




Prüfbericht

Test and assessment report

Nr. GC/ Ex 8774.01 / 21

EU-Baumusterprüfung für Geräte und Komponenten zur Verwendung in explosionsgefährdeten Bereichen (Richtlinie 2014/34/EU, Anhang III)

EU-Type Examination for Equipment and Components Intended for Use
in potentially Explosive Atmospheres (Directive 2014/34/EU, annex III)

Gegenstand: Gerät / Komponente / Typ Subject: Equipment / Component / Type	Explosion-Proof Camera DH-ECA2A series
Hergestellt und zur Prüfung vorgelegt Manufactured and submitted for examination	ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD.
Anschrift Address	NO. 1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China
Verwendete Normen Standard basis	EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014
Prüfgrundlage für Sicherheits- und Gesundheits- Anforderungen, die nicht von den verwendeten Normen abgedeckt werden. Basis for those health and safety requirements Not covered by the standard basis	Entfällt Not relevant
Schutzartenkennzeichen Code for type of protection	 II 2 G Ex db IIC T6 Gb II 2 D Ex tb IIC T80°C Db
Angebotsnummer Offer number	245773840
Auftragsnummer der Prüfstelle / Region Testing station / region order number	GC 244424897
Auftragsnummer der Zertifizierungsstelle Order number of ExCB	DE 268483936-181
Zeitraum der Prüfung Period of Testing	N/A

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1. Gegenstand und Typ / Subject and type

Explosion-Proof Camera
Type(s): DH-ECA2A series

2. Allgemeine Produktbeschreibung / General product information

The main enclosure of the Explosion-Proof Camera model DH-ECA2A is made of 304 or 316L. The enclosure is constructed in type of explosion protection flameproof enclosure "db". The equipment is intended to be used combustible gas environment in Zone 1 and 2, and combustible dust environment in Zone 21 and Zone 22. DH-ECA2A is used to monitor the condition of environment and transfer to display.

Nomenclature:

0	1	2	3	4	5	6	7	8	9	10			
Fixed type	illuminator	Resolution	Optical Zoom	P/T Type	Interface	Intelligent Function	Zoom Module	Zoom Module Sequence Number	Feature	Feature			
DH-ECA2A	0=None 1=Infrared	1=130W 2=200W 3=300W 4=400W 5=500W 6=600W 8=800W A=1000W	00=Fixed 03=3x 04=4x 05=5x 10=10x 12=12x 15=15x 16=16x 18=18x 20=20x 23=23x 25=25x 28=28x 30=30x 31=31x 32=32x 33=33x 36=36x 37=37x 38=38x 40=40x 41=41x 44=44x 45=45x 48=48x 50=50x 60=60x 1A=100x	Not relevant with Ex.									

Details of change:

Add content "Optical Zoom: 00=Fixed" into the Nomenclature of equipment.

Nur zur internen Verwendung/ Only for internal use:

Platz für interne Beschreibungen, die nicht mit ins Zertifikat überführt werden sollen.
Section of internal descriptions which are not transferred to the certificate.
Not applicable.

3. Dokumentation des Herstellers / Manufacturer's documents

Reg-Nr./ Reg. no.	Dokumententitel/ Document title:	Dokumenten-Nr./ Document no.:	Rev./ Rev.:	Datum/ Date:
1.	Nameplate	DH3-RD002670-1003-SY002	B01	2018-11-22



Reg.-Nr./ Reg. no.	Dokumententitel/ Document title:	Dokumenten-Nr./ Document no.:	Rev./ Rev.:	Datum/ Date:
2.	CE1009-00-Explosion-proof Camera	DH3-RD004924-1	-	2021-10-12
3.	CE1009-00-BOM General Assembly Drawing	DH3-RD004924-2	A01	2021-10-12
4.	CE1009-00-Sun Shade	DH3-RD004924-1001	A01	2021-07-27
5.	CE1009-00-Fixing Bracket	DH3-RD004924-1002	A02	2021-07-27
6.	CE1009-00-Front Cover	DH3-RD004924-6001	A03	2021-08-17
7.	CE1009-00-Rear Barrel	DH3-RD004924-6002	A03	2021-11-01
8.	CE1009-00-Sealing Ring	DH3-RD004924-2001	A01	2021-10-12
9.	CE1001-00-Cable Nut	DH3-0125-6007	B02	2021-02-25
10.	CE1009-00-Tempered Glass-61-H6	DH3-RD004925-9000	A01	2021-07-27
11.	CE1009-00-Nameplate	DH3-RD004924-1001- SY001	A01	2021-10-12
12.	Cables-terminal_8-core registered jack, 140mm-bare cable –black 2000mm	T2.00255866	B01	2021-10-26
13.	OSLON Black Series	SFH4713A	a.2	2015-02-16
14.	High-power infrared LED	XB-HAKEBW0A-90	A/0	2018-10-16
15.	6308 Epoxy Resin Physical Properties.	QP-03-15-007	-	2016-12-20
16.	Epoxy Resin Adhesive Material Report for Dahua Anti-explosion Camera	-	-	2016-04-22
17.	ELASTOSIL R401/50 S (3 pages)	-	-	2019-11-14
18.	*Nomenclature of DH- ECA2A camera	-	B	2022-05-30
19.	Explosion-Proof Camera (ECA-2A) Installation Manual	-	V1.0.0	-
20.	Declaration of conformity	-	-	2022-04-22

Tabelle 1

Hinweis/ Note:

Ein * vor dem Dokumententitel markiert Dokumente, die neu oder überarbeitet sind.

A * in front of the document title marks documents which are new or revised.



Prüfmuster / Test sample

Nummer / Number	Eingangsdatum / Date of receipt
N/A	N/A

Tabelle 2

4. Technische Daten / Technical data

Elektrische Daten/ Electrical data

Rated Voltage: 12VDC

Rated Power: 4W

Umgebungsdaten/ Environmental data

Ambient temperature: -40°C to +60°C

Ingress protection: IP66/68 (2m, 2h)

Liste der verwendeten Geräte und Komponenten / List of used equipment and components

Gerät/ Device	Hersteller/ Manufacturer	Typ/ Type	Ex-Kennzeichnung/ Ex-Marking	Bescheinigung-Nr./ Certificate no.
N/A				

Tabelle 3


5. Prüfumfang / Scope of testing

Explosion-Proof Camera DH-ECA2A is evaluated according to standards EN IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-31:2014. This equipment can be used in explosive gas and dust atmosphere of IIC with EPL Gb and IIIC with EPL Db.

6. Kennzeichnung

Marking

The marking (clearly visible, legible and permanent) comprises the following statements:

- CE-mark and the number of the notified body, who is involved into factory inspection.
- Name and address of the manufacturer
- Manufacturer's type identification
-  II 2 GD
- Certification number
- Serial number
- Year of production
- Technical data



Deutsche
Akkreditierungsstelle
D-PL-11052-02-00



TÜVRheinland®
Genau. Richtig.

	II 2 G Ex db II C T6 Gb II 2 D Ex tb III C T80°C Db
WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOPHERE IS PRESENT. WARNING - DO NOT OPEN WHEN ENERGIZED.	
DH-ECA2Axxxx-xx EXPLOSION-PROOF CAMERA	
Cert. No.:	TÜV 21 ATEX 8774 X IECEX TUR 21.0069 X
Operating Vol.:	12V ~~, 1.5A, PoE(802.3af,5W)
Ambient Temp.:	-40°C - +60°C
Serial No.:	
Date of Prod.:	
CE 0035	Zhejiang Dahua Vision Technoiogy Co., Ltd
NO. 1199, Bin'an Road, Binjiang District, Hangzhou, P.R.China	

7. Stückprüfungen / Routine test

The manufacturer shall carry out routine tests according to above mentioned standards to ensure that the electrical equipment produced is in accordance with the documentation, which was submitted to the notified body in addition to the sample. The routine tests are as follows:

Overpressure tests are needed on each enclosure of the product according to EN 60079-1: clause 16.1. The routine overpressure test shall be made by the first method (static at least 10S), 1.241MPa test pressure.

The routine test doesn't substitute the conformity assessment procedures (art. 13 of directive 2014/34/EU) which is necessary in connection with the module EU-Type Examination and which the manufacturer has to fulfil according annex IV to VII of the directive 2014/34/EU.

8. Auflagen / Bedingungen für die sichere Verwendung / Special conditions for safe use

1. Specific guidance noted to contact the original manufacturer for information on the dimension of the flameproof joints.
- 2 CAUTION - USE FASTENERS WITH YIELD STRESS \geq 260Mpa.

9. Sicherheitstechnisch relevante Informationen / Safety relevant information

Die Kenntnis der Technische Daten und der aufgeführten Auflagen/ Bedingungen für die sichere Verwendung (siehe Abschnitt 4 und 8) sowie der Betriebsanleitung ist für die sichere Verwendung erforderlich.

The information given under Technical data and Special conditions for safe use (see clause 4 and 8) as well as in the manufacturer's instructions has to be observed.

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10. **Prüfergebnisse aus Laboren / Test results from laboratories**

Reportnummer/ Report no.	Laborprüfung/ Type test	Labor/ Laboratory	Datum/ Date
N/A	N/A	N/A	N/A

Tabelle 4

Siehe Listung der Checklisten / Prüfprotokolle im Anhang zu diesem Bericht:

See listing of checklists / Lab test reports annexed to this report:

Anlage/ Annex	Checkliste/ Checklist	Seiten/ Pages
1.	Checklist Annex II of Directive 2014/34/EU	7

Tabelle 5



TÜV Rheinland Industrie Service GmbH
Am Grauen Stein,
51105 Köln,
Germany

Köln, den 2022-06-08

Shawn Lu

Erstellt von / Compiled by

Dipl.-Ing. Shawn Lu

Ron Huo *Xiaolong Zhang*

Geprüft von / Reviewed by

Dipl.-Ing. Ron Huo

Dipl.-Ing. Xiaolong Zhang

Der Anhang II der Richtlinie 2014/34/EU ist erfüllt
The Annex II of Directive 2014/34/EU is fulfilled.

TÜV Rheinland Industrie Service GmbH
Zertifizierstelle für Explosionsschutz
Certification body for explosion protection

Köln, den
Cologne, 2022-06-08

He Mei

Assigned Certifier: He Mei

Zertifizierstellenleiter: Klauspeter Graffi // stellvertr. Zertifizierstellenleiter: Andreas Maschke
Head of certification body: Klauspeter Graffi // Deputy of certification body: Andreas Maschke

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