

**Declaration of Performance**  
issued acc. to attachment III of EU directive No. 305/2011

**No. CDM/FDMA/001/14**

- 1. Unique identification code of product type:**  
FDMA-R, FDMA-S (TPM 018/01).
- 2. Type, series, serial number, or any other element enabling building product identification according to Article 11 (4):**  
FDMA-R, FDMA-S – Fire Damper. Hereinafter the trade description of the identical product specified in p. 3, round or rectangular design
- 3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification:**  
The fire dampers are used in conjunction with partions to maintain fire compartments and protect means of escape in case of fire in heating, ventilation and airconditioning (HVAC) systems in buildings, under methods of use and installation conditions stated in certification report and related documentation TPM 018/01.  
The fire dampers serves for elimination of fire and smoke spreading according to EN 15560:2010 available with fire resistance EIS 90, EIS 120  
Detailed information about installation possibilities is mentioned in annex No.1 and TPM 018/01.  
**Variants of trade description containing identical technical solution/design:**  
PKTM 90-K, PKTM 90-C, BSK-A-90-R, BSK-A-90-E  
**Starting/actuation/drive:**
  - El. actuator with emergency function, manufacturer Belimo, Gruner, Schischek 24V, 110V, 230V
  - Mechanical equipped by thermal fuse and using the energy of return spring**Equipment:**
  - Limit switches ( open/close position )
  - Communication modules and superior governing systems ( e.g. GBS )
  - Smoke, pressure, motion and temperature sensors
  - Electromagnet ( solenoid system )
- 4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11 (5):**  
MANDÍK, a.s., Dobříšská 550, 26724, Hostomice, Česká republika
- 5. If appropriate, name and contact address of authorized representative whose power of attorney applies to the tasks specified in Article 12 (2):**  
Not relevant
- 6. Assessment and verification system of constancy of building product properties according to Annexe V: 1, ( see Annexe V, point 1.2 of EU Parliament and Council Directive (EU) No. 305/2001 issued on 9.3.2011 + Correction of EU Parliament and Council Directive (EU) No. 305/2001 issued on 9.3.2011)**
- 7. In case of the Declaration of Performance concerning a construction product covered by a harmonised standard:**  
PAVUS,a.s., Notified Body No. 1391, Prosecká 412/74, 190 00 Praha 9, VAT No.: 60193174 provided initial inspection in company of producer, production management, continuous supervision, review and evaluation of production management according to the system 1 and issued ES Certificate of Constancy of Performance No. 1391 – CPR – 0010/2014 dated 27.6.2014
- 8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:**  
Not relevant

## 9. Assessed properties of the product

Essential characteristics	Requirement clauses in EN 15650:2010	Requirement
Nominal activation conditions/sensitivity	4.2.1.2	EN 15650, Art. 4.2.1.2
_ - sensing element load bearing capacity	4.2.1.2.2	EN 15650, Art. 5.2.5
_ - sensing element response temperature	4.2.1.2.3	EN 15650, Art. 5.2.5
Response delay (response time): _ - closure time	4.2.1.3	EN 1366-2, Art. 10.4.6
Operational reliability: _ - cycling	4.3.1, a)	The fire damper conforms to cycle test if 50 cycles are done prior to the fire test
Fire resistance		
_ - integrity	4.1.1, a)	E
_ - insulation	4.1.1, b)	EI
_ - smoke leakage	4.1.1, c)	ES/EIS
_ - mechanical stability (under E)	4.1.1, a)	-
_ - maintenance of the cross section (under E)	4.1.1, a)	-
Durability of response delay: _ - sensing element response to temperature and load bearing capacity	4.2.1.2.2 4.2.1.2.3	EN 15650, Art. 4.2.1.2
Durability of operation reliability: _ - open and closing cycle tests	4.3.3.2	EN 15650, Annex C.3.2
Resistance against corrosion	4.2.2 Annex B	Increased resistance against corrosion - Salt spray exposure test (EN 60068-2-52)

10. The performance of the product identified in points 1 and 2 is in full conformity with the properties in point 9. 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:

  
 Marcel Mandík  
 Chairman of the Board of Directors of MANDÍK, a.s.  
  
**MANDÍK, a.s.**  
 267 24 Hostomice, Dobříšská 550  
[www.mandik.cz](http://www.mandik.cz)  


In Hostomice on 29<sup>th</sup> of July 2014

**ANNEX No.1 - General table of installations**  
**Fire Test according to EN 1366-2**  
**Classification according to EN 13501-3**

Product	Description	Type	Wall	Sealing	Classification	Certificate/Report
FDMA	Rectangular - range from 180 x 180 mm up to 1600 x 1000 mm	Rigid wall	aerated concrete min 100 mm	with mortar (mortar, gypsum, concrete)	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0113/2012
			aerated concrete min 100 mm	with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			aerated concrete min 100 mm	in "weichschott"	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			aerated concrete min 100 mm	outside a wall construction, space between duct and wall is filled by mineral stone wool, duct insulation with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		Rigid floor	aerated concrete min 150 mm	with mortar (mortar, gypsum, concrete)	EI 90 (h <sub>o</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			aerated concrete min 150 mm	with mineral stone wool and cover plates on wall	EI 90 (h <sub>o</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			aerated concrete min 150 mm	in "weichschott"	EI 90 (h <sub>o</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			aerated concrete min 150 mm	outside a floor construction, space between duct and wall is filled by mortar, duct insulation with mineral stone wool and cover plates on wall	EI 90 (h <sub>o</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		Flexible light wall	metal stud gypsum plasterboard 100 mm	with mortar (mortar, gypsum, concrete)	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			metal stud gypsum plasterboard 100 mm	with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012

FDMA

Round - range from 180 mm up to 1000 mm

		metal stud gypsum plasterboard 100 mm	in "weichschott"	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	
		metal stud gypsum plasterboard 100 mm	outside a wall construction, space between duct and wall is filled by mineral stone wool, duct insulation with mineral stone wool and cover plates on wall	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	
Rigid wall		aerated concrete min 100 mm	with mortar (mortar, gypsum, concrete)	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	
		aerated concrete min 100 mm	with mineral stone wool and cover plates on wall	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	
		aerated concrete min 100 mm	in "weichschott"	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	
		aerated concrete min 100 mm	outside a wall construction, space between duct and wall is filled by mineral stone wool, duct insulation with mineral stone wool and cover plates on wall	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	
	Rigid floor		aerated concrete min 150 mm	with mortar (mortar, gypsum, concrete)	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			aerated concrete min 150 mm	with mineral stone wool and cover plates on floor	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			aerated concrete min 150 mm	in "weichschott"	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
			aerated concrete min 150 mm	outside a floor construction, space between duct and wall is filled by mortar, duct insulation with mineral stone wool and cover plates on floor	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		metal stud gypsum plasterboard 100 mm	with mortar (mortar, gypsum, concrete)	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	

	Flexible light wall	metal stud gypsum plasterboard 100 mm	with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		metal stud gypsum plasterboard 100 mm	in "weichschott"	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		metal stud gypsum plasterboard 100 mm	outside a wall construction, space between duct and wall is filled by mineral stone wool, duct insulation with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	Rigid wall	aerated concrete min 100 mm	with mortar (mortar, gypsum, concrete)	EI 120 (v <sub>e</sub> i ↔ o)S (300 Pa) <b>*Blade thickness 50 mm</b>	1391-CPD-0113/2012
		aerated concrete min 100 mm	with mortar (mortar, gypsum, concrete)	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0113/2012
		aerated concrete min 100 mm	frame to frame 2 pcs of dampers (in "battery")	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		aerated concrete min 100 mm	with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		aerated concrete min 100 mm	with instalation frame E1	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		aerated concrete min 100 mm	with instalation frame E2	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		aerated concrete min 100 mm	with instalation frame E4 on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		aerated concrete min 100 mm	in "weichschott"	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012

Rectangular - range from 180 x 180 mm up to 1500 x 800 mm

Rigid floor	aerated concrete min 100 mm	outside a wall construction, space between duct and wall is filled by mineral stone wool, duct insulation with mineral stone wool and cover plates on wall	EI 90 ( $v_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 100 mm	outside a wall construction with installation frame E6	EI 90 ( $v_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	with mortar (mortar, gypsum, concrete)	EI 120 ( $h_o$ i ↔ o)S (300 Pa) *Blade thickness 50 mm	1391-CPD-0114/2012
	aerated concrete min 150 mm	with mortar (mortar, gypsum, concrete)	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	with mineral stone wool and cover plates on wall	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	with installation frame E1	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	with installation frame E2	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	with installation frame E4 up the floor	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	in "weichschott"	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	outside a floor construction, space between duct and wall is filled by mortar, duct insulation with mineral stone wool and cover plates on wall	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	outside a floor construction up the floor with concrete	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	
aerated concrete min 150 mm	outside a floor construction up the floor with concrete and installation frame E4	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012	

Round - range from 180 mm up to 1000 mm

aerated concrete min 100 mm	outside a wall construction,space between duct and wall is filled by mineral stone wool, duct insulation with mineral stone wool and cover plates on wall	EI 90 ( $v_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 100 mm	outside a wall construction with instalation frame R6	EI 90 ( $v_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	with mortar (mortar, gypsum, concrete)	EI 120 ( $h_o$ i ↔ o)S (300 Pa) <b>*Blade thickness 50 mm</b>	1391-CPD-0114/2012
aerated concrete min 150 mm	with mortar (mortar, gypsum, concrete)	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	with mineral stone wool and cover plates on floor	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	with instalation frame R1	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	with instalation frame R2	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	with instalation frame R3	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	with instalation frame R4	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	with instalation frame R5 up the floor	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	in "weichschott"	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012
aerated concrete min 150 mm	outside a floor construction,space between duct and wall is filled by mortar, duct insulation with mineral stone wool and cover plates on floor	EI 90 ( $h_o$ i ↔ o)S (300 Pa)	1391-CPD-0114/2012

Rigid floor

	aerated concrete min 150 mm	outside a floor construction up the floor with concrete	EI 90 (h <sub>o</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	outside a floor construction up the floor with concrete and instalation frame R5	EI 90 (h <sub>o</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	aerated concrete min 150 mm	outside a floor construction with instalation frame R6 and insulation with fireproof plates	EI 90 (h <sub>o</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
Flexible light wall	metal stud gypsum plasterboard 100 mm	with mortar (mortar, gypsum, concrete)	EI 120 (v <sub>e</sub> i ↔ o)S (300 Pa) <b>*Blade thickness 50 mm</b>	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	with mortar (mortar, gypsum, concrete)	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	frame to frame 2 pcs of dampers with instalation frame R1	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	with instalation frame R1	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 150 mm	with instalation frame R2	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	with instalation frame R3	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 150 mm	with instalation frame R4	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	in "weichschott"	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012



	aerated concrete min 150 mm	outside a floor construction with installation frame E6 and insulation with fireproof plates	EI 90 (h <sub>o</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
Flexible light wall	metal stud gypsum plasterboard 100 mm	with mortar (mortar, gypsum, concrete)	EI 120 (v <sub>e</sub> i ↔ o)S (300 Pa) *Blade thickness 50 mm	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	with mortar (mortar, gypsum, concrete)	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	Frame to frame 2 pcs of dampers with frame E1	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	with installation frame E1	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	with installation frame E3	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	in "weichschott"	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	outside a wall construction, space between duct and wall is filled by mineral stone wool, duct insulation with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	moving floor with installation frame E5	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
		aerated concrete min 100 mm	with mortar (mortar, gypsum, concrete)	EI 120 (v <sub>e</sub> i ↔ o)S (300 Pa) *Blade thickness 50 mm
	aerated concrete min 100 mm	with mortar (mortar, gypsum, concrete)	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012

Rigid wall

aerated concrete min 100 mm	frame to frame 2 pcs of dampers with mortar	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD- 0114/2012
aerated concrete min 100 mm	with mineral stone wool and cover plates on wall	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD- 0114/2012
aerated concrete min 100 mm	with instalation frame R1	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD- 0114/2012
aerated concrete min 150 mm	with instalation frame R2	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD- 0114/2012
aerated concrete min 100 mm	with instalation frame R3	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD- 0114/2012
aerated concrete min 150 mm	with instalation frame R4	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD- 0114/2012
aerated concrete min 100 mm	with instalation frame R5 on wall	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD- 0114/2012
aerated concrete min 100 mm	in "weichschott"	EI 90 ( $v_e$ i ↔ o)S (300 Pa)	1391-CPD- 0114/2012

	metal stud gypsum plasterboard 100 mm	outside a wall construction,space between duct and wall is filled by mineral stone wool, duct insulation with mineral stone wool and cover plates on wall	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012
	metal stud gypsum plasterboard 100 mm	moving floor with instalation frame R7	EI 90 (v <sub>e</sub> i ↔ o)S (300 Pa)	1391-CPD-0114/2012

