



Switch/Pushbutton

Technical data

Ex-installation switch and Ex-pushbuttons

Marking accd. to 94/9/EC	Ex II 2 G Ex de IIC T6 / Ex II 2 D Ex tD A21 IP66 T80 °C
EC-Type Examination Certificate	PTB 98 ATEX 3121
IECEX Certificate of Conformity	IECEX BK1 07.0036
Marking accd. to IECEx	Ex ed IIC T6 Ex tD A21 IP66 T67 °C
Permissible ambient temperature	-20 °C up to +40 °C -55 °C up to +55 °C (option)
Rated voltage	250 V, 50 - 60 Hz
Rated current	16 A
Connecting terminals	Switch terminals: 2 x 2.5 mm ² / PE-terminals: 4 x 2.5 mm ²
Degree of protection accd. to EN 60529	IP66
Cable glands ¹⁾	Ex e cable glands max. 2 x M25; 2 x M20 thread
Weight	0.32 kg
Enclosure material	Polyamide

Ordering details

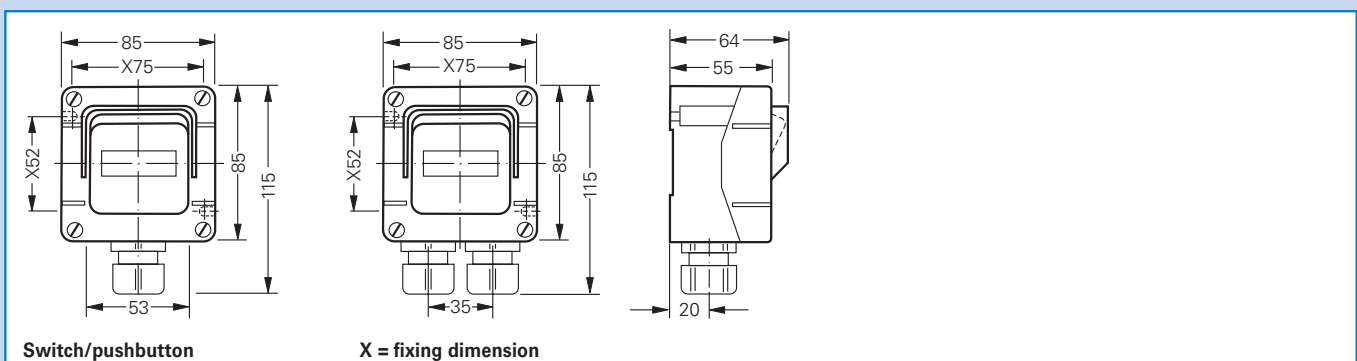
Type	Circuit	Cable glands ¹⁾	Order No.
ON-OFF switch 2-pole -55 °C up to +55 °C		1 x M25	GHG 273 2000 R0017
		2 x M25	GHG 273 2000 R0018
		2 x M20 ²⁾	GHG 273 2000 R0003
		1 x M25	GHG 273 2000 R0022
Change-over switch -55 °C up to +55 °C		1 x M25	GHG 273 6000 R0011
		2 x M20 ²⁾	GHG 273 6000 R0003
		2 x M25	GHG 273 6000 R0014
		2 x M25	GHG 273 2000 R9017
Pushbutton -55 °C up to +55 °C		1 x M25	GHG 273 4000 R0004
		2 x M25	GHG 273 4000 R0007
		1 x M25	GHG 273 2000 R0010

¹⁾ Base enclosure can be rotated after wards (entry from top or down)

²⁾ Threaded only

Other versions available on request

Dimension drawing



Dimensions in mm



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

UNIT VERIFICATION

Certificate No.:	IECEx INE 15.0005X	issue No.:	0	Certificate history:
Status:	Current			
Date of Issue:	2015-04-24	Page 1 of 3		
Applicant:	FLUIDES SERVICE TECHNOLOGIES 8 Avenue de Gutenberg 31128 PORTET-SUR-GARONNE France			
Electrical Apparatus: Serial number(s) or Unique Identification:	Hydraulic Power Unit type HPU 144-036-7			
Type of Protection:	d e ia			
Marking:	Ex d e ia IIB T3 Gb			
Approved for issue on behalf of the IECEx Certification Body:	Thierry HOUeix			
Position:	Ex Certification Officer			
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.

Certificate issued by:

INERIS
 Institut National de l'Environnement Industriel
 et des Risques
 BP n2
 Parc Technologique ALATA
 F-60550 Verneuil-En-Halatte
 France



IECEx Certificate of Conformity

Certificate No.:	IECEx INE 15.0005X	
Date of Issue:	2015-04-24	Issue No.: 0
		Page 2 of 3
Manufacturer:	FLUIDES SERVICE TECHNOLOGIES 8 Avenue de Gutenberg 31128 PORTET-SUR-GARONNE France	
Additional Manufacturing location(s):		

This Unit verification certificate is issued as verification that the Apparatus identified on page 1, was assessed and tested and found to comply with the IEC Standard list below. 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 : 2011 Explosive atmospheres - Part 0: General requirements
 Edition: 6.0

IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
 Edition: 6

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"
 Edition: 6.0

IEC 60079-7 : 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
 Edition: 4

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:
 The Apparatus listed has successfully met the examination and test requirements as recorded in

Test Report:
FR/INE/ExTR15.0022/00

Quality Assessment Report:

As this is a Unit Verification Certificate, no QAK is applicable as this certificate is specific to the items listed by serial number or other unique identification.



IECEx Certificate of Conformity

Certificate No.: IECEx INE 15.0005X

Date of Issue: 2015-04-24

Issue No.: 0

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Hydraulic Power Unit is equipped with the assembly of :

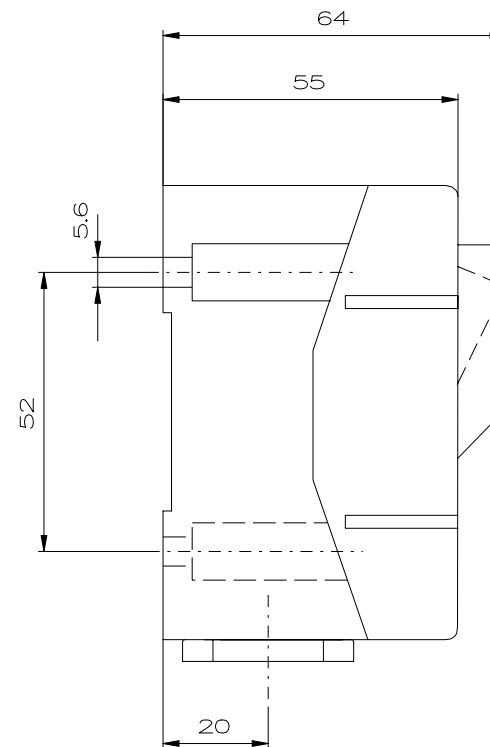
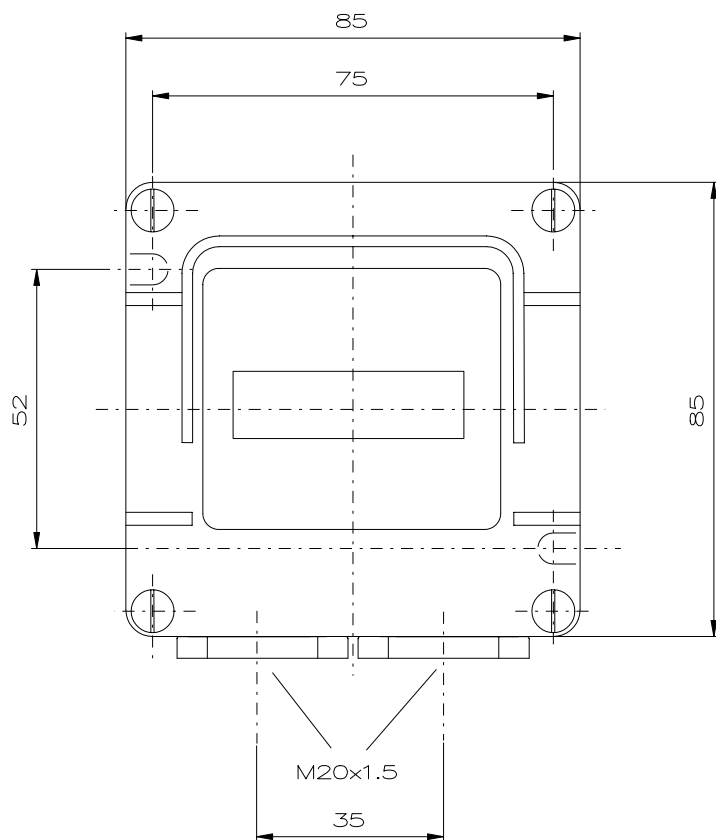
- Two level transmitters certified IECEx BAS 09.0076X
- Three differential pressure transmitters certified IECEx BAS 04.0017X
- Seven pressure transmitters certified IECEx BAS 09.0076X
- Two junction box certified IECEx PTB 07.0060
- Four hydraulic motor pumps certified IECEx LCI 04.0030X
- One enclosure light certified IECEx LCI 04.0017
- One lighting ON/OFF switch certified IECEx BKI 07.0036

The connection between the different pieces of Ex equipment is in accordance with IEC 60079-14.

CONDITIONS OF CERTIFICATION: YES as shown below:

For the risk of electrostatic discharge, the user will have to read the instructions.

Annex: [IECEx INE 15.0005-00_Annex.pdf](#)



"Schutzvermerk nach DIN 34 beachten" / "Copyright reserved"

Description: Ex-Installation Switch pole switch 2-pole, 2 x M20
Beschreibung: Ex-Installationsschalter Ausschalter 2 x M20



Rev.st/ Zust.	Revision/ Änderung	Date/ Datum	Name/ Name	Date/ Datum	12.05.2010
				Expert/ Bearbeiter	Kubesch
				1:1	Dimension unit: mm Maßeinheit: mm

Material-No./ Material-Nr.:
GHG2732000R0003

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin



(1) **EC-TYPE-EXAMINATION CERTIFICATE** (Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

PTB 98 ATEX 3121

(4) Equipment: Installation switch type GHG 27.R....

(5) Manufacturer: CEAG Sicherheitstechnik GmbH

(6) Address: 69412 Eberbach

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 98-30008.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014:1997 EN 50018:1994 EN 50019:1994

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.


(12) The marking of the equipment shall include the following:

 **II 2 G EEx ed IIC T6**

Zertifizierungsstelle Explosionsschutz

Braunschweig, October 15, 1998

By order:


Dr.-Ing. U. Engel
Regierungsdirektor



Sheet 1/2

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

(13) **SCHEDULE**

(14) **EC-TYPE-EXAMINATION CERTIFICATE No. PTB 98 ATEX 3121**

(15) Description of equipment

The installation switch type GHG 27.R.... serves as a current switch for light, load and control circuits.

It is connected via terminals integrated in the socket.

Electrical data

Rated voltage U_e up to 250 V
Rated current I_e max. 16 A
according to VDE 0632

In accordance with the relevant provisions, rated values other than those stated above are permissible if the making and breaking capacity is complied with; they have been specified by the manufacturer as a function of the mode of operation, utilization category, etc.

At a rated thermal current I_{th} 16 A
for use in areas of temperature class T6

Rated cross section max. 2 x 4 mm² solid lead
2 x 2,5 mm² flexible lead

Ambient temperature -55 °C up to 40 °C

(16) Report PTB Ex 98-30008, description (3 sheets), enclosure to description (3 sheet), 2 drawings

(17) Special conditions for safe use

not applicable

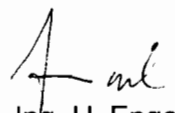
(18) Essential health and safety requirements

The test carried out and their positive results show, that the installation switch meets the requirements of Directive 94/9/EC and of the standards mentioned on the cover sheet.

Zertifizierungsstelle Explosionsschutz

Braunschweig, October 15, 1998

By order:


Dr.-Ing. U. Engel
Regierungsdirektor



Sheet 2/3

1st SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 98 ATEX 3121

(Translation)

Equipment: Installation switch, type 273 ... R....


Marking:  II 2 G EEx ed IIC T6 or  II 2 D T 67 °C IP 66

Manufacturer: CEAG Sicherheitstechnik GmbH

Address: Neuer Weg Nord 49
D-69412 Eberbach

Description of supplements and modifications

- Type GHG 272R..... will not be used any more. Only type GHG 273...R.... will be retained. If this type is made from a material of a surface resistance of $\geq 1 \text{ G}\Omega$, it will carry a warning note.
- Its field of application will be extended to areas exposed to flammable dust.

Marking:  II 2 D T 67 °C IP 66

▪ Technical data

when used in areas exposed to gas, vapours, fog:

Ambient temperature range, when connecting 1.5 mm² conductors: $-55 \text{ °C} \leq T_{\text{amb}} \leq +40 \text{ °C}$

Ambient temperature range, when connecting 2.5 mm² conductors: $-55 \text{ °C} \leq T_{\text{amb}} \leq +55 \text{ °C}$

when used in areas exposed to flammable dust:

Ambient temperature range, when connecting 1.5 mm² conductors: $-20 \text{ °C} \leq T_{\text{amb}} \leq +40 \text{ °C}$


Ambient temperature range, when connecting 2.5 mm² conductors: $-20 \text{ °C} \leq T_{\text{amb}} \leq +55 \text{ °C}$

Test report: PTB Ex 00-30082

Zertifizierungsstelle Explosionsschutz

Braunschweig, 30 October 2000

By order:


Dr.-Ing. U. Engel
Regierungsdirektor



Sheet 1/1

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

Physikalisch-Technische Bundesanstalt • Postfach 33 45 • 38023 Braunschweig

Cooper-Crouse Hinds GmbH
z. Hd. Frau Frankhauser

Neuer Weg Nord 49
69412 Eberbach

Ihr Zeichen:
Ihre Nachricht vom: 15.04.2008
Unser Zeichen:
Unsere Nachricht vom:

Bearbeitet von: Dr. Monika Schumann
Telefondurchwahl: +49 (0) 531-592-3515
Telefaxdurchwahl: +49 (0) 531-592-3505
E-Mail: Monika.Schumann@ptb.de

Datum: 6. Juni 2008

Normengenerationsänderung nach EN 60079-0 ff, EN 61241-0 ff Installationsschalter Typ / Installation switch, type GHG 273 ... R.... PTB 98 ATEX 3121

Sehr geehrte Frau Frankhauser,

es bestehen keine sicherheitstechnischen Bedenken,
den Installationsschalter Typ 273 ... R.... mit folgenden Kennzeichnungen zu versehen:

 II 2 G Ex ed IIC T6

 II 2 D Ex tD A21 IP66 T 80 °C

Wir bitten Sie, diese Änderungen bei zukünftigen Ergänzungen mit aufzunehmen.

Translation

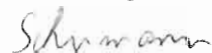
there are no safety-related objections from PTB to mark
the installation switch, type GHG 273 ... R.... as follows

 II 2 G Ex ed IIC T6

 II 2 D Ex tD A21 IP66 T 80 °C

We would like to ask you to include this change into the next supplement.

Mit freundlichen Grüßen
Im Auftrag



Dr. Schumann
Regierungsrätin

Achtung! Neue Bankverbindung: