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 TUN 21.0006X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2021-04-20		
Applicant:	**ARCA-REGLER GmbH** Kempener Straße 18 47918 Tönisvorst **Germany**		
Equipment:	**Electropneumatic positioner ARCASMART 826**		
Optional accessory:			
Type of Protection:	**Intrinsic safety, Increased safety, Dust ignition protection by enclosure**		
Marking:	II 2 G Ex ia IIC T4 Gb II 3 G Ex ic IIC T4 Gc II 3 G Ex ec IIC T4 Gc II 2 D Ex tb IIIC T100°C Db		

Approved for issue on behalf of the IECEx Certification Body: **Christian Roder**

Position: **Head of IECEx Certification Body**

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 www.iecex.com or use of this QR Code.

Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1, 30519 Hannover
Germany

IECEx Certificate of Conformity

Manufacturer: **ARCA-REGLER GmbH**
Kempener Straße 18
47918 Tönisvorst
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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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/TUN/ExTR21.0007/00

Quality Assessment Report:

DE/TUN/QAR21.0001/00

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The electropneumatic positioner ARCASMART 826 is intended to regulate the valve or damper position in pneumatic actuators. It serves as a coupling assembly between electrical controllers or control devices and pneumatic actuators.

Refer to attachment for more details.

SPECIFIC CONDITIONS OF USE: YES as shown below:
The electropneumatic positioner ARCASMART 826 with polymeric lid (type 826.**-***-K**-*.*) shall be protected against the build-up of electrostatic charges.

The capacitance of the labels exceeds the allowed value of 3 pF.

Operating instructions must be observed.

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Additional information:
N/A

Annex:

Attachment to IECEx TUN 21.0006 X.pdf

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Product:

The electropneumatic positioner ARCASMART 826 is intended to regulate the valve or damper position in pneumatic actuators. It serves as a coupling assembly between electrical controllers or control devices and pneumatic actuators.

Type designation

1	2	3	-	4	5	6	-	7	8	9	-	10		11
826	a	b	-	c	d	e	-	f	g	0	-	h	-	i

Illustration type of enclosure	
826 (f=K)	**826 (f=M)**
Polycarbonate	**Aluminum**
	

ARCASMART, type 826.ab-cde-fg0-h-i			
	Type of explosion protection Index (a)	Type of option Index (i)	
Enclosure material index f=			
K	X	-	or
M	X, S, D	-	or
Order Codes Index Z=	SE		

* = any character

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826	E	2	-	0	0	0	-	M	1	0	-	G	-	KA
[1]	[2]	[3]	-	[4]	[5]	[6]	-	[7]	[8]	[9]	-	[10]	-	[11]

1. Series	
826	

2. Explosion protection	
E	not explosion proof
X	Ex i (IS)
S	Ex i (IS); Ex e (NI)
D	Ex i (IS); Ex e (NI); Ex t (DIP)

3. Basic device connection	
2	2-wire

4. Analogue output	
0	no analogue module
A	with analogue module

5. Binary output	
0	no binary module
B	with binary module

6. Communication	
0	without communication
H	with HART communication

7. Housing material /cover	
M	Anodised aluminium / anodised aluminium
K	Anodised aluminium / plastic

8. Pneumatics	
1	single-acting
2	double-acting

9. Position recording	
0	Standard (contactless)

10. Connecting thread electrical/pneumatic	
G	M20x1.5 / G 1/4
N	1/2" NPT / 1/4" NPT
M	M20x1.5 / 1/4" NPT
P	1/2" NPT / G 1/4

11. Options Z	
SE	Silencer, rust-proof stainless steel
ZD	Supply air restrictor
KA	Customised design

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Marking

With Index		Marking
f=	**a=**	
K, M	X	II 2 G Ex ia IIC T4 Gb II 3 G Ex ic IIC T4 Gc
M	S	II 2 G Ex ia IIC T4 Gb II 3 G Ex ic IIC T4 Gc II 3 G Ex ec IIC T4 Gc
M	D	II 2 G Ex ia IIC T4 Gb II 3 G Ex ic IIC T4 Gc II 3 G Ex ec IIC T4 Gc II 2 D Ex tb IIIC T100°C Db

Electrical Data:

Analog Input (AI / HART),
control current 4 … 20 mA
Terminals 6 (+) and 7 (-)

only for the connection to an intrinsically safe circuit in type of protection "Ex ia IIC" resp. "Ex ib IIC".
Maximum values: U_i = 30 V
I_i = 100 mA
P_i = 750 mW
C_i = 6 nF
L_i = 221 µH

resp.

only for the connection to an intrinsically safe circuit in type of protection "Ex ic IIC".
Maximum values: U_i = 30 V
I_i = 100 mA
C_i = 6 nF
L_i = 221 µH

resp.

in type of protection increased safety "Ex ec IIC".
Nominal voltage: U_n ≤ 30 V
Nominal current: I_n ≤ 100 mA

resp.

in type of protection dust ignition protection by enclosure "Ex tb IIIC".
Nominal voltage: U_n ≤ 30 V
Nominal current: I_n ≤ 100 mA

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Analog Output (AO),
control current 4 … 20 mA
Terminals 61 (+) and 62 (-)

only for the connection to an intrinsically safe circuit in type of protection "Ex ia IIC" resp. "Ex ib IIC".
Maximum values: U_i = 30 V
I_i = 100 mA
P_i = 750 mW
C_i = 7 nF
L_i = 66 µH

resp.

only for the connection to an intrinsically safe circuit in type of protection "Ex ic IIC".
Maximum values: U_i = 30 V
I_i = 100 mA
C_i = 7 nF
L_i = 66 µH

resp.

in type of protection increased safety "Ex ec IIC".
Nominal voltage: U_n ≤ 30 V
Nominal current: I_n ≤ 100 mA

resp.

in type of protection dust ignition protection by enclosure "Ex tb IIIC".
Nominal voltage: U_n ≤ 30 V
Nominal current: I_n ≤ 100 mA

Thermal data:
Permissible ambient temperature range:

ARCASMART, Typ 826.ab-cde-fg0-h-i with types of protection Ex ia/ic and Ex ec	
	Temperature class T4
with the data (f = K, M) and (a = X, S, D)	-20°C ≤ T_a ≤ +80°C

ARCASMART, Typ 826.ab-cde-fg0-h-i with type of protection Ex tb	
with the data (f = M) and (a = D)	-20°C ≤ T_a ≤ +80°C

Special Conditions for Safe Use:

The electropneumatic positioner ARCASMART 826 with polymeric lid (type 826.**-***-K**-* shall be protected against the build-up of electrostatic charges.

The capacitance of the labels exceeds the allowed value of 3 pF.

Operating instructions must be observed.