

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx PTB 07.0023		Issue No: 1	Certificate history:
Status:	Current		Page 1 of 5	Issue No. 1 (2007-09-11)
Date of Issue:	2007-09-11			10000110.0 (2007 04 20)
Applicant:	Killark, Div. of Hubbell Inc. (Delawa 3940 Dr. Martin Luther King Drive St. Louis, MO 63113 United States of America	are)		
Equipment:	Controller			
Optional accessory:	Type EXBN34 CN			
Type of Protection:	d , tD			
Marking:	Ex d IIB + H2 T5 or T6 Ex tD A21 IP66 100 °C or 85 °C Tamb -20 °C to +60 °C			
Approved for issue on behalf of the IECEx Certification Body:		Dr Ing. Uwe Klausme	yer	
Position:		Head of Section "Flame	eproof Enclosures	"
Signature: (for printed version)				
Date:				
1. This certificate and schedule may only be reproduced in full.				
<ol> <li>This certificate is not transferable and remains the property of the issuing body.</li> <li>The Status and authenticity of this partificate may be varified by visiting the Official LECEX Website</li> </ol>				
5. The Status and admentionly of this certificate may be verified by visiting the Official IECEX Website.				
Certificate issued by:				

Physikalisch-Technische Bundesanstalt (PTB) Bundesallee 100 38116 Braunschweig Germany





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Manufacturer:	Killark, Div. of Hubbell Inc. (Delaware) 3940 Dr. Martin Luther King Drive St. Louis, MO 63113 United States of America	

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 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	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
Edition:4.0	
IEC 60079-1 : 2003 Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
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:

DE/PTB/ExTR07.0029/01

Quality Assessment Report:

US/UL/QAR07.0004/00



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Schedule

### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

#### Description

The controllers type EXB - ..... N34 CN consists of the flame-proof housing made of cast aluminium with threaded holes for direct flame-proof cable entries or conduit entries and alternatively with operating rods and/or a sight glass. The empty enclosures serves to mount switches and control devices. Connection is through direct flame-proof cable entries.

### **Electrical Data**

Rated Voltage – up to 690 V Conductor Size – max. 500 mm<sup>2</sup> Rated ambient temperature range: -20 °C to +60 °C Ingress protection: IP66

CONDITIONS OF CERTIFICATION: NO



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EQUIPMENT (continued):

### Notes for Manufacturing and Operation

The controller may also be connected by means of suitable cable entries or conduit systems which meet the requirements of IEC 60079-1:2003, sections 13.1 and 13.2, and for which a separate examination certificate has been issued. Openings not used shall be closed in compliance with IEC 60079-1:2003, section 11.

A Repair and overhaul of the flameproof gaps are only allowed according constructive information given from the original manufacturer. A repair according the values give in Table 1 or Table 2 of IEC 60079-1 is not permitted.



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

The "X" on the certificate number has been removed, because the gap meets the requirements of table 2 of IEC 60079-1

Annex:

Annex IECEx PTB 07.0023X.pdf

Nomenc	lature

Basic Enclosure Series Designation:

### <u>EXB - 12 12 6 N34 CN</u>

Nominal Enclosure Inside Width:

	inch	mm
6	6	152.4
8	8	203.2
10	10	254
12	12	304.8
14	14	355.6
16	16	406.4
18	18	457.2
20	20	508
24	24	609.6

Nominal Enclosure Inside Length:

	inch	mm
6	6	152.4
8	8	203.2
10	10	254
12	12	304.8
14	14	355.6
16	16	406.4
18	18	457.2
24	24	609.6
36	36	914.4

Nominal Enclosure Inside Depth:

inch	mm
4	101.6
6	152.4
8	203.2
10	254
11	279.4
	inch 4 6 8 10 11

Enclosure Type Designation:

N34 = Enclosure Type 3 and Type 4 (Rain and Hose down Tight)

Options:

CN	Modified for CENELEC
SU-1	Stainless Steel Hardware
SU-2	Hinges Installed
SU-9	Special Finish
SU-14	Fungus Proofing
MOD	Modification to add conduit

## openings, operator openings or installation of

windows

### Additional Information

Maximum power loss for use in temperature class

Housing Ty	/pe	Т6	Т5
F	(B-664	95 W/	135 W
E) F)	(B-886	130 W	185 W
E/ F)	(B-8104	130 W	185 W
E)	(B-8106	155 W	225 W
E) F)	(B-8126	185 W	270 W
E) F)	(B-8128	205 W	310 W
Ē	KB-10106	195 W	280 W
ΕŻ	KB-10108	210 W	310 W
Ē	KB-10146	235 W	335 W
Ελ	KB-10148	255 W	380 W
Ελ	KB-12126	205 W	310 W
Ελ	KB-12128	240 W	350 W
Ε>	KB-12186	280 W	385 W
Ε>	KB-12188	315 W	465 W
Ε>	KB-12246	350 W	500 W
Ε>	KB-12248	385 W	565 W
Ε>	KB-122412	495 W	740 W
Ε>	KB-12368	550 W	795 W
Ε>	KB-123610	590 W	875 W
Ε>	KB-14146	280 W	385 W
Ε>	KB-14148	315 W	465 W
E>	KB-16166	315 W	460 W
Ε>	KB-16168	340 W	500 W
E>	KB-16248	495 W	735 W
Ε>	KB-162410	530 W	785 W
Ε>	KB-18186	400 W	585 W
E>	KB-18188	440 W	650 W
Ε>	KB-18248	495 W	740 W
Ε>	KB-182410	535 W	790 W
Ε>	KB-18368	685 W	1020 W
Ε>	KB-183610	725 W	1085 W
Ε>	KB-203611	870 W	1300 W
Ε>	KB-24248	610 W	910 W
E	XB-242410	650 W	975 W
E	XB-24308	650 W	975 W
E	XB-24368	850 W	1265 W
E	XB-243620	900 W	1350 W

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus.

Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category etc.

### Notes for Manufacturing and Operation

The empty enclosure may also be connected by means of suitable cable entries or conduit systems which meet the requirements of IEC 60079-1:2004, sections 13.1 and 13.2, and for which a separate examination certificate has been issued.

Openings not used shall be closed in compliance with IEC 60079-1:2004, section 11.

A Repair and overhaul of the flameproof gaps are only allowed according constructive information given from the original manufacturer. A repair according the values give in Table 1 or Table 2 of IEC 60079-1 is not permitted.