



## EC Type Examination Certificate    CML 14ATEX3021X    Issue 1

- 1    Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC
- 2    Equipment    **Nautilus Terminal Enclosure Range**
- 3    Manufacturer    **Abtech Ltd**
- 4    Address    199 Newhall Road,  
Lower Don Valley,  
Sheffield,  
S9 2QJ,  
UK
- 5    The equipment is specified in the schedule of this certificate and the documents to which it refers.
- 6    Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, in accordance with Article 9 of Directive 94/9/EC, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
  
The examination and test results are recorded in the confidential reports listed in Section 12.
- 7    If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8    This EC Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 94/9/EC Article 8 apply to the manufacture of the equipment or component and are separately certified.
- 9    Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

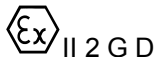
EN 60079-0:2012

EN 60079-7:2007

EN 60079-11:2012

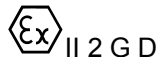
IEC 60079-31:2013

- 10    The equipment shall be marked with the following:



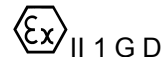
II 2 G D

Ex e IIC T5 Gb  
Ex tb IIIC T100°C Db  
Ta= -50°C to +55°C



II 2 G D

Ex ib IIC T5 Gb  
Ex tb IIIC T100°C Db  
Ta= -50°C to +55°C



II 1 G D

Ex ia IIC T5 Ga  
Ex ta IIIC T100°C Da  
Ta= -50°C to +55°C



CML 14ATEX3021X  
Issue 1

## 11 Description

The Nautilus range of terminal boxes are submersible enclosures and are fitted with an arrangement of suitably certified terminals. The Nautilus terminal enclosures are constructed from a flanged stainless steel enclosure base and flat lid. The lid is fixed in place with stainless steel M12 bolts, and the internal and external joints of the enclosure base are fully welded. Additionally the lid may be hinged.

A solid silicone O-ring gasket is fitted into the base lip and provides sealing with the enclosure lid.

Cable entries may be provided on the base, top, sides or back of the enclosure and an external and optional internal earth stud (M6 or larger) is provided on all enclosure.

Enclosures may also contain slotted metallic or non-metallic trunking.

Additionally, lifting eyelets and mounting lugs can be provided and are welded to the enclosure base and lid.

The Nautilus range of terminal boxes are manufactured in the following standard sizes:

NAUTILUS Ref.	Internal dimensions		
	Length (mm)	Width (mm)	Depth (mm)
NAUT1	130	100	50
NAUT2	230	170	140
NAUT3	340	170	140
NAUT3A	340	220	140
NAUT4	400	210	190
NAUT5	350	250	190
NAUT6	390	310	190
NAUT7A	530	270	210
NAUT7B	430	370	210
NAUT8	490	400	240
NAUT9	630	250	240
NAUT10	690	340	250
NAUT11	1020	570	390

The enclosures may also be manufactured to sizes not specified in the above table. This assumes that any given dimension is not larger than the respective dimension of the largest or smaller than the respective dimension of the smallest enclosure.

Before the terminal box is installed, its total dissipated power for the particular application will be calculated in accordance with EN 60079-7, Annex E (E.2) and shall not exceed the values given in the table below:



**CML 14ATEX3021X  
Issue 1**

NAUTILUS Ref.	Internal dimensions			Max. Power Dissipation (W) Ga, Gb, Db	Max. Power Dissipation (W) Da
	Length (mm)	Width (mm)	Depth (mm)		
NAUT1	130	100	50	9.3	4.65
NAUT2	230	170	140	19	9.5
NAUT3	340	170	140	22	11
NAUT3A	340	220	140	29	14.5
NAUT4	400	210	190	32	16
NAUT5	350	250	190	32	16
NAUT6	390	310	190	36	18
NAUT7A	530	270	210	42	21
NAUT7B	430	370	210	42	21
NAUT8	490	400	240	44	22
NAUT9	630	250	240	44	22
NAUT10	690	340	250	50	25
NAUT11	1020	570	390	68	34

### Variation 1

This variation introduces the following modifications:

- i. To allow the product reference name to be changed for clarity, from 'SSD Range of Terminal Enclosures' to 'Nautilus range of Terminal Enclosures'. The description and Conditions of manufacture have been updated to include the new reference.

### 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	30 Apr 2015	R152A/00	Issue of prime certificate
1	23 Jan 2015	R314C/00	To introduce variation 1

Note: Drawings that describe the equipment or component are listed in the Annex.

### 13 Conditions of manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- 13.1 The equipment covered by this certificate incorporate the use of previously certified components, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these components. The manufacturer shall notify CML of any modifications to the components that may impinge upon the explosion safety aspects of the Nautilus terminal enclosures.



**CML 14ATEX3021X  
Issue 1**

- 13.2 The power rating marking on the label will be allocated in accordance with the table detailed in the 'Description of Equipment'.
- 13.3 The manufacturer will take all reasonable steps to ensure that the power dissipated by the Terminal box does not exceed the maximum value stipulated the table detailed in the 'Description of Equipment', and shall supply all the relevant information that will allow the installer/user to calculate the power dissipation (Watts) in accordance with EN 60079-7, Annex E, E.2 for each terminal box.
- 13.4 When terminals are supplied with the enclosure, they shall be ATEX approved components, chosen from the Abtech 'Approved Component Document – Sira 12AC087 and having a minimum insulation temperature of -50°C to +100°C. All terminals shall be installed in accordance with their Conditions of Safe Use/Schedule of Limitations/Conditions of Certification and the relevant codes of practice/wiring regulations, specifically to the minimum creepage and clearance requirements and to any limitations to ratings that may be observed due to method of installation.
- 13.5 When the Nautilus enclosure is fitted with terminals and components are wired by the manufacturer, a routine electric strength shall be carried out in accordance with the latest edition of the following standards:

Title	European standards
Industrial control equipment	EN 60947
Measurement, control and laboratory use	EN 61010

#### **14 Special Conditions for Safe Use (Conditions of Certification)**

The following conditions relate to safe installation and/or use of the equipment.

- 14.1 When used for Ex ia, Ex ib or Ex ta applications, over-power fault protection shall be provided and shall take into account the 'EPL' fault requirements necessary:
- Ex ia - Ga and Ex ta - Da applications – Two countable faults are to be applied to the current and/or voltage limiter.
  - Ex ib – Gb applications – One countable fault is to be applied to the current and/or voltage limiter.

## Certificate Annex



**Certificate Number** CML 14ATEX3021X  
**Equipment** Nautilus Terminal Enclosure Range  
**Manufacturer** Abtech Ltd

The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
ABT26976	1 of 1	A	10/04/2014	Certification Drawing NAUTILUS IP68 Enclosure
ABT26977	1 of 1	A	10/04/2014	NAUTILUSIP68 Certification label
ABT23598	1 to 18	A	10/04/2014	Weidmuller terminal list ATEX
ABT23599	1 to 25	A	10/04/2014	Phoenix terminal list ATEX
ABT23600	1 to 23	A	10/04/2014	Wago terminal list ATEX

### Issue 1

Drawing No	Sheets	Rev	Approved date	Title
ABT26977	1 of 1	B	23/01/2015	Nautilus Certification Label
ABT26976	1 of 1	B	23/01/2015	Certification drawing Nautilus Enclosure