 ATEX 8329 X Issue: 00

(15) Description of equipment

15.1 Equipment and type:

User Interface and Controller Model C5000 PINPad

15.2 Description / Details of Change

General product information

The C5000 PINPad comprises a main PCB with circuit components on one side of the PCB and an LCD panel on the other side and provides an interface for user input via a membrane keypad and an optional card reader or HID reader (latter for safe area use only).

The C5000 PINPad has a polycarbonate front cover and a metallic rear cover. When installed, the PINPad is secured to a metallic panel with a cut-out to provide viewing the LCD screen. This option is intended to be installed in the hazardous area.

The C5000 PINPad may also be provided in its own steel enclosure of dimensions approximately 155mm x 170mm x 115mm. The C5000 PINPad Box is fitted with a clear window and a membrane keypad and may also be fitted with a card reader or HID reader mounted on the side of the enclosure. When fitted with a HID reader the C5000 PINPad Box may only be installed in a safe area but connected to intrinsically safe circuits - refer to conditions of use for further details and parameters.

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Technical Data

Electrical Data

The following input and output parameters were determined for the connectors on the C5000 PINPad and must be taken into account during interconnection to external equipment:

Connector J1 (BUS-IN) <small>see Note 1</small>	
5V & RS485	Pins 1, 2 & 6 w.r.t. Pins 3, 4, 5 & 7
U _i	6 V
I _i	235 mA
P _i	1.05 W
L _i	2 µH
C _i	8 µF
9V	Pin 8 w.r.t. Pins 3, 4, 5 & 7
U _i	10 V
I _i	1 A
P _i	10 W
L _i	0 µH
C _i	0 µF

Note 1: Connector J2 (BUS-OUT) is connected in parallel to J1, and hence has the same parameters with the pin numbers allocated as follows:

Circuit reference	J1 Pin #	J2 Pin #
9V	8	6
5V	2	3
A	6	8
B	1	4
Earth, Screen	3, 4, 5, 7	1, 2, 5, 7, 9, 10

Connector J3	
For connection to membrane keypad (simple apparatus).	
5V Output	Pin 1 w.r.t. Pin 2 (all connections considered in parallel)
U _o	6 V
I _o	6 mA
P _o	8.5 mW
L _o	2 µH
C _o	0.3 µF

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Thermal Data

Ambient temperature

T_{amb} -40°C ≤ to ≤ +70°C

PINPad + Card Reader: T4

(16) Test-Report No. 557/Ex 8329.00/18

(17) Special Conditions for safe use

- (1) The C5000 PINPad box with a HID reader installed on the side of the enclosure shall only be installed in a safe area. This version of the C5000 PINPad must be supplied by an intrinsically safe source and the parameters above apply.
- (2) In order to maintain a degree of protection IP23,
 - the card reader shall be mounted vertically with the card reader heads at the top
 - the PINPad in a stand-alone enclosure shall be mounted vertically

Any other mounting configuration is considered to be IP20 only.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

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