

DECLARATION OF PERFORMANCE No. PM/FDMR/01/23/2

1.	Unique identification code of the product-type	FDMR
2.	Products	Dampers – Fire dampers
	Intended use	Fire safety. To be used in conjunction with partitions to maintain fire compartments in heating, ventilating and air conditioning installations.
	Technical documentation – product information, instruction for installation and maintenance, safety information	Technical specifications <u>TPM 140/19</u>
3.	Manufacturer	MANDÍK, a.s. Dobříšská 550, 26724 Hostomice, Czech Republic ID 26718405, tel. +420 311 706 706 mandik@mandik.cz, www.mandik.com
5.	System of AVCP	System 1
6. Harmonised standard EN 15650:2010 Notified body No. 1391 PAVUS, a.s., Prosecká 412/74, 190 00 Praha 9 -		EN 15650:2010
		Notified body No. 1391 PAVUS, a.s., Prosecká 412/74, 190 00 Praha 9 – Prosek
	Output documents of the notified body	Certificate of Constancy of Performance No. 1391-CPR-2023/0161 Assessment Report of Performance of Construction Product No. P-1391-CPR-2023/0161

7a.	Declared performances	– fire resistance classification		
	Essential characteristics in accordance with EN 15650:2010, art. 4.1.1			
Fire s	separating construction,	Installation type, installation system	Performance	
location of the damper			 class of fire resistance 	
Solid wall construction – damper in the wall		Mortar or gypsum ^{1]}	EI 120 (v _e i↔o) S ³ EI 90 (v _e i↔o) S ³	
– 100 mm min. wall thickness		2 dampers in one opening – mortar or gypsum 1]	2.30 (12.17.0)	
		Installation next to wall, ceiling – mortar or gypsum and mineral wool 1]		
		Installation next to wall, ceiling – mortar or gypsum 1]	EI 90 (v _e i↔o) S	
		Installation next to wall, ceiling – installation frame R1, R2, R5 and mineral wool ^{1]}		
		Mineral wool with fire protection mastic and cement lime plate ^{1], 4]}		
		Installation frame R1, R2, R3, R4, R5 1]		
		Weichschott/Ablative Coated Batt 1], 2]		
		2 dampers in one opening – installation frame R1 ^{1]}		
		Fire protection foam with stucco plaster 1]	EI 60 (v _e i↔o) S	

(table continues)

- 1] Refer to <u>Technical documentation</u> for the details of the installation type / installation system.
- 2] Installation materials may be replaced by a similar approved system of the equivalent performance.
- 3] Tested at increased test vacuum of 500 Pa up to diam. 315 mm (included), tested at 300 Pa for bigger diameters.

(continuation of the table)

Fire separating construction,	Installation type, installation system	Performance	
location of the damper	, , ,	– class of fire resistance	
Solid wall construction – damper remote from the wall	Insulation of the duct with cement lime plates – installation frame R6 ^{1]}		
– 100 mm min. wall thickness	Insulation of the duct with mineral wool Rockwool th. 180 mm (3 × 60) + Mineral wool with fire protection mastic and cement lime plate ¹	EI 90 (v _e i↔o) S	
	Insulation of the duct with mineral wool + mortar or gypsum – ISOVER ULTIMATE PROTECT 1], 2] Insulation of the duct with mineral wool + Weichschott/Ablative Coated Batt – ISOVER ULTIMATE PROTECT 1], 2]	According to insulation thickness EI 90 ($v_e i\leftrightarrow 0$) S, or EI 60 ($v_e i\leftrightarrow 0$) S	
Gypsum plasterboard wall construction	Mortar or gypsum ^{1]}	EI 120 (v _e i↔o) S ^{3]} EI 90 (v _e i↔o) S ^{3]}	
- damper in the wall - 100 mm min. wall thickness	2 dampers in one opening — mortar or gypsum ^{1]} Installation next to wall, ceiling — mortar or gypsum and mineral wool ^{1]} Installation next to wall, ceiling — mortar or gypsum ^{1]} Installation next to wall, ceiling — installation frame R1, R2, R5 and mineral wool ^{1]} Mineral wool with fire protection mastic and cement lime plate ^{1]} Installation frame R1, R2, R5 ^{1]} Weichschott/Ablative Coated Batt ^{1]} , ^{2]} 2 dampers in one opening — installation frame R1 ^{1]} Flexible ceiling — installation frame R7 ^{1]} Wooden construction (beams 60x60mm) — Weichschott/Ablative Coated Batt ^{1]} , ^{2]} Fire protection foam with stucco plaster ^{1]}	EI 90 (v _e i↔o) S EI 60 (v _e i↔o) S	
Gypsum plasterboard wall construction - damper remote from the wall - 100 mm min. wall thickness	Insulation of the duct with mineral wool Rockwool th. 180 mm (3x60) + Mineral wool with fire protection mastic and cement lime plate 1]	El 90 (v _e i↔o) S	
	Insulation of the duct with mineral wool - mortar or gypsum – ISOVER ULTIMATE PROTECT 1], 2] Insulation of the duct with mineral wool - Weichschott/Ablative Coated Batt – ISOVER ULTIMATE PROTECT 1], 2]	According to insulation thickness EI 90 ($v_e i \leftrightarrow o$) S, or EI 60 ($v_e i \leftrightarrow o$) S	
Sandwich wall construction – damper in the wall – 100 mm min. wall thickness	Ruukki SPB W – Weichschott/Ablative Coated Batt with cement lime plate ^{1]} Paroc AST S – Weichschott/Ablative Coated Batt with cement lime plate ^{1]}	El 90 (h₀ i↔o) S	

(table continues)

- 1] Refer to <u>Technical documentation</u> for the details of the installation type / installation system.
- 2] Installation materials may be replaced by a similar approved system of the equivalent performance.
- 3] Tested at increased test vacuum of 500 Pa up to diam. 315 mm (included), tested at 300 Pa for bigger diameters.

(continuation of the table)

Installation type, installation system	Performance	
	 class of fire resistance 	
Mortar or gypsum ^{1]}	El 90 (h₀ i↔o) S 3]	
	EI 120 (h₀ i↔o) S	
2 dampers in one opening		
– mortar or gypsum 1]		
Mineral wool with fire protection mastic		
and cement lime plate 1]		
Installation frame R1, R2, R3, R4, R5 1]	El 90 (h₀ i↔o) S	
Weichschott/Ablative Coated Batt 1],2]		
2 dampers in one opening		
– installation frame R2 ^{1]}		
Insulation of the duct with mineral wool		
Rockwool th. 180 mm (3x60) + mortar or		
Concrete 1]	El 90 (h₀ i↔o) S	
Concrete with installation frame R5 1]]	
Insulation of the duct with cement lime		
plates – installation frame R6 1]		
Insulation of the duct with mineral wool	According to insulation	
 mortar or gypsum – ISOVER ULTIMATE 	thickness	
PROTECT 1], 2]	EI 90 (h₀ i↔o) S, or	
	El 60 (h₀ i↔o) S	
Mortar or gypsum ^{1]}	FI 00 (v. i.v.o) S	
Installation frame R1 1]	El 90 (v _e i↔o) S	
	2 dampers in one opening — mortar or gypsum ^{1]} Mineral wool with fire protection mastic and cement lime plate ^{1]} Installation frame R1, R2, R3, R4, R5 ^{1]} Weichschott/Ablative Coated Batt ^{1],2]} 2 dampers in one opening — installation frame R2 ^{1]} Insulation of the duct with mineral wool Rockwool th. 180 mm (3x60) + mortar or gypsum ^{1]} Concrete ^{1]} Concrete with installation frame R5 ^{1]} Insulation of the duct with cement lime plates – installation frame R6 ^{1]} Insulation of the duct with mineral wool – mortar or gypsum – ISOVER ULTIMATE PROTECT ^{1], 2]} Mortar or gypsum ^{1]}	

- 1] Refer to <u>Technical documentation</u> for the details of the installation type / installation system.
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7b.	. Declared performances – essential characteristics			
Essential characteristics		Requirements (provisions of the harmonised standard EN 15650:2010)	Performance (lever or class) / Compliance with the requirements	
Nom	inal activation conditions/sensitivity:	4.2.1.2	Conforms	
– sensing element load bearing capacity		4.2.1.2.2	Conforms	
 sensing element response temperature 		4.2.1.2.3	Conforms	
Response delay (response time): – closure time		4.2.1.3	Conforms	
Operational reliability: – cycling		4.3.1, a)	50 cycles – conforms	
Durability of response delay: – sensing element response to temperature and load bearing capacity		4.2.1.2.2 4.2.1.2.3	Conforms	
Durability of operational reliability: – opening and closing cycle tests		4.3.3.2	Conforms Dampers with BELIMO actuators: C _{10.000} Dampers with GRUNER actuators: C _{10.000} Dampers with SCHISCHEK actuators: C _{10.000} Dampers with MODULAR mechanism: C ₃₀₀	

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

In Hostomice, 2023-12-11

Mgr. Jan Mičan CEO, Ppa MANDÍK, a.s.

Declared performances – other characteristics				
Characteristics	Technical standard	Performance (lever or class) / Compliance with the requirements		
Resistance against corrosion	EN 15650:2010, art. 4.2.2 EN 15650:2010, Annexe B	Conforms		
Application with no ducting	EN 1366-2:2015 art. 6.2.7	Conforms		
Damper blade tightness	EN 1751:2014	Class 3		
Damper casing tightness	EN 1751:2014	Class C		

Additional provisions for use of the product in Austria

The product-type products meet also all requirements of ÖNORM H 6025 standard, cf. Assessment Report of Performance of Construction Product No. P-1391-CPR-2023/0161.