



(1) **Supplementary EU - Type Examination Certificate No.1**

(2) **Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 2014/34/EU)**

(3) EU - Type Examination Certificate number:

FTZÚ 18 ATEX 0141X

(4) Product: **Back pressure flap, type BADA DN 200 ÷ DN 1000**

(5) Manufacturer: **Formula Air Baltic, UAB**

(6) Address: **P. Motiekaičio g. 3, 77104 Šiauliai, Lithuania**

(7) This supplementary certificate extends EU - Type Examination Certificate No. FTZÚ 18 ATEX 0141X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

(8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, certifies that this product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 16447:2014 EN ISO 80079-36:2016

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.


(11) The marking of the product shall include the following:

 **II D St1**

 **II 1/2 D Ex h IIIB T85°C Da/Db**

(12) This certificate is valid till: **18.12.2023**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



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Ostrava - Radvanice**

(13) **Schedule**

(14) **Supplementary EU - Type Examination Certificate No. 1
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(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Extension of the series, change of the company address.

This supplementary certificate describes the extension of series of the BADA back pressure flaps for sizes from DN 200. Type series of explosion isolation flap valves BADA works as a protective system when fulfilling the requirements in article (17) below.


(16) Report Number.: 18/0141/1

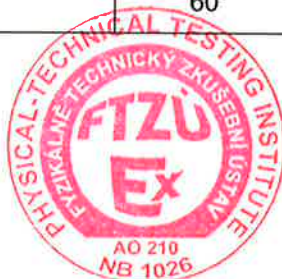
(17) Specific Conditions of Use:

1. Ambient temperature range: from -20°C to 60°C.
2. Parameters of the dust: organic non-metallic dust, $K_{st,max} = 200 \text{ bar.m.s}^{-1}$, MIE = 13mJ, MIT = 430°C.
3. DN 200 – 400: Pull and push, straight pipes or 2x 90° bend is allowed between the protected vessel and the flap.
DN 450 - 1000: Pull flow situation, straight pipes between the protected vessel and the flap. Venting on the protected vessel only with non-reclosing vent devices (this excludes e.g. suppression and venting with reclosing vent devices).
4. The maximal speed flow is 25 m.s⁻¹.
5. The maximum dust concentration in the ducting is without the limit.
6. The product has to be installed so that the propagating brush discharges on the external surface of the device are avoided.
7. The electrical devices installed together with the back pressure flap must have the type of protection corresponding with the defined explosive zone.

Parameters of flap (unit):	Sizes DN (mm):			
	200	250-400	450 - 600	650-1000
$p_{red,max}$ (bar)	0,5	0,5	0,5	0,5
p_{max} (bar) design pressure - EN 14460	1	1	0,8	0,7
minimal vessel volume (m ³)	0,46	0,96	6	6
minimal installation distance (m)	2,2	3,1	4	4
maximal installation distance (m)	7,2	7,2	7,2	7
maximum allowable opening angle of the blade to the vertical	60°	60°	60°	50°

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(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (9) of this supplementary certificate.

(19) Drawings and Documents:

Number	Sheets	Issue	Date	Description
1-1_0-0-0	1	D	27.06.2019	Non-return valve BADA 200FF20-ATEX
1-1_0-0-0	1	D	27.06.2019	Non-return valve NRV200-ATEX
1-1_1-0-0	1	D	27.06.2019	Housing
1-1_1-0-0	1	D	27.06.2019	Housing with sensor
1-1_2-0-0	1	D	27.06.2019	Inlet
1-1_3-0-0	1	D	27.06.2019	Flap
1-1_3-0-1	1	D	27.06.2019	Blade
1-1_3-1-0	1	D	27.06.2019	Arm
1-1_4-0-0	1	D	27.06.2019	Lock
1-1_5-0-0	1	D	27.06.2019	Inspection lid
1-1_0-0-10	1	C	27.06.2019	Gasket 15x5, L=1305mm ATEX-8
1-1_2-0-10	1	C	27.06.2019	Gasket, L=730mm ATEX-14
1-1_5-0-10	1	C	27.06.2019	Gasket 15x5, L=1046mm ATEX-8
1-2_0-0-0	1	A	27.06.2019	Non-return valve BADA 250FF20-ATEX
1-2_0-0-0	1	A	27.06.2019	Non-return valve NVR250-ATEX
1-2_1-0-0	1	A	27.06.2019	Housing
1-2_1-0-0	1	A	27.06.2019	Housing with sensor
1-2_2-0-0	1	A	27.06.2019	Inlet
1-2_3-0-0	1	A	27.06.2019	Flap
1-2_3-0-1	1	A	27.06.2019	Blade
1-2_3-1-0	1	A	27.06.2019	Arm
1-2_4-0-0	1	A	27.06.2019	Lock
1-2_5-0-0	1	A	27.06.2019	Inspection lid
1-2_0-0-10	1	A	27.06.2019	Gasket 15x5, L=1465mm ATEX-8
1-2_2-0-10	1	A	27.06.2019	Gasket, L=895mm ATEX-14
1-2_5-0-10	1	A	27.06.2019	Gasket 15x5, L=1046mm ATEX-8

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(19) Drawings and Documents:

Number	Sheets	Issue	Date	Description
1-1_0-0-0	1	D	27.06.2019	Non-return valve BADA 200FF20-ATEX
1-1_0-0-0	1	D	27.06.2019	Non-return valve BADA 200FF20-ATEX with sensor
1-1_1-0-0	1	D	27.06.2019	Housing
1-1_1-0-0	1	D	27.06.2019	Housing with sensor
1-1_2-0-0	1	D	27.06.2019	Inlet
1-1_3-0-0	1	D	27.06.2019	Flap
1-1_3-0-1	1	D	27.06.2019	Blade
1-1_3-1-0	1	D	27.06.2019	Arm
1-1_4-0-0	1	D	27.06.2019	Lock
1-1_5-0-0	1	D	27.06.2019	Inspection lid
1-1_0-0-10	1	C	27.06.2019	Gasket 15x5, L=1305mm ATEX-8
1-1_2-0-10	1	C	27.06.2019	Gasket, L=730mm ATEX-14
1-1_5-0-10	1	C	27.06.2019	Gasket 15x5, L=1046mm ATEX-8
1-2_0-0-0	1	A	27.06.2019	Non-return valve BADA 250FF20-ATEX
1-2_0-0-0	1	A	27.06.2019	Non-return valve BADA 250FF20-ATEX with sensor
1-2_1-0-0	1	A	27.06.2019	Housing
1-2_1-0-0	1	A	27.06.2019	Housing with sensor
1-2_2-0-0	1	A	27.06.2019	Inlet
1-2_3-0-0	1	A	27.06.2019	Flap
1-2_3-0-1	1	A	27.06.2019	Blade
1-2_3-1-0	1	A	27.06.2019	Arm
1-2_4-0-0	1	A	27.06.2019	Lock
1-2_5-0-0	1	A	27.06.2019	Inspection lid
1-2_0-0-10	1	A	27.06.2019	Gasket 15x5, L=1465mm ATEX-8
1-2_2-0-10	1	A	27.06.2019	Gasket, L=895mm ATEX-14
1-2_5-0-10	1	A	27.06.2019	Gasket 15x5, L=1046mm ATEX-8

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Number	Sheets	Issue	Date	Description
1-3_0-0-0	1	A	27.06.2019	Non-return valve BADA 300FF20-ATEX
1-3_0-0-0	1	A	27.06.2019	Non-return valve BADA 300FF20-ATEX with sensor
1-3_1-0-0	1	A	27.06.2019	Housing
1-3_1-0-0	1	A	27.06.2019	Housing with sensor
1-3_2-0-0	1	A	27.06.2019	Inlet
1-3_3-0-0	1	A	27.06.2019	Flap
1-3_3-0-1	1	A	27.06.2019	Blade
1-3_3-1-0	1	A	27.06.2019	Arm
1-3_4-0-0	1	A	27.06.2019	Lock
1-3_5-0-0	1	A	27.06.2019	Inspection lid
1-3_0-0-10	1	A	27.06.2019	Gasket 15x5, L=1618mm ATEX-8
1-3_2-0-10	1	A	27.06.2019	Gasket, L=1060mm ATEX-14
1-3_5-0-10	1	A	27.06.2019	Gasket 15x5, L=1210mm ATEX-8
1-4_0-0-0	1	A	27.06.2019	Non-return valve BADA 350FF20-ATEX
1-4_0-0-0	1	A	27.06.2019	Non-return valve BADA 350FF20-ATEX with sensor
1-4_1-0-0	1	A	27.06.2019	Housing
1-4_1-0-0	1	A	27.06.2019	Housing with sensor
1-4_2-0-0	1	A	27.06.2019	Inlet
1-4_3-0-0	1	A	27.06.2019	Flap
1-4_3-0-1	1	A	27.06.2019	Blade
1-4_3-1-0	1	A	27.06.2019	Arm
1-4_4-0-0	1	A	27.06.2019	Lock
1-4_5-0-0	1	A	27.06.2019	Inspection lid
1-4_0-0-10	1	A	27.06.2019	Gasket 15x5, L=1775mm ATEX-8
1-4_2-0-10	1	A	27.06.2019	Gasket, L=1225mm ATEX-14
1-4_5-0-10	1	A	27.06.2019	Gasket 15x5, L=1350mm ATEX-8
1-5_0-0-0	1	C	27.06.2019	Non-return valve BADA 400FF20-ATEX
1-5_0-0-0	1	C	27.06.2019	Non-return valve BADA 400FF20-ATEX with sensor
1-5_1-0-0	1	C1	27.06.2019	Housing
1-5_1-0-0	1	C	27.06.2019	Housing with sensor
1-5_2-0-0	1	C	27.06.2019	Inlet
1-5_3-0-0	1	C	27.06.2019	Flap
1-5_3-0-1	1	C	27.06.2019	Blade
1-5_3-1-0	1	C	27.06.2019	Arm

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Number	Sheets	Issue	Date	Description
1-5_4-0-0	1	C	27.06.2019	Lock
1-5_5-0-0	1	C	27.06.2019	Inspection lid
1-5_0-0-10	1	C	27.06.2019	Gasket 15x5, L=1932mm ATEX-8
1-5_2-0-10	1	B	27.06.2019	Gasket, L=1390mm ATEX-14
1-5_5-0-10	1	B	27.06.2019	Gasket 15x5, L=1522mm ATEX-8
1-6_0-0-0	1	A	27.06.2019	Non-return valve BADA 450FF20-ATEX
1-6_0-0-0	1	A	27.06.2019	Non-return valve BADA 450FF20-ATEX with sensor
1-6_1-0-0	1	A	27.06.2019	Housing
1-6_1-0-0	1	A	27.06.2019	Housing with sensor
1-6_2-0-0	1	A	27.06.2019	Inlet
1-6_3-0-0	1	A	27.06.2019	Flap
1-6_3-0-1	1	A	27.06.2019	Blade
1-6_3-1-0	1	A	27.06.2019	Arm
1-6_4-0-0	1	A	27.06.2019	Lock
1-6_5-0-0	1	A	27.06.2019	Inspection lid
1-6_0-0-10	1	A	27.06.2019	Gasket 15x5, L=2089mm ATEX-8
1-6_2-0-10	1	A	27.06.2019	Gasket, L=1556mm ATEX-14
1-6_5-0-10	1	A	27.06.2019	Gasket 15x5, L=1618mm ATEX-8
1-7_0-0-0	1	A	27.06.2019	Non-return valve BADA 500FF20-ATEX
1-7_0-0-0	1	A	27.06.2019	Non-return valve BADA 500FF20-ATEX with sensor
1-7_1-0-0	1	A	27.06.2019	Housing
1-7_1-0-0	1	A	27.06.2019	Housing with sensor
1-7_2-0-0	1	A	27.06.2019	Inlet
1-7_3-0-0	1	A	27.06.2019	Flap
1-7_3-0-1	1	A	27.06.2019	Blade
1-7_3-1-0	1	A	27.06.2019	Arm
1-7_4-0-0	1	A	27.06.2019	Lock
1-7_5-0-0	1	A	27.06.2019	Inspection lid
1-7_0-0-10	1		27.06.2019	Gasket 15x5, L=2245mm ATEX-8
1-7_2-0-10	1	A	27.06.2019	Gasket, L=1722mm ATEX-14
1-7_5-0-10	1	A	27.06.2019	Gasket 15x5, L=1770mm ATEX-8
1-8_0-0-0	1	A	27.06.2019	Non-return valve BADA 550FF20-ATEX
1-8_0-0-0	1	A	27.06.2019	Non-return valve BADA 550FF20-ATEX with sensor

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Number	Sheets	Issue	Date	Description
1-8_1-0-0	1	A	27.06.2019	Housing
1-8_1-0-0	1	A	27.06.2019	Housing with sensor
1-8_2-0-0	1	A	27.06.2019	Inlet
1-8_3-0-0	1	A	27.06.2019	Flap
1-8_3-0-1	1	A	27.06.2019	Blade
1-8_3-1-0	1	A	27.06.2019	Arm
1-8_4-0-0	1	A	27.06.2019	Lock
1-8_5-0-0	1	A	27.06.2019	Inspection lid
1-8_0-0-10	1	A	27.06.2019	Gasket 15x5, L=2402mm ATEX-8
1-8_2-0-10	1	A	27.06.2019	Gasket, L=1887mm ATEX-14
1-8_5-0-10	1	A	27.06.2019	Gasket 15x5, L=1918mm ATEX-8
1-9_0-0-0	1	A	27.06.2019	Non-return valve BADA 600FF20-ATEX
1-9_0-0-0	1	A	27.06.2019	Non-return valve BADA 600FF20-ATEX with sensor
1-9_1-0-0	1	A	27.06.2019	Housing
1-9_1-0-0	1	A	27.06.2019	Housing with sensor
1-9_2-0-0	1	A	27.06.2019	Inlet
1-9_3-0-0	1	A	27.06.2019	Flap
1-9_3-0-1	1	A	27.06.2019	Blade
1-9_3-1-0	1	A	27.06.2019	Arm
1-9_4-0-0	1	A	27.06.2019	Lock
1-9_5-0-0	1	A	27.06.2019	Inspection lid
1-9_0-0-10	1	A	27.06.2019	Gasket 15x5, L=2560mm ATEX-8
1-9_2-0-10	1	A	27.06.2019	Gasket, L=2052mm ATEX-14
1-9_5-0-10	1	A	27.06.2019	Gasket 15x5, L=2058 ATEX-8
2019-714 Rev.2	18	2	19.11.2019	Ignition and risk analyses
6-5/LT	20	12.2	28.11.2019	Maintenance Manual

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