



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 DEK 13.0075 Issue No: 2 Certificate history:
Status: **Current** Issue No. 2 (2018-04-25)
Date of Issue: **2018-04-25** Issue No. 1 (2015-02-13)
Page 1 of 4 Issue No. 0 (2013-12-20)
Applicant: **BARTEC NEDERLAND B.V.**
Boelewerf 25
2987 VD Ridderkerk
The Netherlands
Equipment: **Control/distribution panels, Series BARTEC B/C/D/E and BARTEC B/C/D/E-ASSEMBLY**
Optional accessory:
Type of Protection: **d e i m o p q a n d t**
Marking:
BARTEC B (-ASSEMBLY): Ex db ... IIB / IIB + H₂ T6 ... T3 Gb
BARTEC C (-ASSEMBLY): Ex db ... IIC T6 ... T3 Gb
BARTEC D (-ASSEMBLY): Ex tb ... IIIC T80 °C ... T130 °C Db
BARTEC E (-ASSEMBLY): Ex eb ... IIB / IIC T6 ... T3 Gb
BARTEC E (-ASSEMBLY): Ex ia / ib ... IIB / IIC T6 ... T4 Gb

Additional markings are provided depending on the certified components used in the actual construction.

Approved for issue on behalf of the IECEx
Certification Body:

T. Pijpker

Position:

Certification Manager

Signature:
(for printed version)

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](http://www.iecex.com).

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands





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Manufacturer: **BARTEC NEDERLAND B.V.**
SEE ANNEX FOR ALL MANUFACTURING LOCATIONS
The Netherlands

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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18 : 2017 Edition:4.1	Explosive atmospheres - Part 18: Protection by encapsulation "m"
IEC 60079-28 : 2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-5 : 2015 Edition:4.0	Explosive atmospheres -Part 5: Equipment protection by powder filling "q"
IEC 60079-7 : 2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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:

[NL/DEK/ExTR13.0080/02](#)

Quality Assessment Report:

[DE/TUN/QAR06.0017/09](#)

[GB/ITS/QAR15.0008/01](#)

[NL/DEK/QAR11.0034/04](#)

[NL/DEK/QAR12.0059/03](#)

[NL/DEK/QAR12.0061/04](#)

[NO/NEM/QAR07.0003/10](#)

[SI/SIQ/QAR11.0003/04](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The control / distribution panels consist of one (Series BARTEC B/C/D/E) ore more (Series BARTEC B/C/D/E-ASSEMBLY) enclosures made of aluminium, stainless steel, sheet steel, carbon steel or black reinforced polyester, as applicable and depending on the type of protection. The enclosures accomodate measuring, control and switchgear as well as terminals for intrinsically and/or non-intrinsically safe circuits and may be fitted with actuator elements, indicator lights and inspection windows. Field wiring connections are made either direct by means of suitable certified cable entries and/or plugs and sockets or indirect using connection boxes mounted to the main enclosure.

See Annex for further details.

TECHNICAL DATA

Rated supply voltage and current: maximum 1000 Vac / 1500 Vdc; maximum 1000 A

Working voltage: maximum 25 kV (Ex db and Ex tb) or 11 kV (Ex eb)

Conductor cross area: maximum 800 mm²

Ambient temperature range: -60 °C to +80 °C maximum

Degree of ingress protection: IP54 up to IP66/67/68

The actual technical data, types of protection, ambient temperature range, IP rating and EPL depend on the applied equipment and components and are indicated on the marking label.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 2:

- Assessment to the latest editions of the applicable standards
- Addition of new manufacturing location
- Deletion of Ex p
- Addition of various types of enclosures
- Extension of maximum ambient temperature range
- Extension of maximum conductor cross sectional area
- Addition of IP68 degree of ingress protection

Annex:

[Annex to IECEX DEK 13.0075 - Issue 2.pdf](#)

Annex to Certificate of Conformity IECEX DEK 13.0075, Issue 2

Manufacturing locations:

Manufacturing Site	Location
BARTEC NEDERLAND B.V	Boelewerf 25 2987 VD Ridderkerk The Netherlands
BARTEC TECHNOR AS	Vestre Svanholmen 24 NO-4313 Sandnes Norway
BARTEC Varnost d.o.o	Cesta 9. Avgusta 59 SI-1410 Zagorje ob Savi Slovenia
BARTEC Explosion Proof Appliances(Shanghai) Co.,Ltd.	New Building 7, No. 188 Xinjun Ring Road Caohejing Pujiang Hi-tech Park Minhang District CN 201114 Shanghai P.R.China
BARTEC Pte. Ltd.	63 Hillview Ave., #07-20/23 Lam Soon Industrial Building Singapore 669569 Singapore
BARTEC GmbH	Max-Eyth-Strasse 16 97980 Bad Mergentheim Germany
BARTEC Middle East FZE	RA-08, HB-01 Jebel Ali Free Zone PO BOX 17830 Dubai United Arab Emirates

Each Manufacturing Location equips final product with marking label bearing own name & address.

General product information:

Electrical equipment: Control/Distribution Panel, Type BARTEC B, C, D or E

Description:

The control / distribution panel type **BARTEC B** consists of one or a number of enclosures which are made from aluminium, stainless steel or carbon steel. BARTEC B is designed to main type of protection by flameproof enclosure “db” having flanged joint and is suitable for gas group IIB or IIB+H₂. The enclosures are to accommodate measuring, control and switchgear, RF control, backup batteries, small fans (in e.g. VSD), as well as terminals for intrinsically safe and non-intrinsically safe circuits, and may, if required, be fitted with actuator elements, indicator lights, and inspection windows. Internally regular industrial switchgear are allowed. Connection is either by means of flanged enclosures in type of protection “eb” or by cable glands, conduit seals, cable- / line bushings, plugs and sockets and/or flame arrestors. The empty enclosures as well as all the Ex relevant elements are (as far as applicable) tested and certified under separate (component/equipment) certificates.

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The control / distribution panel type **BARTEC C** consists of one or a number of enclosures which are made from aluminium, stainless steel or welded sheet steel. BARTEC C is designed to main type of protection by flameproof enclosure “db” having either threaded or spigot joint and is suitable for gas group IIC. The enclosures are to accommodate measuring, control and switchgear, RF control, backup batteries, small fans (in e.g. VSD), as well as terminals for intrinsically safe and non-intrinsically safe circuits, and may, if required, be fitted with actuator elements, indicator lights, and inspection windows. Internally regular industrial switchgear are allowed. Connection is either by means of flanged enclosures in type of protection “eb” or by cable glands, conduit seals, cable- / line bushings, plugs and sockets and/or flame arrestors. The empty enclosures as well as all the Ex relevant elements are (as far as applicable) tested and certified under separate (component/equipment) certificates.

The control / distribution panel type **BARTEC D** consists of one or a number of enclosures which are made from aluminium, stainless steel, sheet steel or black reinforced polyester. BARTEC D is designed to main type of protection dust ignition protection by enclosure “tb” having a minimum ingress protection degree of IP 6X and is suitable for dust groups IIIA, IIIB and IIIC. The enclosures are to accommodate measuring, control and switchgear, RF control, backup batteries as well as terminals for intrinsically safe and non-intrinsically safe circuits, and may, if required, be fitted with actuator elements, indicator lights, and inspection windows. Internally regular industrial switchgear is allowed. Connection is by means of either flanged enclosures or by cable glands, conduit seals, cable- / line bushings, plugs and sockets and/or bulkhead union. The empty enclosures as well as all the Ex relevant elements are (as far as applicable) tested and certified under separate (component/equipment) certificates.

The control / distribution panel type **BARTEC E** consists of one or a number of enclosures which are made from aluminium, stainless steel, sheet steel or black reinforced polyester. BARTEC E is designed to main type of protection increased safety “eb” and is suitable for gas groups IIA, IIB and IIC. The enclosures are to accommodate measuring, control and switchgear, as well as terminals for intrinsically safe and non-intrinsically safe circuits, and may, if required, be fitted with actuator elements, indicator lights, and inspection windows. Internally components and equipment with an own type of protection are allowed only. Connection is by means of either flanged enclosures or by cable entries, plugs and sockets and/or bulkhead unions. The empty enclosures as well as all the Ex relevant (internally and externally) elements are tested and certified under separate (component/equipment) certificates.

The type **BARTEC E** is also the basis for enclosures which can contain intrinsic safe equipment only. In the marking, the type of protection “ia” and/or “ib” will appear only.

Technical Data:

Rated supply voltage	: up to 1000 VAC or 1500 VDC
Rated supply current	: up to 1000 A
Working voltage (secondary)	: up to 25 kV (for Ex db and Ex tb only) : up to 11 kV (when Ex eb applies)
Nominal conductor cross area	: up to 800 mm ²
Maximum ambient temperature range	: -60°C to +80°C
Temperature class (for gas)	: T6, T5, T4 or T3
Max. surface temperature (for dust)	: T80°C, T95°C, T130°C
Ingress Protection, IP degree	: depending on applied components IP 54 up to IP 66/67/68 (for gas min. IP 54, for dust min. IP 6x)

Rated values are maximum values, the actual electrical values are determined by the applied electrical components and equipment and by the manufacturer to be indicated on the marking

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label. Within these limiting values, - complying with the appropriate standards -, the Manufacturing Location specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc. The composition of the symbols on the marking label is based on the types of protection and Equipment Protection Levels (EPL's) of components and/or equipment actually used. The actual ambient temperature range is based on temperature range permitted for the components and/or equipment used. Final applicable marking is responsibility of the Manufacturing Location. The IP (ingress protection) degree depends on the components and/or equipment used; IP rating will be from IP 54 up to IP 66/67/68 and final marking on the marking label is responsibility of the Manufacturing Location (however not required by any of the Ex relevant standards).

Type code:

BARTEC B-x-y	Control/distribution panel based on Ex db IIB or Ex db IIB+H ₂ enclosure, x = enclosure sub make or type - y = enclosure size
BARTEC B-ASSEMBLY	Control/distribution panel based on more than one enclosure with Ex db IIB as significant type of protection (enclosures used defined in construction file)
BARTEC C-x-y	Control/distribution panel based on Ex db IIC enclosure, x = enclosure sub make or type - y = enclosure size
BARTEC C-ASSEMBLY	Control/distribution panel based on more than one enclosure with Ex db IIC as significant type of protection (enclosures used defined in construction file)
BARTEC D-x-y	Control/distribution panel based on Ex tb IIIC enclosure, x = enclosure sub make or type - y = enclosure size
BARTEC D-ASSEMBLY	Control/distribution panel based on more than one Ex tb IIIC enclosure
BARTEC E-x-y	Control/distribution panel based on Ex eb IIC enclosure, x = enclosure sub make or type - y = enclosure size
BARTEC E-ASSEMBLY	Control/distribution panel based on more than one Ex eb IIC enclosure

In all situations for an ASSEMBLY; an ASSEMBLY consists always of more than one enclosure where the enclosures are interconnected either by manufacturer filled seals (Ex db to Ex db), manufacturer filled line bushings (Ex db to Ex eb) or flanged (Ex eb to Ex eb or Ex tb to Ex tb). Each enclosure will be equipped with an identical Ex marking label which contains all necessary information (like types of protection) of the whole assembly. Customers and Inspectors are able to check the application in the documents belonging to the order confirmation and delivery note.

Below listed; accepted possibilities indicated in the marking at the 'x' position; 'sub-brand or type':

B	x	Original make basis enclosure	Type series	Certificate of Conformity
	ASP	BARTEC NASP	EJB	IECEX INE 13.0079 U
	COR	CORTEM	EJB	IECEX CES 14.0017 U
	EFB	BARTEC	EFB	IECEX CQM 14.0013 U
	FEA	BARTEC FEAM	EJB	IECEX INE 13.0083 U
	MAM	M.A.M.	EJB	IECEX INE 14.0036 U
	TNA	BARTEC TECHNOR	DE8BC	IECEX INE 13.0001 U
	TNR	BARTEC TECHNOR	TNBCD	IECEX NEM 10.0003 U
C	x	Original make basis enclosure	Type series	Certificate of Conformity
	ASP	BARTEC NASP	GUB	IECEX INE 13.0077 U

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	ASP-E	BARTEC NASP	EJC	IECEX BKI 11.0009
	CCH	Eaton CCH	GHG66/67	IECEX PTB 12.0025 U
	COR	CORTEM	GUB / CCA	IECEX CES 14.0012 U
	FEA	BARTEC FEAM	GUB	IECEX INE 13.0082 U
	FEA-E	BARTEC FEAM	EJC	IECEX BKI 11.0010
	TNR	BARTEC TECHNOR	TNCD	IECEX NEM 10.0001 U

D	x	Original make basis enclosure	Type series	Certificate of Conformity
	A	BARTEC VARNOST aluminium	07-5180	IECEX PTB 11.0032 U
	P	BARTEC VARNOST polyester	07-5185	IECEX PTB 09.0008 U
	ASP-A	BARTEC NASP aluminium	ESA	IECEX INE 11.0014 X
	ASP-P	BARTEC NASP polyester	AS	IECEX INE 13.0005 U
	ASP-S	BARTEC NASP stainless steel	ESX	IECEX INE 11.0014 X
	COR	CORTEM aluminium and stainless steel	SA	IECEX CES 13.0001
	ENS	ENSTO stainless steel	X1 ... X3	IECEX PRE 14.0042 U
	FEA-P	BARTEC FEAM polyester	GWR	IECEX INE 13.0021 U
	FEA-A	BARTEC FEAM aluminium	ESA	IECEX INE 11.0016 X
	FEA-S	BARTEC FEAM stainless steel	ESX	IECEX INE 11.0016 X
	RIT-P	RITTAL polyester	KEL 92	IECEX PTB 10.0011 U
	RIT-S	RITTAL stainless steel with cover	KEL 93	IECEX PTB 09.0033 U
	RIT-S	RITTAL stainless steel with door	KEL 94	IECEX PTB 09.0035 U
	STD	BARTEC VARNOST stainless steel	07-56	IECEX IBE 09.0016 U

E	x	Original make basis enclosure	Type series	Certificate of Conformity
	A	BARTEC VARNOST aluminium	07-5180	IECEX PTB 11.0032 U
	P	BARTEC VARNOST polyester	07-5185	IECEX PTB 09.0008 U
	ASP-A	BARTEC NASP aluminium	ESA	IECEX INE 11.0014 X
	ASP-P	BARTEC NASP polyester	AS	IECEX INE 13.0005 U
	ASP-S	BARTEC NASP stainless steel	ESX	IECEX INE 11.0014 X
	COR	CORTEM aluminium and stainless steel	SA	IECEX CES 13.0001
	ENS	ENSTO stainless steel	X1 ... X3	IECEX PRE 14.0042 U
	FEA-P	BARTEC FEAM polyester	GWR	IECEX INE 13.0021 U
	FEA-A	BARTEC FEAM aluminium	ESA	IECEX INE 11.0016 X
	FEA-S	BARTEC FEAM stainless steel	ESX	IECEX INE 11.0016 X
	RIT-P	RITTAL polyester	KEL 92	IECEX PTB 10.0011 U
	RIT-S	RITTAL stainless steel with cover	KEL 93	IECEX PTB 09.0033 U
	RIT-S	RITTAL stainless steel with door	KEL 94	IECEX PTB 09.0035 U
	STD	BARTEC VARNOST stainless steel	07-56	IECEX IBE 09.0016 U
	TNR	BARTEC TECHNOR stainless steel	TNCN	IECEX DNV 09.0005 U

Note: BARTEC B and C enclosure types are limited to the above listing; BARTEC D and E is a typical listing, other certified types are possible

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For BARTEC B and BARTEC C series position ‘y’ is typically used for size indication and eventually material choice (for details ask the BARTEC Manufacturing Location which is indicated on type label):

B	y	Manufacturer	Material choice
		ASP/CORTEM/BARTEC/FEAM/MAM	Aluminium
	X	ASP / CORTEM / FEAM / MAM	“INOX” = stainless steel (EJB series)
		TECHNOR	stainless steel (TNBCD & DE8BC)
	CS	TECHNOR	carbon steel (DE8BC)

C	y	Manufacturer	Material choice
		ASP / CORTEM / FEAM	aluminium
	X	ASP / CORTEM / FEAM	“INOX” = stainless steel (GUB series)
	I	CORTEM	“INOX” = stainless steel (CCA series)
	66	EATON CCH	aluminium
	67	EATON CCH	sheet steel (welded)

For BARTEC D and BARTEC E series there are many variants possible, where the position ‘y’ is typically used for material choice and size (in cm) indicated in 6 digits (ww x hh x dd), for details ask the BARTEC Manufacturing Location which is indicated on the type label:

D/E	y	Manufacturer	Material choice
	A	BARTEC / ASP / CORTEM / FEAM	aluminium
	P	BARTEC / ASP / FEAM / RITTAL	black reinforced polyester
	S	BARTEC / ASP / CORTEM / ENSTO / FEAM / RITTAL	stainless steel

D/E	y	Indication in cm			Enclosure size in mm
		ww	hh	dd	
		06	06	06	60
		up to
		99	99	99	990
		A0	A0	-	1000
		-	B0	-	1100
		-	C0	-	1200
		-	D0	-	1300
		-	E0	-	1400
		-	F0	-	1500
		-	G0	-	1600
		-	H0	-	1700
		-	I0	-	1800
		-	J0	-	1900
		-	K0	-	2000
		-	L0	-	2100
		-	M0	-	2200

For BARTEC ASSEMBLIES all final details are in Technical Construction File at BARTEC Manufacturing Location available for authorities only.