Declaration of performance

Version: **E**

1. Unique identification code of the product

S-BM2

2. Type

Systemair Smoke Control Damper S-BM2

3. Intended use of the construction product

Ductwork closure of the Smoke and Heat Exhaust Ventilation System – for multi compartments

4. Name, registered trade name and contact address of the manufacturer

Systemair Production a.s.
Hlavná 371,
90043 Kalinkovo, Slovakia

5. Where applicable, name and contact address of the authorized representative

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6. System of assessment and verification of constancy of performance of the construction product

System 1

7. Harmonized product standard, test standard, classification standard

EN 12101-8:2011, EN 1366-10:2011, EN 13 501-4:2018

8. Identification number of the notified body

1396
Name and address of the notified person:
FIRES s.r.o.,
Osloboditeľov 282,

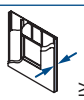
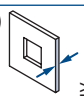
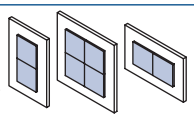
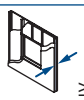
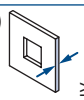
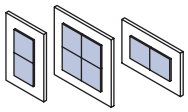
059 35 Batizovce, Slovakia

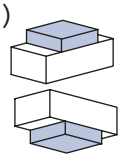
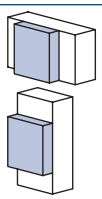
Notified person performed in system 1 the determination of the product type based on type testing (including sampling) and descriptive documentation of the production initial inspection of the manufacturing plant and of factory production control and continuous surveillance, assessment and evaluation of factory production control and issued certificate of constancy of performance:

CE
1396 - CPR - 0157

9. Declared performance:

Installations:

1 Wet	S-BM2  125 × 325 ... 1000 × 1225	EI 120 (v_{ew} - i ↔ o) $S1000C_{mod}$ HOT400/30 MAmulti	a)  ≥ 125	b)  ≥ 125	
		EI 90 (v_{ew} - i ↔ o) $S1000C_{mod}$ MAmulti	a)  ≥ 125	b)  ≥ 125	
	S-BM2  W > 1000, H > 1225 ... 2080 × 2530	EI 90 (v_{ew} - i ↔ o) $S1000C_{mod}$ HOT400/30 MAmulti	b)  ≥ 125		
	S-BM2  125 × 325 ... 1000 × 1225	EI 120 (h_{ow} - i ↔ o) $S1000C_{mod}$ HOT400/30 MAmulti	c)  ≥ 125 ≥ 620 (kg/m³)		
2 Dry	S-BM2  125 × 325 ... 1000 × 1225	EI 120 (v_{ew} - i ↔ o) $S1000C_{mod}$ HOT400/30 MAmulti	a)  ≥ 125	b)  ≥ 125	
		EI 90 (v_{ew} - i ↔ o) $S1000C_{mod}$ MAmulti	a)  ≥ 125	b)  ≥ 125	
3 Soft	S-BM2  125 × 325 ... 1000 × 1225	EI 90 (v_{ew} - i ↔ o) $S1000C_{mod}$ HOT400/30 MAmulti	b)  ≥ 125		
		EI 90 (v_{ew} - i ↔ o) $S1000C_{mod}$ MAmulti	b)  ≥ 125		
	S-BM2  W > 1000, H > 1225 ... 2080 × 2530	EI 90 (v_{ew} - i ↔ o) $S1000C_{mod}$ HOT400/30 MAmulti	b)  ≥ 125		
	S-BM2  125 × 325 ... 1000 × 1225	EI 120 (h_{ow} - i ↔ o) $S1000C_{mod}$ HOT400/30 MAmulti	c)  ≥ 125 ≥ 620 (kg/m³)		
3F Fit	S-BM2  125 × 325 ... 1000 × 1225	EI 120 (v_{ew} - i ↔ o) $S1000C_{mod}$ HOT400/30 MAmulti	a)  ≥ 125		
		EI 90 (v_{ew} - i ↔ o) $S1000C_{mod}$ MAmulti	a)  ≥ 125		

DBH DBV	S-BM2 125 × 325 ... 1000 × 1225	EI 120 (v_{ed} - i ↔ o) S1000C_{mod} HOT400/30 MAmulti	d) 	EN 1366-9 EN 1366-8	
		EI 120 (h_{od} - i ↔ o) S1000C_{mod} HOT400/30 MAmulti	d) 		
DMH DMV	S-BM2 125 × 325 ... 1000 × 1225	EI 120 (v_{ed} - i ↔ o) S1000C_{mod} HOT400/30 MAmulti	d) 	EN 1366-9 EN 1366-8	
		EI 120 (h_{od} - i ↔ o) S1000C_{mod} HOT400/30 MAmulti	d) 		
D1H, D2H	S-BM2 125 × 325 ... 1000 × 1225	EI 120 (h_{od} - i ↔ o) S1000C_{mod} HOT400/30 MAmulti	d) 	EN 1366-9 EN 1366-8	
D1V D2V	S-BM2 125 × 325 ... 1000 × 1225	EI 120 (v_{ed} - i ↔ o) S1000C_{mod} HOT400/30 MAmulti	d) 	EN 1366-9 EN 1366-8	

Legend:

1.Wet - Wet Installation, Using Plaster/Mortar/Concrete Filling
2.Dry - Dry Installation, Using Mineral Wool and Cover Boards
3.Soft - Soft Installation, Using Mineral Wool filing
3F.Fit - Fit Installation, Wall build around the damper, filled with mineral wool
DBH, DBV - In the Board duct installation
DMH, DMV - In the Metal duct installation
D1H, D2H - Horizontally Oriented Damper, On the Duct
D1V, D2V - Vertically Oriented Damper, On the Duct
a) - Flexible (plasterboard) wall
b) - Concrete/masonry/cellular concrete (rigid) wall
c) - Concrete/cellular concrete (rigid) floor/ceiling
d) - Duct per EN 1366-9 or EN 1366-8
v_{ew} - Wall placement, vertically oriented damper
h_{ow} - Wall placement, horizontally oriented damper
v_{ed} - Duct placement, vertically oriented damper
h_{od} - Duct placement, horizontally oriented damper

Notified Body Assessment of S-BM2

Property	Test regulation	Classification standard	Technical specification for assessment	Performance expressed	Evaluation
Nominal activation conditions/ sensitivity	/	/	EN 12101-8, cl. 4.2.1.3	Smoke control damper for systems with manual intervention (suitable also for application in automatic systems).	**Satisfied**
Response delay (response time)	EN 1366-10, cl. 6.2	/	EN 12101-8, cl. 4.2.1.4	The smoke control dampers´ response delay within 60 seconds.	**Satisfied**
Operational reliability	EN 1366-10, cl. 6.3 + Annex A	EN 13501-4	EN 12101-8, cl. 4.3.2.2	10 000 cycles at nominal operating supply of 24V/ 50Hz and 230V/ 50Hz at the range from 0° to 90° followed by 10 000 cycles at nominal operating supply at range from half open to two thirds open.	**Satisfied**
Fire resistance • integrity • insulation • smoke leakage • mechanical stability	EN 1366-10, cl. 6.5	EN 13501-4, cl. 7.3.4.1	EN 12101-8, cl. 4.1.1, a), cl. 4.1.1 b), cl. 4.1.1 c), cl. 4.1.1 d), cl. 4.4.1	See installation Table 9.	**Satisfied**
Fire resistance • maintenance of cross-section	EN 1366-10, cl. 7.2.7	EN 13501-4, cl. 7.3.4.1	EN 12101-8, cl. 4.1.1 e)	See installation Table 9.	**Satisfied**
Durability of response delay	EN 1366-10, cl. 6.3	/	EN 12101-8, cl. 4.4.2.1	Smoke control damper closes/ opens at the prescribed time and in the required time period.	**Satisfied**

Durability of operational reliability	EN 1366-10, cl. 6.3	EN 13501-4	EN 12101-8, cl. 4.4.2.2	Smoke control damper passed the open and closing cycle test when the cycles were fully completed with the average time of each cycle less than 120 s.	**Satisfied**

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.
Signed for and on behalf of the manufacturer by:

Kalinkovo, June 24, 2021 Ing. Maroš Chlebo, Managing Director