

(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 8227 X

Issue: 00

- (4) Equipment: **Slave Display**
- (5) Manufacturer: **Compac Industries Ltd**
- (6) Address: **52 Walls Road, Penrose Auckland
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/Ex8227.00/18
- (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 60079-0:2012/A11:2013 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 (-40°C ≤ Ta ≤ +70°C)

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2018-06-29

Dipl.-Ing. Klauspeter Graff

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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
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13) Annex

(14) **EU Type Examination Certificate**
TÜV 18 ATEX 8227 X Issue: 00

(15) Description of equipment

15.1 Equipment and type:

Slave Display

15.2 Description / Details of Change

General product information

The Slave Display comprises a CI503 Slave Display Board, with either a CI252 or CI253 LCD Panel PCB directly mounted to the Slave Display Board, and a totaliser, all housed in a plastic enclosure with a polycarbonate front cover. A metal bracket used to mount the totaliser is accessible from outside the plastic enclosure.

The Slave Display is designed to form part of an intrinsically safe control system, and is powered via the BUS-IN connector J1. Connections are provided for 5 V and 9 V IS supplies, common ground and RS485 communications. The Slave Display provides a BUS-OUT connector J2 which is directly connected to BUS-IN connector J1 (though the pin numbers on J1 for the various circuits are not the same as the pin numbers on J2) for through connected 5 V and 9 V IS supplies, common ground and RS485 communications.

In addition to the BUS-IN and BUS OUT connectors, the Slave Display Board (CI503) provides connector J300 for a totalizer mounted internal to the enclosure

Technical Data

Nominal input voltage 5V and 9V

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(16) Test-Report No. 557 / Ex 8227.00/18

(17) Special Conditions for safe use

The following input and output parameters were determined for the connectors on the Slave Display and must be taken into account during interconnection:

Connector J1 (BUS-IN) <small>see Note 1</small>	
5V & RS485	Pins 1, 2 & 6 w.r.t. Pins 3, 4, 5 & 7
Ui	6 V
Ii	235 mA
Pi	1.05 W
Li	0 μ H
Ci	5.5 μ F
Io	2 mA <small>see Note 2</small>
Po	3 mW <small>see Note 2</small>
9V	Pin 8 w.r.t. Pins 3, 4, 5 & 7
Ui	10 V
Ii	1 A
Pi	10 W
Li	0
Ci	0

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

Note 2: The terminals on the 5V circuit may be considered under fault to be connected to an internal source of supply due to a supercapacitor that may charge up to the applied Ui but is limited by internal resistance to provide the Io and Po shown in this table. This needs to be accounted for when connecting in a system.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

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