

JUMO dTRANS T07

Two-channel temperature transmitter
with HART®/Ex/SIL for installation in terminal head,
B form, and for mounting on DIN rails



Safety Manual Ex



70708000T99Z005K000

V5.00/EN/00681606/2023-05-23

1	Certificates	4
1.1	Declaration of conformity	4
1.2	Examination certificate	9
1.3	IECEx certificate of conformity	13
1.4	Declaration of conformity for display module dTRANS T07 BD7	18
1.5	Examination certificate for display module dTRANS T07 BD7	23
1.6	IECEx certificate of conformity for display module dTRANS T07 BD7	25
2	Important information about this document	30
2.1	How this document works	30
2.2	Symbols	30
2.2.1	Symbols and descriptions for types of information	30
2.3	Other applicable device documentation	30
3	Admissible device types	31
4	Safety information	32
4.1	Installation	33
4.2	Head transmitters	33
4.3	DIN rail devices	33
4.4	Zone 1 and zone 2	33
4.5	Zone 0	33
5	Technical data	34
5.1	Admissible ambient temperatures	34
5.2	Voltage supply	34
5.3	Ignition protection types	35

1 Certificates

1.1 Declaration of conformity

JUMO GmbH & Co. KG

Moritz-Juchheim-Straße 1
36039 Fulda, Germany

Tel.: +49 661 6003-0
Fax: +49 661 6003-500

E-Mail: mail@jumo.net
Internet: www.jumo.net



More than **sensors + automation**

EU-Konformitätserklärung

EU declaration of conformity / Déclaration UE de conformité

Dokument-Nr. CE 600
Document No. / Document n°.

Hersteller JUMO GmbH & Co. KG
Manufacturer / Etabli par

Anschrift Moritz-Juchheim-Straße 1, 36039 Fulda, Germany
Address / Adresse

Produkt

Product / Produit

Name

Name / Nom

Typ

Type / Type

Typenblatt-Nr.

Data sheet no. / N°

Document

d'identification

dTRANS T07	707080	707080
dTRANS T07 B	707080	707080
dTRANS T07 B SIL	707081	707080
dTRANS T07 T	707082	707080
dTRANS T07 T SIL	707083	707080
dTRANS T07 B Ex	707085	707080
dTRANS T07 B SIL Ex	707086	707080
dTRANS T07 T Ex	707087	707080
dTRANS T07 T SIL Ex	707088	707080

Produktbeschreibung

Product description / Description du produit

2-Kanal-Temperaturmessumformer mit HART/Ex/SIL

Wir erklären in alleiniger Verantwortung, dass das bezeichnete Produkt die Anforderungen der Europäischen Richtlinien erfüllt.

We hereby declare in sole responsibility that the designated product fulfills the requirements of the European Directives.

Nous déclarons sous notre seule responsabilité que le produit remplit les Directives Européennes.

Dokument-Nr.
Document No. / Document n°.

CE 600

EU-Konformitätserklärung

Seite: 1 von 5

JUMO GmbH & Co. KG

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1. Richtlinie

Directive / Directive

Name EMC 2014/30/EU

Name / Nom

Konformitätsbewertungsverfahren Mod. A

Conformity assessment procedure /

Procédure d'évaluation de la conformité

Datum der Erstanbringung des CE-Zeichens auf 2017

dem Produkt

Date of first application of the CE mark to the product /

Date de 1ère application du sigle sur le produit

Angewendete Normen/Spezifikationen

Standards/Specifications applied / Normes/Spécifications appliquées

Referenz	Ausgabe	Bemerkung
<i>Reference / Référence</i>	<i>Edition / Édition</i>	<i>Comment / Remarque</i>
EN 61326-1	2013	
EN 61326-2-3	2013	
EN 61326-2-5	2013	

Gültig für Typ

Valid for Type / Valable pour le type

707080/...

707081/...

707082/...

707083/...

707085/...

707086/...

707087/...

707088/...

Dokument-Nr.
Document No. / Document n°.

CE 600

EU-Konformitätserklärung

Seite: 2 von 5

1 Certificates

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More than **sensors + automation**

2. Richtlinie

Directive / Directive

Name

ATEX 2014/34/EU

Name / Nom

Konformitätsbewertungsverfahren

Mod. A and Mod. B+D

Conformity assessment procedure /

Procédure d'évaluation de la conformité

Datum der Erstanbringung des CE-Zeichens auf dem Produkt

Date of first application of the CE mark to the product /

Date de 1ère application du sigle sur le produit

Angewendete Normen/Spezifikationen

Standards/Specifications applied / Normes/Spécifications appliquées

Referenz

Reference / Référence

EN 60079-0

Ausgabe

Edition / Édition

2018

Bemerkung

Comment / Remarque

The application of this standard takes place within the framework of module A.

Gültig für Typ

Valid for Type / Valable pour le type

707085/...

707086/...

707087/...

707088/...

2.1 EU-Baumusterprüfbescheinigung

EU type examination certificate / Certificat d'examen de type UE

Zertifikatsnummer

EPS 17 ATEX 1 129 X

Certificate number / Numéro de certificat

Notifizierte Stelle

Notified Body / Organisme notifié

BUREAU VERITAS Consumer Products
Services Germany GmbH, Wilhelm-Hennemann-
Straße 8, 19061 Schwerin, Germany

Dokument-Nr.
Document No. / Document n°.

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EU-Konformitätserklärung

Seite: 3 von 5

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More than **sensors + automation**

Angewendete Normen/Spezifikationen

Standards/Specifications applied / Normes/Spécifications appliquées

Referenz <i>Reference / Référence</i>	Ausgabe <i>Edition / Édition</i>	Bemerkung <i>Comment / Remarque</i>
EN 60079-0	2012+A11:2013	
EN 60079-11	2012	

Qualitätssicherung bezogen auf den Produktionsprozess

Quality assurance of the production process / L'assurance de la qualité de la production

Zertifikatsnummer <i>Certificate number / Numéro de certificat</i>	Available on request
Notifizierte Stelle <i>Notified Body / Organisme notifié</i>	BUREAU VERITAS Consumer Products Services Germany GmbH, Wilhelm-Hennemann- Straße 8, 19061 Schwerin, Germany
Kennnummer <i>Identification no. / N° d'identification</i>	2004

3. Richtlinie

Directive / Directive

Name <i>Name / Nom</i>	RoHS 2011/65/EU
Konformitätsbewertungsverfahren <i>Conformity assessment procedure / Procédure d'évaluation de la conformité</i>	Mod. A
Datum der Erstanbringung des CE-Zeichens auf dem Produkt <i>Date of first application of the CE mark to the product / Date de 1ère application du sigle sur le produit</i>	2017

Angewendete Normen/Spezifikationen

Standards/Specifications applied / Normes/Spécifications appliquées

Referenz <i>Reference / Référence</i>	Ausgabe <i>Edition / Édition</i>	Bemerkung <i>Comment / Remarque</i>
VDK Umweltrelevante Aspekte bei der Produktentwicklung und -gestaltung	V1	

Dokument-Nr.
Document No. / Document n°.

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EU-Konformitätserklärung

Seite: 4 von 5

1 Certificates

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Gültig für Typ

Valid for Type / Valable pour le type

707080/...

707081/...

707082/...

707083/...

707085/...

707086/...

707087/...

707088/...

Aussteller

Issued by / Etabli par

JUMO GmbH & Co. KG

Ort, Datum

Place, date / Lieu, date

Fulda, 2023-05-10

Rechtsverbindliche Unterschriften

Legally binding signatures /

Signatures juridiquement valable

Bereichsleitung Globaler Vertrieb

i. V. Markus Belmer

Qualitätsbeauftragter und Leiter Qualitätswesen

i. V. Harald Gienger

Dokument-Nr.
Document No. / Document n°.

CE 600

EU-Konformitätserklärung

Seite: 5 von 5

1.2 Examination certificate



EU - Type Examination Certificate

- (1) **EU - Type Examination Certificate**
- (2) Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 2014/34/EU
- (3) EU - Type Examination Certificate Number
- EPS 17 ATEX 1 129 X** **Revision 0**
- (4) Equipment: Temperature transmitter type dTRANS T07 T Ex DINrail
Temperature transmitter type dTRANS T07 B Ex Head
- (5) Manufacturer: Jumo GmbH & Co. KG
- (6) Address: Moritz-Juchheim-Straße 1
36039 Fulda
Germany
- (7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.
- (8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, 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 of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 17TH0362.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
- EN 60079-0:2012+A11:2013** **EN 60079-11:2012**
- (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 annex to this certificate.
- (11) This EU - Type Examination Certificate relates only to the design and examination of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

II 1G Ex ia IIC T6...T4 Ga (Head)

II 2G Ex ia IIC T6...T4 Gb (Head)

II 2(1)G Ex ib [ia Ga] IIC T6...T4 Gb (DIN Rail)

Certification department of explosion protection

Nuremberg, 2017-10-24



H. Schäffer



Page 1 of 4

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 17 ATEX 1 129 X, Revision 0.

1 Certificates



(13)

Annex

(14) EU - Type Examination Certificate EPS 17 ATEX 1 129 X

Revision 0

(15) Description of equipment:

The temperature transmitter type dTRANS T07 T Ex (DIN rail type) and dTRANS T07 B Ex (Head type) is a two wire transmitter with analogue output. It has measuring input circuits for resistance thermometers (RTD) in 2-, 3- or 4-wire connection, thermocouples and voltage transmitters.

The equipment is intended for the application inside the explosion hazardous area. The DIN Rail version is intended to be installed in control cabinets.

Electrical data:

Head transmitter:

Power supply
(terminals + and -)

$U_i \leq 30V$ DC
 $I_i \leq 130$ mA
 $P_i = 800$ mW
 $C_i =$ negligibly small
 $L_i =$ negligibly small

Sensor circuit
(terminal 3 to 7)

$U_o \leq 7.6V$ DC
 $I_o \leq 13$ mA
 $P_o \leq 24.7$ mW

Max. connection values

Ex ia IIC	$L_o = 10$ mH	$C_o = 1$ μ F
Ex ia IIB	$L_o = 50$ mH	$C_o = 4.5$ μ F
Ex ia IIA	$L_o = 50$ mH	$C_o = 6.7$ μ F

Page 2 of 4

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DIN Rail transmitter:

Power supply

(terminals + and -)

U_i	\leq	30V DC
I_i	\leq	130 mA
P_i	$=$	770 mW
C_i	$=$	negligibly small
L_i	$=$	negligibly small

Sensor circuit

(terminal 3 to 8)

U_o	\leq	9V DC
I_o	\leq	13 mA
P_o	\leq	29.3 mW

Max. connection values

Ex ia IIC	$L_o = 5$ mH	$C_o = 0.93$ μ F
Ex ia IIB	$L_o = 20$ mH	$C_o = 3.8$ μ F
Ex ia IIA	$L_o = 50$ mH	$C_o = 4.8$ μ F

Ambient temperature

Type (order option)	Temperature class	Ambient temperature Zone 1/EPL Gb	Ambient temperature Zone 0/ EPL Ga
dTRANS T07 B Ex	T6	$-50^{\circ}\text{C} \leq T_a \leq +58^{\circ}\text{C}$	$-50^{\circ}\text{C} \leq T_a \leq +46^{\circ}\text{C}$
	T5	$-50^{\circ}\text{C} \leq T_a \leq +75^{\circ}\text{C}$	$-50^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
Head transmitter without display	T4	$-50^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$	$-50^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
dTRANS T07 B Ex	T6	$-40^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$	
	T5	$-40^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$	
	T4	$-40^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$	
Head transmitter with display (dTRANS T07 BD7)			
type dTRANS T07 T Ex (DIN rail transmitter)	T6	$-40^{\circ}\text{C} \leq T_a \leq +46^{\circ}\text{C}$	
	T5	$-40^{\circ}\text{C} \leq T_a \leq +61^{\circ}\text{C}$	
	T4	$-40^{\circ}\text{C} \leq T_a \leq +85^{\circ}\text{C}$	

1 Certificates



(16) Reference number: 17TH0362

(17) Special conditions for safe use:

In hazardous areas it is not permitted to use the CDI interface of dTRANS T07 for configuration.

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Nuremberg, 2017-10-24



H. Schaffer



Page 4 of 4

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 17 ATEX 1 129 X, Revision 0.

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Consumer Products Services Germany GmbH

Thurn-und-Taxis-Straße 18, 90411 Nürnberg, Germany
Phone: + 49 40 74041-0

cps-nuernberg@de.bureauveritas.com
www.bureauveritas.de/cps

1.3 IECEx certificate of conformity

		<h3>IECEx Certificate of Conformity</h3>	
INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres <small>for rules and details of the IECEx Scheme visit www.iecex.com</small>			
Certificate No.:	IECEx EPS 17.0075X	Page 1 of 5	<u>Certificate history:</u> Issue 0 (2017-10-24)
Status:	Current	Issue No: 1	
Date of Issue:	2023-05-15		
Applicant:	Jumo GmbH & Co. KG Moritz-Juchheim-Straße 1 36039 Fulda, Germany Germany		
Equipment:	Temperature transmitter type dTRANS T07		
Optional accessory:			
Type of Protection:	ia/ ib		
Marking:	Ex ia IIC T6...T4 Ga (Head) Ex ia IIC T6...T4 Gb (Head) Ex ib [ia Ga] IIC T6...T4 Gb (DIN Rail)		
Approved for issue on behalf of the IECEx Certification Body:			
Position:			
Signature: (for printed version)			
Date: (for printed version)			
			
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 www.iecex.com or use of this QR Code.			
Certificate issued by:			
Bureau Veritas Consumer Products Services Germany GmbH Businesspark A96 86842 Türkheim Germany			

1 Certificates



IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 17.0075X**

Page 2 of 5

Date of issue: **2023-05-15**

Issue No: 1

Manufacturer: **Jumo GmbH & Co. KG**
Moritz-Juchheim-Straße 1
36039 Fulda, Germany
Germany

Manufacturing
locations:

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

This Certificate **does not** indicate compliance with 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/EPS/ExTR17.0069/00

Quality Assessment Report:

DE/EPS/QAR23.0003/00



IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 17.0075X**

Page 3 of 5

Date of issue: **2023-05-15**

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The temperature transmitter type dTRANS T07, is a two wire transmitter with analogue output. It has measuring input circuits for resistance thermometers (RTD) in 2-, 3- or 4-wire connection, thermocouples and voltage transmitters.

The equipment is intended for the application inside the explosion hazardous area.

The DIN Rail version is intended to be installed in control cabinets.

Electrical data:

Head transmitter:

Power supply

(terminals + and -)

U_i	\leq	30V DC
I_i	\leq	130 mA
P_i	$=$	800 mW
C_i	$=$	negligibly small
L_i	$=$	negligibly small

Sensor circuit

(terminal 3 to 7)

U_o	\leq	7.6V DC
I_o	\leq	13 mA
P_o	\leq	24.7 mW

Max. connection values

Ex ia IIC	$L_o = 10$ mH	$C_o = 1$ μ F
Ex ia IIB	$L_o = 50$ mH	$C_o = 4.5$ μ F
Ex ia IIA	$L_o = 50$ mH	$C_o = 6.7$ μ F

SPECIFIC CONDITIONS OF USE: YES as shown below:

In hazardous areas it is not permitted to use the CDI interface of dTRANS T07 for configuration.

1 Certificates



IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 17.0075X**

Page 4 of 5

Date of issue: **2023-05-15**

Issue No: 1

Equipment (continued):

DIN Rail transmitter:

Power supply

(terminals + and -)

U _i	≤	30V DC
i _i	≤	130 mA
P _i	=	770 mW
C _i	=	negligibly small
L _i	=	negligibly small

Sensor circuit

(terminal 3 to 8)

U _o	≤	9V DC
i _o	≤	13 mA
P _o	≤	29.3 mW

Max. connection values

Ex ia IIC	Lo = 5 mH	Co = 0.93 µF
Ex ia IIB	Lo = 20 mH	Co = 3.8 µF
Ex ia IIA	Lo = 50 mH	Co = 4.8 µF

Ambient temperature

Type (order option)

Temperature class

Ambient temperature

Ambient temperature

Zone 1/EPL Gb

Zone 0/ EPL Ga

dTRANS T07 B Ex	T6	-50°C ≤ Ta ≤ +58°C	-50°C ≤ Ta ≤ +46°C
	T5	-50°C ≤ Ta ≤ +75°C	-50°C ≤ Ta ≤ +60°C
Head transmitter without display	T4	-50°C ≤ Ta ≤ +85°C	-50°C ≤ Ta ≤ +60°C
dTRANS T07 B Ex	T6	-40°C ≤ Ta ≤ +55°C	
	T5	-40°C ≤ Ta ≤ +70°C	
Head transmitter with display (dTRANS T07 BD7)	T4	-40°C ≤ Ta ≤ +85°C	
dTRANS T07 T Ex	T6	-40°C ≤ Ta ≤ +46°C	
(DIN rail transmitter)	T5	-40°C ≤ Ta ≤ +61°C	
	T4	-40°C ≤ Ta ≤ +85°C	



IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 17.0075X**

Page 5 of 5

Date of issue: **2023-05-15**

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

This new issue of the certificate is issued to show that the ExCB responsible for the QAR has now been changed. No new ExTR required.

1 Certificates

1.4 Declaration of conformity for display module dTRANS T07 BD7

JUMO GmbH & Co. KG

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Internet: www.jumo.net



More than **sensors + automation**

EU-Konformitätserklärung

EU declaration of conformity / Déclaration UE de conformité

Dokument-Nr.

Document No. / Document n°.

CE 805

Hersteller

Manufacturer / Etabli par

JUMO GmbH & Co. KG

Anschrift

Address / Adresse

Moritz-Juchheim-Straße 1, 36039 Fulda, Germany

Produkt

Product / Produit

Name

Name / Nom

Typ

Type / Type

Typenblatt-Nr.

Data sheet no. / N°

Document

d'identification

BD7 - Aufsteckdisplay für dTRANS
T07

TN 00672701

707080

Produktbeschreibung

Product description / Description du produit

Aufsteckdisplay für dTRANS T07

Wir erklären in alleiniger Verantwortung, dass das bezeichnete Produkt die Anforderungen der Europäischen Richtlinien erfüllt.

We hereby declare in sole responsibility that the designated product fulfills the requirements of the European Directives.

Nous déclarons sous notre seule responsabilité que le produit remplit les Directives Européennes.

Dokument-Nr.
Document No. / Document n°.

CE 805

EU-Konformitätserklärung

Seite: 1 von 5

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More than **sensors + automation**

1. Richtlinie

Directive / Directive

Name EMC 2014/30/EU

Name / Nom

Konformitätsbewertungsverfahren Mod. A

Conformity assessment procedure /

Procédure d'évaluation de la conformité

Datum der Erstanbringung des CE-Zeichens auf 2018

dem Produkt

Date of first application of the CE mark to the product /

Date de 1ère application du sigle sur le produit

Angewendete Normen/Spezifikationen

Standards/Specifications applied / Normes/Spécifications appliquées

Referenz

Reference / Référence

EN 61326-1

Ausgabe

Edition / Édition

2013

Bemerkung

Comment / Remarque

Gültig für Typ

Valid for Type / Valable pour le type

TN 00672701

2. Richtlinie

Directive / Directive

Name ATEX 2014/34/EU

Name / Nom

Konformitätsbewertungsverfahren Mod. A and Mod. B+D

Conformity assessment procedure /

Procédure d'évaluation de la conformité

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Referenz

Reference / Référence

EN 60079-0

Ausgabe

Edition / Édition

2018

Bemerkung

Comment / Remarque

The application of this standard takes place within the framework of module A.

Gültig für Typ

Valid for Type / Valable pour le type

TN 00672701

2.1 EU-Baumusterprüfbescheinigung

EU type examination certificate / Certificat d'examen de type UE

Zertifikatsnummer

Certificate number / Numéro de certificat

EPS 18 ATEX 1 113 X

Notifizierte Stelle

Notified Body / Organisme notifié

BUREAU VERITAS Consumer Products
Services Germany GmbH, Wilhelm-Hennemann-
Straße 8, 19061 Schwerin, Germany

Angewendete Normen/Spezifikationen

Standards/Specifications applied / Normes/Spécifications appliquées

Referenz

Reference / Référence

EN 60079-0

EN 60079-11

Ausgabe

Edition / Édition

2012+A11:2013

2012

Bemerkung

Comment / Remarque

Qualitätssicherung bezogen auf den Produktionsprozess

Quality assurance of the production process / L'assurance de la qualité de la production

Zertifikatsnummer

Certificate number / Numéro de certificat

Available on request

Notifizierte Stelle

Notified Body / Organisme notifié

BUREAU VERITAS Consumer Products
Services Germany GmbH, Wilhelm-Hennemann-
Straße 8, 19061 Schwerin, Germany

Kennnummer

Identification no. / N° d'identification

2004

Dokument-Nr.
Document No. / Document n°.

CE 805

EU-Konformitätserklärung

Seite: 3 von 5

JUMO GmbH & Co. KG

Moritz-Juchheim-Straße 1
36039 Fulda, Germany

Tel.: +49 661 6003-0
Fax: +49 661 6003-500

E-Mail: mail@jumo.net
Internet: www.jumo.net



More than **sensors + automation**

3. Richtlinie

Directive / Directive

Name RoHS 2011/65/EU

Name / Nom

Konformitätsbewertungsverfahren Mod. A

Conformity assessment procedure /

Procédure d'évaluation de la conformité

Datum der Erstanbringung des CE-Zeichens auf 2018

dem Produkt

Date of first application of the CE mark to the product /

Date de 1ère application du sigle sur le produit

Angewendete Normen/Spezifikationen

Standards/Specifications applied / Normes/Spécifications appliquées

Referenz

Reference / Référence

Ausgabe

Edition / Édition

Bemerkung

Comment / Remarque

VDK Umweltrelevante Aspekte V1

bei der Produktentwicklung und

-gestaltung

Gültig für Typ

Valid for Type / Valable pour le type

TN 00672701

Dokument-Nr.
Document No. / Document n°.

CE 805

EU-Konformitätserklärung

Seite: 4 von 5

1 Certificates

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More than **sensors + automation**

Aussteller

Issued by / Etabli par

JUMO GmbH & Co. KG

Ort, Datum

Place, date / Lieu, date

Fulda, 2023-05-10

Rechtsverbindliche Unterschriften

Legally binding signatures /

Signatures juridiquement valable

Bereichsleitung Globaler Vertrieb

i. V. Markus Belmer

Qualitätsbeauftragter und Leiter Qualitätswesen

i. V. Harald Gienger

Dokument-Nr.
Document No. / Document n°.

CE 805

EU-Konformitätserklärung

Seite: 5 von 5

1.5 Examination certificate for display module dTRANS T07 BD7



(1) EU - Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 2014/34/EU

(3) EU - Type Examination Certificate Number

EPS 18 ATEX 1 113 X

Revision 0

(4) Component: Display module, type dTRANS T07 BD7

(5) Manufacturer: Jumo GmbH & Co. KG

(6) Address: Moritz-Juchheim-Straße 1
36039 Fulda
Germany

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

(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, 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 of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 18TH0251.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:


EN 60079-0:2012+A11:2013

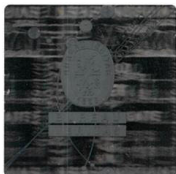
EN 60079-11:2012

(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 annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and examination of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

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

 II 2G Ex ia IIC T6...T4 Gb



Certification department of explosion protection

Nuremberg, 2018-05-29

H. Schaffer



Page 1 of 2

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 18 ATEX 1 113 X, Revision 0.

1 Certificates



(13)

Annex

(14) EU - Type Examination Certificate EPS 18 ATEX 1 113 X

Revision 0

(15) Description of equipment:

The display, type dTRANS T07 BD7 is used for the configuration of the head-type temperature transmitters of type dTRANS T07 B Ex as well as for the display of transmitter settings.

Electrical data:

Power supply
(CDI connector)

in type of protection Intrinsic Safety Ex ia I only for the connection of certified intrinsically safe circuit
Max. values: (Input)
U_i = 7.6 V
I_i = 130 mA
C_i = negligibly small maximum internal capacitance
L_i = negligibly small maximum internal inductance

Ambient temperature:

T6: -40 °C ≤ Ta ≤ +55 °C
T5: -40 °C ≤ Ta ≤ +70 °C
T4: -40 °C ≤ Ta ≤ +85 °C

(16) Reference number: 18TH0251

(17) Notes for manufacture, installation and operation:

The display dTRANS T07 BD7 must be installed in such a way that charging/ discharging of electrostatic is avoided.

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Nuremberg, 2018-05-29



Page 2 of 2

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 18 ATEX 1 113 X, Revision 0.

1 Certificates



IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 18.0048X**

Page 2 of 4

Date of issue: **2023-05-15**

Issue No: 1

Manufacturer: **Jumo GmbH & Co. KG**
Moritz-Juchheim-Straße 1
36039 Fulda
Germany

Manufacturing
locations:

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 equipment 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 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

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

This Certificate **does not** indicate compliance with 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/EPS/ExTR18.0047/00

Quality Assessment Report:

DE/EPS/QAR23.0003/00



IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 18.0048X**

Page 3 of 4

Date of issue: **2023-05-15**

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The display, type dTRANS T07 BD7 is used for the configuration of the head-type transmitters of type dTRANS T07 B Ex as well as for the display of transmitter settings.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The display dTRANS T07 BD7 must be installed in such a way that charging/ discharging of electrostatic is avoided.

1 Certificates



IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 18.0048X**

Page 4 of 4

Date of issue: 2023-05-15

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

This new issue of the certificate is issued to show that the ExCB responsible for the QAR has now been changed. No new ExTR required.

Annex:

IECEX EPS 18.0048X Issue 1 - Annex.pdf



Annex to Certificate
IECEx EPS 18.0048X Issue No.: 1



Electrical data:

Power supply (CDI connector) in type of protection Intrinsic Safety Ex ia I only for the connection of certified intrinsically safe circuit
Max. values: (Input)
U_i = 7,6 V
I_i = 130 mA
C_i = negligibly small maximum internal capacitance
L_i = negligibly small maximum internal inductance

Ambient temperature:

T6: -40 °C ≤ T_a ≤ +55 °C
T5: -40 °C ≤ T_a ≤ +70 °C
T4: -40 °C ≤ T_a ≤ +85 °C

2 Important information about this document

2.1 How this document works

The document forms part of the operating manual and acts as a reference for safety information and technical data concerning transmitter variants designed for potentially explosive areas according to Directive 2014/34/EU (ATEX).

2.2 Symbols

2.2.1 Symbols and descriptions for types of information



REFERENCE!

This symbol refers to **additional information** in other sections, chapters, or other manuals.

2.3 Other applicable device documentation

Document	Content of the document
Data sheet 707080 JUMO dTRANS T07	Planning aid for the device The document provides all technical data related to the device and an overview of all accessories that can be ordered for the device.
Operating manual JUMO dTRANS T07	These instructions contain information that is required in the various phases of the device's lifecycle: from product identification, product acceptance and storage to mounting, connection, basic operation, and startup, through to troubleshooting, maintenance and disposal.
SIL safety manual JUMO dTRANS T07	This manual for functional safety according to IEC 61508:2010 describes deviating requirements for device installation, startup, and operation of the safety function.

This safety manual applies in addition to the operating manual, data sheet and the SIL safety manual. The other applicable documents must be observed during installation, startup, and operation. The deviating requirements for potentially explosive areas are described in this safety manual.

3 Admissible device types

The information in this manual related to operation in potentially explosive areas applies to the device types listed below from the specified firmware and hardware versions. Unless specified otherwise, all of the following versions can also be applied.

Type	Designation	Description
707085	dTRANS T07 B Ex	For installation in terminal head, form B, with Ex approval
707086	dTRANS T07 B EX SIL	For installation in terminal head, form B, with Ex and SIL approval
707087	dTRANS T07 T Ex	For mounting on DIN rail, TS 35, with Ex approval
707088	dTRANS T07 T Ex SIL	For mounting on DIN rail, TS 35, with Ex and SIL approval
Valid firmware version		From 01.01.10
Valid hardware version (electronics)		From 01.00.07 (head transmitter) From 01.00.04 (DIN rail device)
Valid device drives		DTM from version 1.9.0.396 DD from revision 04

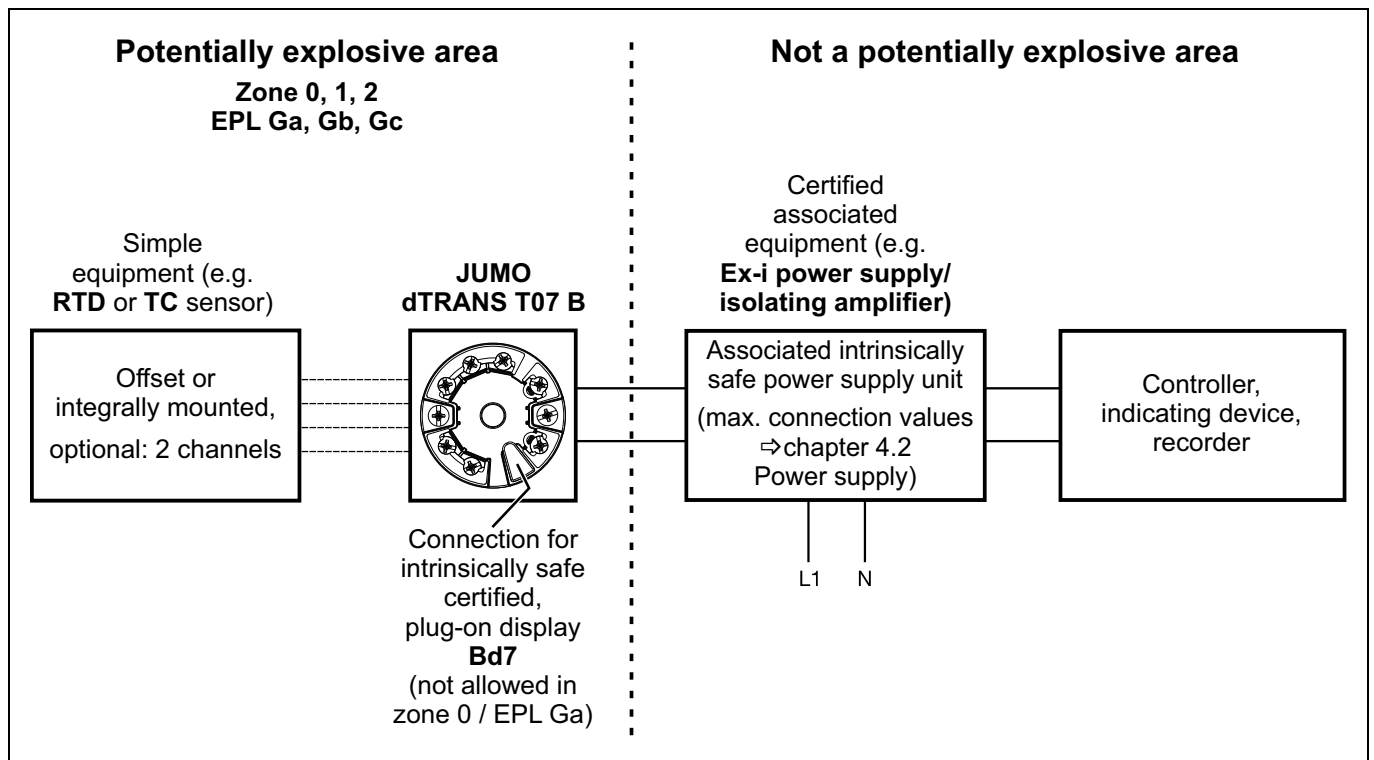
NOTE!

Ex-certified devices are marked with an Ex symbol on their nameplate.

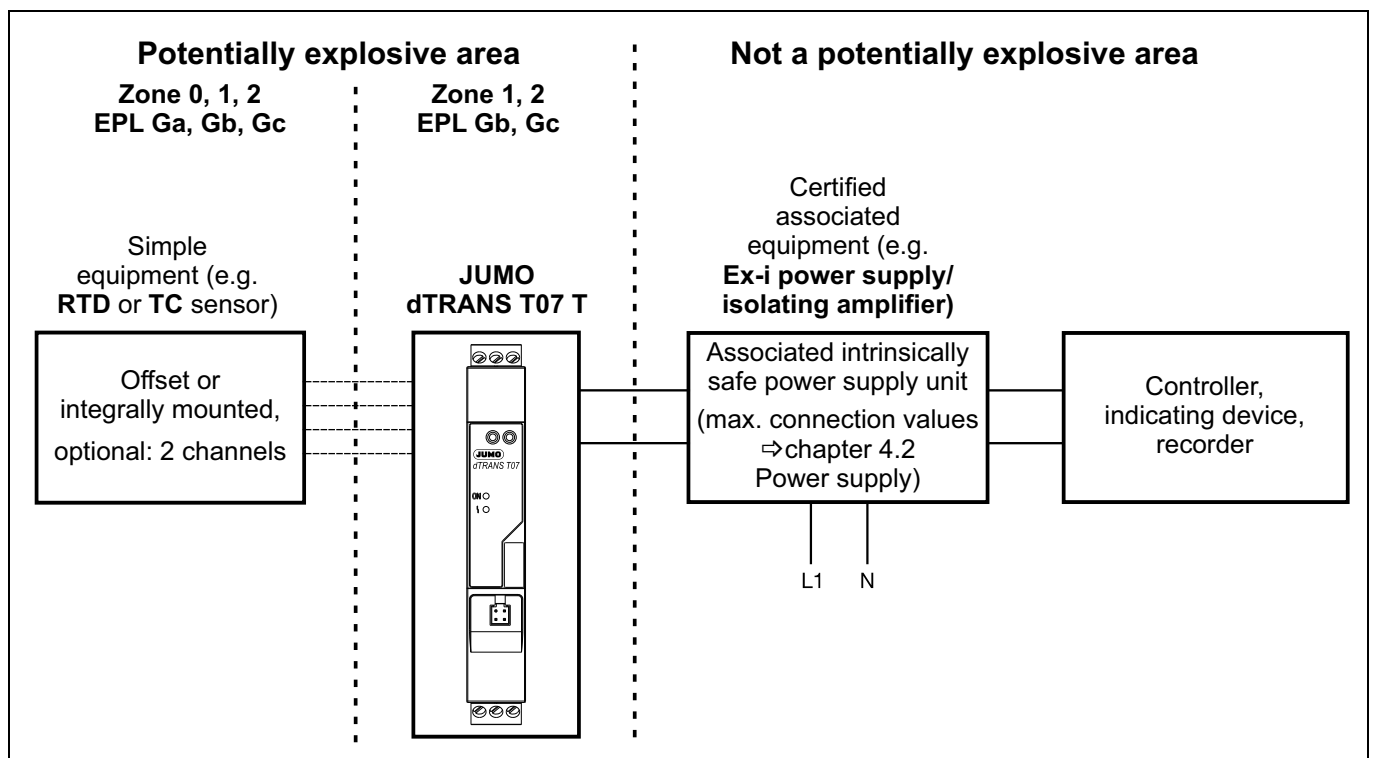


4 Safety information

Installation diagram for head transmitters in potentially explosive areas



Installation diagram for DIN rail devices in potentially explosive areas



4.1 Installation

- Please note the installation and safety information in the operating manual.
- Install the device according to the information provided by the manufacturer and the valid standards and rules (e.g., EN/IEC 60079-14).
- When installing the device, make sure that housing protection type IP20 is observed according to EN/IEC 60529.
- If the transmitter is connected to verified intrinsically safe electrical circuits in category "ib" from explosion protection group IIC or IIB, the ignition protection type changes: Ex ib IIC or Ex ib IIB.
- The CDI interface may not be used for configuration in potentially explosive areas.

4.2 Head transmitters

- Connect the device (terminal head) to the potential equalization wire.
- The approved display, type BD7, may only be installed in zone 1/EPL Gb or zone 2/EPL Gc.
- Please note the admissible ambient temperatures for the display, type BD7.

4.3 DIN rail devices

- During the installation process, make sure the distance between intrinsically safe electrical circuits and non-intrinsically safe electrical circuits is a 50 mm thread pitch.

4.4 Zone 1 and zone 2

- According to the information provided by the manufacturer, this operating equipment can be used in zone 1 (category 2)/EPL Gb or zone 2 (category 3) /EPL Gc.
- The sensor circuit may be implemented in zone 0 (category 1)/EPL Ga.

4.5 Zone 0

The following points only have to be observed if the device is installed directly in zone 0 (category 1)/EPL Ga.

- Explosive mixtures of steam/air may only arise under atmospheric conditions.
 - $-50\text{ °C} \leq T_a \leq +60\text{ °C}$
 - $0.8\text{ bar} \leq p \leq 1.1\text{ bar}$If no explosive mixtures are present or if additional measures in accordance with EN 1127-1 have been applied, the devices may also be operated outside of atmospheric conditions in accordance with the manufacturer's specifications.
- Observe the restricted ambient temperatures according to EN 1127-1 6.4.2 (⇒chapter 5.1 "Admissible ambient temperatures", Page 34).
- The supply circuit to be connected must meet ignition protection type Ex ia IIC (EN/IEC 60079-14 12.3).
- Only use the devices in media that are sufficiently resistant to the materials that come into contact with the process.
- When operating the complete device in zone 0/EPL Ga, make sure the housing materials (polycarbonate (PC) housing, polyurethane (PUR) potting) are compatible with the media.
- The display BD7 may not be installed in zone 0/EPL Ga.
- Install the transmitter so that no electrostatic charge can occur, e.g., by installing it in a grounded metallic head or grounded housing.

5 Technical data

5.1 Admissible ambient temperatures

Head transmitter without display

Temperature class	Ambient temperature zone 1	Ambient temperature zone 0
T6	-50 to +58 °C	-50 to +46 °C
T5	-50 to +75 °C	-50 to +60 °C
T4	-50 to +85 °C	-50 to +60 °C

Head transmitter with display

Temperature class	Ambient temperature zone 1	Ambient temperature zone 0
T6	-40 to +55 °C	--
T5	-40 to +70 °C	--
T4	-40 to +85 °C	--

DIN rail devices

Temperature class	Ambient temperature zone 1	Ambient temperature zone 0
T6	-40 to +46 °C	--
T5	-40 to +61 °C	--
T4	-40 to +85 °C	--

5.2 Voltage supply

Head transmitters

	Sensor circuit			Auxiliary energy circuit
Max. voltage U_0	DC 7.6 V			--
Max. current I_0	13 mA			--
Max. power P_0	24.7 mW			--
Max. voltage U_i	--			30 V
Max. current I_i	--			130 mA
Max. power P_i	--			800 mW
Max. internal inductance L_i	--			negligible
Max. internal capacitance C_i	--			negligible
Gas group	Ex ia IIC	Ex ia IIB	Ex ia IIA	--
Max. external inductance L_o	10 mH	50 mH	50 mH	--
Max. external capacitance C_o	1 μ F	4.5 μ F	6.7 μ F	--

DIN rail devices

	Sensor circuit			Auxiliary energy circuit
Max. voltage U_0	DC 9 V			--
Max. current I_0	13 mA			--
Max. power P_0	29.3 mW			--
Max. voltage U_i	--			30 V
Max. current I_i	--			130 mA
Max. power P_i	--			770 mW
Max. internal inductance L_i	--			negligible
Max. internal capacitance C_i	--			negligible

5 Technical data

	Sensor circuit			Auxiliary energy circuit
Gas group	Ex ia IIC	Ex ia IIB	Ex ia IIA	--
Max. external inductance L_o	5 mH	20 mH	50 mH	--
Max. external capacitance C_o	0.93 μ F	3.8 μ F	4.8 μ F	--

5.3 Ignition protection types

Device version	Ignition protection type (ATEX and IECEx)	Category (ATEX)
Head transmitters	Ex ia IIC T6...T4 Ga	II1G
DIN rail devices	Ex ib [ia Ga] IIC T6...T4 Gb	II2(1)G



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