



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 BAS 09.0090X** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2009-08-28** Page 1 of 3

Applicant: **ABTECH Limited
5 Sanderson Street
Sheffield
S9 2UA
United Kingdom**

Electrical Apparatus: **ABAD and ABRE Range of Thread Adaptors & Reducers**
Optional accessory:

Type of Protection: **Flameproof, Increased Safety and Dust Protection by Enclosure**

Marking: **Ex d IIC Ex e II Ex tD A21 IP66**

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position: **Managing Director**

Signature:
(for printed version)

28/08/2009

Date:

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:

**Baseefa
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom**





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Manufacturer: **ABTECH Limited**
5 Sanderson Street
Sheffield
S9 2UA
United Kingdom

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 electrical 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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
IEC 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-1 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

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:

GB/BAS/ExTR09.0126/00

Quality Assessment Report:

GB/BAS/QAR07.0030/01

GB/SIR/QAR06.0046/01



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The ABAD range of thread adaptors and ABRE range of thread reducers are manufactured in nickel plated brass and may be supplied in metric or NPT threadforms. The internal and external thread sizes may vary between M16 and M85 (or NPT equivalent) with the female thread being either smaller, or up to three sizes larger, than the male.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. If the adaptors are intended for use with increased safety (Ex e) or dust tight (Ex tD) enclosures, the threads should be sealed to maintain an IP 54 or IP6X respectively in accordance with IEC 60079-14.
2. Only one thread adaptor is permitted for each cable entry, blanking elements shall not be used with adaptors.

ABAD Adaptor & ABRE Reducer

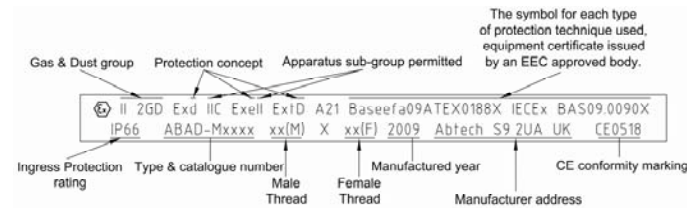


Installation Procedure



- 1) It is important that the size of the corresponding threads of equipment to be connected is measured carefully to ensure correct connection with the adaptor or reducer. Check the attached tables to ensure compatibility of thread variations.
- 2) In order to maintain the IP rating of the enclosure it may be necessary to fit a suitable sealing washer or non setting sealing compound to the threads.
- 3) Fit the adaptor or reducer to the apparatus and tighten until resistance is felt. Using a suitable spanner or wrench, tighten a further 1/2 to 3/4 of a turn.
Fit the cable gland to the adaptor or reducer and tighten until resistance is felt, then using a suitable spanner or wrench, tighten a further 1/2 to 3/4 of a turn.
- 4) For flameproof applications, Ex d, the user must ensure that a minimum of 5 full threads are engaged on both the adaptor or reducer and the cable gland and apparatus.

ATEX and IEC EX Marking details



Special Conditions for Safe Use

1. If the adaptors are intended for use with increased safety (Ex e) or dust tight (Ex tD) enclosures, the threads should be sealed to maintain an IP 54 or IP6X respectively in accordance with IEC/EN 60079-14.
2. Only one thread adaptor is permitted for each cable entry, blanking elements shall not be used with adaptors.

ABTQ-86
Revision Date: 13.08.2009 rev00

Adaptor Selection Chart

Gland Thread Size (NPT)	Part No	Thread size (NPT)		Hexagon Dimensions		D'	Min. Thread Length °C
		Ni (Female)	N (Male)	"H"	"P"		
NPT 3/4"	ABAD-N3412	3/4"	1/2"	32	35	14.5	15.5
NPT 1"	ABAD-N3112	1"	1/2"	40	44	14.5	15.5
	ABAD-N134		3/4"	20.0	16		
NPT 1 1/4"	ABAD-N11434	1 1/4"	3/4"	45.8	51.2	20.2	16
	ABAD-N1141		1"	26.5	20		
NPT 1 1/2"	ABAD-N1121	1 1/2"	1"	45.8	51.2	26.5	20
	ABAD-N12114		1 1/4"	32.5	20		
NPT 2"	ABAD-N2114	2"	1 1/4"	65	72	32.5	20
	ABAD-N2112		1 1/2"	42.5	20.5		
NPT 2 1/2"	ABAD-N21212	2 1/2"	1 1/2"	80	89.5	42.5	20.5
	ABAD-N2122		2"	54.5	21		
NPT 3"	ABAD-N32	3"	2"	100	110	54.5	21
	ABAD-N3212		2 1/2"	66.4	32		
NPT 4"	ABAD-N4212	4"	2 1/2"	125	137	66.4	32
	ABAD-N43		3"	68.4	33.5		

Gland Thread Size (Metric)	Part No	Thread size (NPT)		Hexagon Dimensions		D'	Min. Thread Length °C
		Ni (Female)	N (Male)	"H"	"P"		
M20	ABAD-M2016	M20X1.5	M16X1.5	24	26.8	11	
	ABAD-M2516	M25X1.5	M16X1.5	30	33.5	11	
M25	ABAD-M2520	M25X1.5	M20X1.5	30	33.5	15	
	ABAD-M2716	M27X1.5	M16X1.5			11	
M32	ABAD-M3220	M32X1.5	M20X1.5	36	40.5	15	
	ABAD-M3225	M32X1.5	M25X1.5			20.2	
M40	ABAD-M4020	M40X1.5	M20X1.5			15	
	ABAD-M4025	M40X1.5	M25X1.5	45.8	51.2	20.2	
M50	ABAD-M4032	M40X1.5	M32X1.5			26.5	
	ABAD-M5025	M50X1.5	M25X1.5			20.2	
M50	ABAD-M5040	M50X1.5	M20X1.5	55	61.5	26.5	15
	ABAD-M5040	M50X1.5	M40X1.5			26.5	
M63	ABAD-M6340	M63X1.5	M40X1.5	70	77	32.5	
	ABAD-M6350	M63X1.5	M50X1.5			44.5	
M75	ABAD-M7540	M75X1.5	M40X1.5			32.5	
	ABAD-M7550	M75X1.5	M50X1.5	80	88.5	44.5	
M85	ABAD-M7563	M85X1.5	M50X1.5			56.5	
	ABAD-M8550	M85X1.5	M63X1.5	90	99	44.5	
ABAD-M8563	M85X1.5	M75X1.5			56.5		
ABAD-M8575	M85X1.5	M75X1.5			68.3		

Reducer Selection Chart

Gland Thread Size (Metric)	Part No	Thread size (NPT)		Hexagon Dimensions		Min. Thread Length °C
		Ni (Female)	N (Male)	"H"	"P"	
M16	ABRE-M1625	M16X1.5	M25X1.5	30	33.5	
	ABRE-M1632		M32X1.5	36	40.5	
M20	ABRE-M2025	M20X1.5	M25X1.5	30	33.5	
	ABRE-M2032		M32X1.5	36	40.5	
M25	ABRE-M2040	M25X1.5	M40X1.5	45.8	51.2	
	ABRE-M2532		M32X1.5	36	40.5	
M25	ABRE-M2540	M25X1.5	M40X1.5	45.8	51.2	
	ABRE-M2550		M50X1.5	55	61.5	
M32	ABRE-M3240	M32X1.5	M40X1.5	45.8	51.2	
	ABRE-M3250		M50X1.5	55	61.5	
M40	ABRE-M4050	M40X1.5	M50X1.5	55	61.5	
	ABRE-M4063		M63X1.5	70	77	
M50	ABRE-M4075	M50X1.5	M75X1.5	80	88.5	
	ABRE-M5063		M63X1.5	70	77	
M63	ABRE-M5075	M63X1.5	M75X1.5	80	88.5	
	ABRE-M5085		M85X1.5	90	99	
M75	ABRE-M6375	M75X1.5	M85X1.5	80	88.5	
	ABRE-M6385		M85X1.5	90	99	
M85	ABRE-M7585	M85X1.5	M85X1.5	90	99	

Gland Thread Size (Metric)	Part No	Thread size (NPT)		Hexagon Dimensions		Min. Thread Length °C
		Ni (Female)	N (Male)	"H"	"P"	
N 1/2"	ABRE-N1234	1/2"	3/4"	30	33.5	16
	ABRE-N121		1"	36	40.5	20
N 3/4"	ABRE-N12114	1/2"	1 1/4"	45.8	51.2	20
	ABRE-N341		1"	36	40.5	20
N 1"	ABRE-N34114	3/4"	1 1/4"	45.8	51.2	20
	ABRE-N34112		1 1/2"	52	57.5	20.5
N 1 1/4"	ABRE-N1114		1 1/4"	45.8	51.2	20
	ABRE-N1112		1 1/2"	52	57.5	20.5
N 1 1/2"	ABRE-N12		2"	63	70	21
	ABRE-N11412	1 1/4"	2"	63	70	21
N 1 1/2"	ABRE-N1142		2 1/2"	80	88.5	32
	ABRE-N1122		2"	63	70	21
N 2"	ABRE-N12212	1 1/2"	2 1/2"	95	104.5	33.5
	ABRE-N123		3"	95	104.5	33.5
N 2 1/2"	ABRE-N2212		2 1/2"	90	98.5	32
	ABRE-N24		3"	95	104.5	33.5
N 3"	ABRE-N24		4"	125	137	36
	ABRE-N2123	2 1/2"	3"	95	104.5	33.5
N 3"	ABRE-N2124		4"	125	137	36
	ABRE-N34		4"	125	137	36

Certification Details

Certificate Number: ATEX: Baseefa09ATEX0188X, IEC Ex: IEC ExBAS09.0090X
Coding: II 2GD Ex d IIC Ex e II Ex tD A21
Ambient Temperature: Not Applicable
Ingress Protection: IP 66

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