

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:

IECEX EPS 17.0050X

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Certificate history:

Status:

Current

Issue No: 0

Date of Issue:

2020-04-01

Applicant:

BARTEC GmbH Max-Eyth-Straße 16

D - 97980 Bad Mergentheim

Equipment:

Line bushing: Type 07-920*-**** to 07-924*-**** Line Entry

Optional accessory:

Type of Protection:

db, tb

Marking:

Ex db IIC T6,T5,T4 Gb

Ex tb IIIC T80°C,T95°C,T110°C Db

Approved for issue on behalf of the IECEX

Certification Body:

Position:

(for printed version)

Date:

Holger Schaffe 6mbH 2020-04-0

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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





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Date of issue:

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Manufacturer:

BARTEC GmbH

Max-Eyth-Straße 16 D – 97980 Bad Mergentheim

Germany

Additional 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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

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/EXTR17.0093/00

Quality Assessment Report:

DE/TUN/QAR06.0017/11



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Line Entry Type $07-920^{\pi_- *****}/*****$ to $07-924^{\pi_- *****}/*****$ is for the insertion of hose lines into flameproof enclosure "Ex d".

For additional rating information see attached file "IECEX EPS 17.0050 X - Annex Euipment Ratings"

SPECIFIC CONDITIONS OF USE: YES as shown below:

- If line entries with threads are screwed into threaded holes, then the holes must comply with the minimum requirements specified in IEC 60079-1, section 5.3 (Table 4).
- The line entries must be attached to the electrical device in such a way that they cannot get lost or twisted.
- The hose line of the line entries must be inserted into enclosures that comply with a type of protection as detailed in IEC 60079-0 section 1.
- If temperature allocations that differ from the ones specified in this design test certificate are used, the operating conditions of the line entries are to be specified in the type test of the respective electrical equipment.
- The hose line's quality must be selected in such as way that it meets the thermal and mechanical require-ments in their area of operation.

Annex

IECEX EPS 17.0050 X - Annex Euipment Ratings.pdf



Annex to Certificate (Equipment Rating) IECEx EPS 17.0050 X Issue No.: 0



Description of equipment:

The Line Entry Type 07-920*-****/**** to 07-924*-****/**** is for the insertion of hose lines into flameproof enclosure "Ex d".

Electrical data:

Type No.	07	-	9	2	*	Z	9	E	*	*	ż	1	*	×	*	•
Key No	А	П	В	С	D	Е		F	G	Н	Т		J	К	L	M

Key	Code number	Varia-	Description
110,	for	Tions	,
A, B, C	Line entry	07-92	
D	Sleeve design and	0	screw thread, metric
	kind of thread	1	screw thread, differing to metric, e.g. NPT
		2	screw thread, differing to metric e.g. WWR
		3	screw thread, metric special types
		4	screw thread, differing to metric, e.g. Pg thread
E	Cable design	0	Spacial cables
		1	Rubber hose cable up to 1,140 V PVC- hose cable up to 1,000V
		2	Rubber hose cable up to 1,000 V, increased temp. range
		3 4	Rubber hose o 500 V
1	1	5	Rubber hose cable up to 500 V
		6	Rubber hose cable up to 750 V
Į.		7	Hose cable up to 300 V for intrinsically safe circuits
ĺ		8	Hose cable with screen resp. braiding up to 1,000 V
F	Wire cross-section	A	Special cross-section between B to W (e.g. AWG)
l "	11110 01000 00011011	В	$0.14 - 0.2 \mathrm{mm}^2$ C $0.25 - 0.3 \mathrm{mm}^2$
ł		D	$0.34 - 0.35 \mathrm{mm^2}$ E $0.5 \mathrm{mm^2}$
		F	0.75 mm ² G 1 mm ²
		Н	1.5 mm ² J 2.5 mm ²
		K	4 mm ² L 6 mm ²
		M	10 mm ² N 16 mm ²
	1	Р	25 mm ² Q 35 mm ² 50 mm ² S 70 mm ²
	1	R	50 mm ² S 70 mm ² 95 mm ² U 120 mm ²
	1	T	150 mm ² W 185 mm ²
		Ž	mixed
G. H	Design and	Hose line with xx	
0,11	number of wires at		sin on sleeve side): steps into the resin on boss
	hose line	(side):
		xx:	уу:
	1	01	1 wire 51 1 wire
	l	02	2 wires 52 2 wires
		up to	up to
	Ì	49	49 wires 99 49 wires
	l	Hose line with zz	
		A1, A2 A9	1, 2 9 wires A0 10 wires 11 – 19 wires B0 20 wires
		B1, B2 B9 C1, C2 C9	11 – 19 wires B0 20 wires 21 – 29 wires C0 30 wires
		D1, D2 D9	31 – 39 wires D0 40 wires
		E1, E2 E9	41 – 49 wires
1	Size of sleeve	1	M16x1 2 M24x1.5
	SIZE OF SIEERE	3	M33x1.5 4 M36x1.5
		5	M38x1.5 6 M42x1.5



Annex to Certificate (Equipment Rating) IECEx EPS 17.0050 X Issue No.: 0



		7	M48x1.5	3	M56x1.5				
	i i	'n	M16x1.5	Ĕ	M20x1.5				
	1	5							
		۲	M25x1.5	G	M32x1.5				
		L	M40x1.5	R	M64x1.5				
		S	M72x1.5	9	Special size				
			respective NPT-, WWR- and Pg-sizes						
K	Design	Α	Stripped BARTEC green						
	(and Ex marking)	В	Stripped Huntsman CW1302						
		D	pressure-sealed, -0,9 to 80 bar (for GAS)						
	1 1	E pressure-sealed, -0,9 to 80 bar (for GA							
	1	U	bar (for GAS)						
		V	pressure-sealed, -0,5 to 6 bar (for GAS S DUST)						
	1 1	X	Standard (for GAS)						
		Y	Standard (for GAS % DUST)						
J, L, M	Number or letter		***************************************						
	for characteristics								
	without influence								
	on the explosion								
	protection								
	horsenou								

Rated voltage (1):	300 V up	to 1140 V		7.44.4				
Rated current (1):	1.8 A up to 347 A							
Rated cross section area (1):	0.14 mm ² up to 185 mm ²							
Ambient Temperature								
	Ta min-	Ta max-	Temperature class	Notes				
	-60 °C	40 °C	Т6	When using hose line with temperature range -60 °C \geq T \geq 80 °C				
	-60 °C	55 °C	T5	When using hose line with temperature range -60 °C ≥ T ≥ 95 °C				
	-60 °C	70 °C	T4	When using hose line with temperature range -60 °C ≥ T ≥ 110 °C				
Max. operating temperature at the place of installation of the line entry in normal								
operation (1):	-60 °C ≤ Ts ≤ 110 °C							
~		up to M72						
Type of thread dimension (1):	(Respective e.g. NPT-, WWR- and Pg-sizes)							
Number of wires (1):	0 49							
Static test pressure		20.00.00		·				
(type tested) (1):	30 bar	48.6 bar						

(1): depending on used hose line

Special consideration has to be taken of the machine's own heat and the heat of the electrical equipment in the place of operation at the maximum permitted ambient temperature, while at the same time complying with the operating temperatures of the cast resin and the conduction qualities.