

Certificate of Compliance

Certificate: 80100598 Master Contract: 603323

Project: 80100598 Date Issued: September 22, 2021

Issued To: ARCA-Regler GmbH

Kempener Str. 18

Toenisvorst, North Rhine-Westphalia 47918

Germany

The products listed below are eligible to bear the CSA Mark shown



Maria Gomes

Issued by: Maria Gomes

PRODUCTS

Electropneumatic positioner ARCASMART 826 Type designation:

1	2	3	-	4	5	6	-	7	8	9	-	10	-	1	1
826	a	b	-	С	d	e	-	f	g	0	-	h	•	i	
1 = Series															
826															
2 = Ex protection concept															
a	= E]	not explosion proof												
a:	= X	Intrinsic safety Gb (Ex ia IIC T4 Gb/ Cl I, Div 1 Gp A-D)													
]	Intrinsic safety Gc (Ex ic IIC T4 Gc / Cl I, Div 2 Gp A-D)												
a	a = S Intrinsic safety (Ex ia IIC T4 Gb / Cl I, Div 1 Gp A-D)														
]	Intrinsic safety (Ex ic IIC T4 Gc / Cl I, Div 2 Gp A-D)												
	Increased safety Gb (Ex ec IIC T4 Gc / Cl I, Div 2 Gp A-D)														
a	= D]	Intrinsic safety (Ex ia IIC T4 Gb / Cl I, Div 1 Gp A-D)												
		Intrinsic safety Gc (Ex ic IIC T4 Gc / Cl I, Div 2 Gp A-D)													
	Increased safety (Ex ec IIC T4 Gc / Cl I, Div 2 Gp A-D)														
]	Dust Ignition Protection (Ex tb IIIC T100°C Db / Cl II, Div 1 Gp A-D; Class III)												



3 = Basic de	evice connection									
b = 2	2-wire									
4 = Analogue output										
c = 0	no analogue module									
c = A	with analogue module									
5 = Binary	5 = Binary output									
d = 0	no binary module									
d = B	with binary module									
6 = Commu	6 = Communication									
e = 0	without communication									
e = H	with HART communication									
7 = Housing material / cover										
f = K Polyca	arbonate $f = M$ Aluminum									
8 = Actuato										
g=1	Single acting									
g=2	Double acting									
9 = Position										
	0 Standard (contactless)									
10 = Connecting thread electrical/pneumatic										
h=G	M20x1,5 / G 1/4									
h=N	1/2" NPT / 1/4" NPT									
h=M	M20x1,5 / 1/4" NPT									
	h=P 1/2" NPT / G 1/4									
11 = Device option Z										
i=SE i=ZD	Silencer, rust proof stainless steel Supply air restrictor									
	11 0									
i=KA	CA Customised design									

CLASS - C225804 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

Ex ia IIC T4 Gb I.S. Class I Div 1, Group A, B, C, D, T4

Electropneumatic positioner ARCASMART 826, Type 826 series with below order codes: 826a*-***-f*0-*-*



Where a = (X,S,D) & f = (M or K) the identifiers marked with "*" are placeholders and may vary. Ambient Temperature -20 to +80 °C. Maximum Working Pressure 1.4 to 7.0 bar. IP66, Type 4X. Intrinsically safe when powered through an associated I.S apparatus. The max input parameters are:

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

Ui = 30 V Ii = 100 mA Pi = 750 mW Ci = 6 nF $Li = 221 \mu H$

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

 $\begin{array}{ll} Ui & = 30 \ V \\ Ii & = 100 \ mA \\ Pi & = 750 \ mW \\ Ci & = 7 \ nF \\ Li & = 66 \ \mu H \end{array}$

Note: This interface is labelled as output only in terms of signaling. It is an input in terms of power, and therefore input parameters are specified. This interface is supplied by an external source and signalizes by modulating the input current in the range of 4-20mA.

Conditions of Acceptability

- 1. The electropneumatic positioner ARCASMART 826 with polymeric lid (f=K) shall be protected against the build-up of electrostatic charges. The non-metallic labels may store an electrostatic charge and become a source of ignition. Clean with a damp cloth to prevent the buildup of electrostatic charge.
- 2. Operating instructions in all cases shall be observed.
- 3. The process temperature shall not exceed 80°C for gas environment.
- 4. The capacitance exceeds the allowed value of 3pF.
- 5. Use supply cables suitable for 20°C above the maximum ambient/surrounding temperature.
- 6. The cable shield must be connected to earth potential in accordance with CEC Part I.
- 7. Before commissioning the indications of the protection type which are not being used have to be removed.
- 8. Diameter of cable for delivered cable gland is 6 to 12 mm.
- 9. Approved I.S barrier must meet the following requirements: Uo < Ui.; Io < Ii.; Po < Pi max.; Co > Ci + Ccable; Lo > Li + Lcable.

Ex ic IIC T4 Gc

I.S. Class I Div 2, Group A, B, C, D, T4

Electropneumatic positioner ARCASMART 826 Type 826 series with below order codes: 826a*-***-f*0-*-*

Where a = (X,S,D) & f = (M or K) the identifiers marked with "*" are placeholders and may vary.



Ambient Temperature -20 to +80 °C. Maximum Working Pressure 1.4 to 7.0 bar. IP66, Type 4X. Intrinsically safe when powered through an associated I.S apparatus. The input parameters are:

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

Ui = 30 V Ii = 100 mA Ci = 6 nF $Li = 221 \mu\text{H}$

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

Ui = 30 V Ii = 100 mA Ci = 7 nF $Li = 66 \mu\text{H}$

Note: This interface is labelled as output only in terms of signaling. It is an input in terms of power, and therefore input parameters are specified. This interface is supplied by an external source and signalizes by modulating the input current in the range of 4-20mA.

Conditions of Acceptability

- 1. The electropneumatic positioner ARCASMART 826 with polymeric lid (f=K) shall be protected against the build-up of electrostatic charges. The non-metallic labels may store an electrostatic charge and become a source of ignition. Clean with a damp cloth to prevent the buildup of electrostatic charge.
- 2. Operating instructions in all cases shall be observed.
- 3. The process temperature shall not exceed 80°C for gas environment.
- 4. The capacitance exceeds the allowed value of 3pF.
- 5. Use supply cables suitable for 20°C above the maximum ambient/surrounding temperature.
- 6. The cable shield must be connected to earth potential in accordance with CEC Part I
- 7. Before commissioning the indications of the protection type which are not being used have to be removed.
- 8. Diameter of cable for delivered cable gland is 6 to 12 mm.
- 9. Sufficient ventilation for this operating condition must be ensured to avoid a Zone 0 atmosphere around the device. Operating instructions must be adhered to.
- 10. Approved associated non -incendive field wiring apparatus or approved barrier must meet the following requirements: Uo < Ui .; lo < Ii x.; Po < Pi .; Co > Ci+Ccable; Lo > Li+Lcable

CLASS - C225802 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations

Ex ec, IIC T4 Gc Class I, Div. 2, Groups A, B, C, D; T4 Ex tb IIIC T100°C Db Class II, Div 1, Group E, F, G T100°C; Class III, Enclosure Type 4X, IP66



Electropneumatic positioner ARCASMART 826, Type826 series with below order codes:

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826a*-c*e-f*0-h-* Where f = (M), a = S (Ex ec; Class I Div 2, Group A, B, C, D; T4), D (Ex ec; Class I Div 2, Group A, B, C, D, T4; Ex tb; Class II, Div 1, Group E, F, G T100°C; Class III) e = 0, H; c = 0, A; h = G, N, M, P;
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Identifiers marked with "*" are placeholders and may vary.

Ambient Temperature -20 to +80 °C. Maximum. power ratings 30V/100mA, max 2 x 750mW. Working Pressure 1.4 to 7.0 bar.

Conditions of Acceptability

- 1. The non-metallic labels may store an electrostatic charge and become a source of ignition. Clean with a damp cloth to prevent the buildup of electrostatic charge.
- 2. The device shall only be used for a fixed installation. The user shall ensure adequate clamping of the cables in the end installation.
- 3. Operating instructions in all cases shall be observed.
- 4. The process temperature shall not exceed 80°C for gas environment.
- 5. The capacitance exceeds the allowed value of 3pF.
- 6. Use supply cables suitable for 20°C above the maximum ambient/surrounding temperature.
- 7. The cable shield must be connected to earth potential in accordance with CEC Part I.
- 8. Before commissioning the indications of the protection type which are not being used have to be removed.
- 9. The installation shall be in accordance with Canadian Electrical Code Part I Section 18 requirements for Zone 2/Div 2, and Class II, Class III wiring methods.



APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 61010-1-12	2012	Safety Requirements for Electrical Equipment for
		Measurement,
		Control, and Laboratory Use - Part 1: General Requirements
CAN/CSA-C22.2 No. 60079-0-19	2019	Explosive atmospheres - Part 0: Equipment - General
		Requirements
CAN/CSA-C22.2 No. 60079-7-16	2016	Explosive atmospheres - Part 7: Equipment protection by
		increased safety "e"
CAN/CSA-C22.2 No. 60079-11-	2014	Explosive Atmospheres - Part 11: Equipment protection by
14		intrinsic safety "i"
CAN/CSA-C22.2 No. 60079-31-	2015	Electrical Apparatus for Explosive Gas Atmospheres - Part 31
15		Equipment dust ignition protection by enclosure "t"
CSA-C22.2 No. 25-17	2017	Enclosures for Use in Class II Groups E, F and G
		Hazardous Locations
CAN/CSA-C22.2 No. 60529	2016	Degrees of protection provided by enclosures (IP Code)
CAN/CSA-C22.2 No. 94.2-20	2020	Enclosures for Electrical Equipment, Environmental
		Considerations

MARKINGS

Each unit shall bear all the required markings identified in the applicable certification report(s). Note: The Listee's name and/or CSA file number shall replace the submittor's equivalent information (where applicable).



Supplement to Certificate of Compliance

Certificate: 80100598 Master Contract: 603323

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Submittor Report	Submittor	<u>Listee ID</u>
80100598	September 22, 2021	185289-80043203	SIPART PS100 6DR71a*-bcNde-f*g0-Zjjj	ARCASMART 826 826ab-cde-fg0-h-i