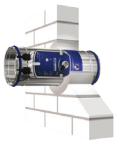
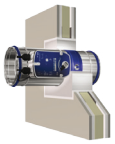
Declaration of performance

DoP/FKRS-EU/DE/002

TROX® TECHNIK
The art of handling air

1 **Product** Unique identification code of the product type	**FKRS-EU**	
2 **Intended use**	Fire damper	
3 **Manufacturer**	TROX GmbH Heinrich-Trox-Platz 47504 Neukirchen-Vluyn, Germany	Phone +49 (0)2845 2020 Fax +49 (0)2845 202265 E-mail trox@trox.de Internet www.troxtechnik.com
5 **System of assessment and verification of constancy of performance**	System 1	
6 **Harmonised standard** **Notified body or body/ies**	EN 15650:2010 The notified bodies 0749 - BCCA and 1322 - IBS carried out the initial inspection of the manufacturing plant and of the factory production control as well as the continuous surveillance, assessment and evaluation of factory production control according to System 1 of the Construction Products Regulation and issued the certificate of constancy of performance: 0749-CPR-BC1-606-4645-15650.04-4651 and 1322-CPR-74135/02	

7 **Declared performances**

Essential characteristic: fire resistance — size [mm]: Ø 100 to Ø 200				
Supporting construction	**Construction details**	**Installation location**	**Installation type**	**Class of performance (EI TT)**
 Solid wall	• d ≥ 100 mm • ρ ≥ 500 kg/m³	in the wall	Fire batt	EI 120 (v_e i↔o) S
 Lightweight partition wall	• Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool	in the wall	Mortar-based installation	EI 120 (v_e i↔o) S
	• Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool	in the wall	Dry mortarless installation	EI 120 (v_e i↔o) S

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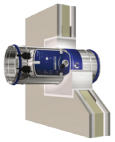
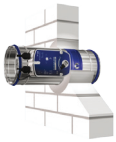
Essential characteristic: fire resistance — size [mm]: Ø 100 to Ø 200				
Supporting construction	**Construction details**	**Installation location**	**Installation type**	**Class of performance (EI TT)**
 Lightweight partition wall	• Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool	in the wall	Fire batt	EI 120 (v_e i↔o) S
	• Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool • Minimum distance to load-bearing structural elements ≥ 40 mm • Distance between casings ≥ 40 mm	in the wall	Fire batt	EI 90 (v_e i↔o) S

Essential characteristic: fire resistance — size [mm]: Ø 100 to Ø 315				
Supporting construction	**Construction details**	**Installation location**	**Installation type**	**Class of performance (EI TT)**
 Solid wall	• d ≥ 100 mm • ρ ≥ 500 kg/m³	in the wall	Dry mortarless installation	EI 90 (v_e i↔o) S
	• d ≥ 100 mm • ρ ≥ 500 kg/m³	on the face of the wall	Dry mortarless installation	EI 90 (v_e i↔o) S
	• d ≥ 100 mm • ρ ≥ 500 kg/m³ • Minimum distance to load-bearing structural elements ≥ 40 mm • Distance between casings ≥ 40 mm	in the wall	Mortar-based installation	EI 120 (v_e i↔o) S
	• d ≥ 100 mm • ρ ≥ 500 kg/m³ • Minimum distance to load-bearing structural elements ≥ 40 mm • Distance between casings ≥ 40 mm	in the wall	Fire batt	EI 90 (v_e i↔o) S

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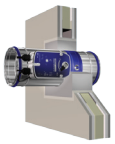
Essential characteristic: fire resistance — size [mm]: Ø 100 to Ø 315				
Supporting construction	**Construction details**	**Installation location**	**Installation type**	**Class of performance (EI TT)**
 Lightweight partition wall	• Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool • Minimum distance to load-bearing structural elements ≥ 40 mm • Distance between casings ≥ 40 mm	in the wall	Mortar-based installation	EI 90 (v_e i↔o) S
	• Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool • Minimum distance to load-bearing structural elements ≥ 40 mm • Distance between casings ≥ 40 mm	in the wall	Fire batt	EI 90 (v_e i↔o) S
	• Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool	in the wall	Dry mortarless installation	EI 90 (v_e i↔o) S
	Fire wall • Metal stud wall with sheet steel • d ≥ 115 mm • Minimum distance to load-bearing structural elements ≥ 40 mm	in the wall	Mortar-based installation	EI 90 (v_e i↔o) S
	Fire wall • Metal stud wall with sheet steel • d ≥ 115 mm	in the wall	Dry mortarless installation	EI 90 (v_e i↔o) S
	• Metal stud wall, gypsum plasterboard DF • d ≥ 75 mm • With or without mineral wool • Wall thickness increased to d ≥ 100 mm	in the wall	Mortar-based installation	EI 30 (v_e i↔o) S
	• Metal stud wall, gypsum plasterboard DF • d ≥ 75 mm • With or without mineral wool • Wall thickness increased to d ≥ 100 mm	in the wall	Dry mortarless installation	EI 30 (v_e i↔o) S

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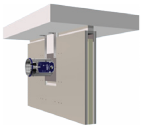
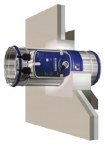
Essential characteristic: fire resistance — size [mm]: Ø 100 to Ø 315				
Supporting construction	**Construction details**	**Installation location**	**Installation type**	**Class of performance (EI TT)**
 Lightweight partition wall	**Flexible ceiling joint** • Metal stud wall, gypsum plasterboard DF • d ≥ 100 mm • With or without mineral wool • Minimum distance to load-bearing structural elements ≥ 50 mm	in the wall	Dry mortarless installation	EI 90 (v_e i↔o) S
 Shaft wall	• With metal support structure, cladding on one side • d ≥ 90 mm • 2 x 20 mm gypsum plasterboard DF	in the wall	Mortar-based installation	EI 90 (v_e i↔o) S
	• With metal support structure, cladding on one side • d ≥ 90 mm • 2 x 20 mm gypsum plasterboard DF	in the wall	Dry mortarless installation	EI 90 (v_e i↔o) S
 Solid ceiling slab	• d ≥ 150 mm • ρ ≥ 600 kg/m³ • Distance between casings ≥ 45 mm	in the ceiling	Mortar-based installation	EI 120 (h_o i↔o) S
	• d ≥ 150 mm • ρ ≥ 600 kg/m³	in the ceiling	Dry mortarless installation	EI 90 (h_o i↔o) S
	• d ≥ 150 mm • ρ ≥ 600 kg/m³	in the ceiling	Fire batt	EI 90 (h_o i↔o) S

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7 Declared performances

Essential characteristics	Technical specification	Performance
Nominal activation conditions/sensitivity • Sensing element load-bearing capacity • Sensing element response temperature 72 °C, 95 °C	ISO 10294-4:2001	Pass
Response delay/response time • Closure time	EN 1366-2:1999	Pass
Operational reliability • Open and closing cycle, 50 cycles	EN 15650:2010 EN 1366-2:1999	Pass
Durability of response delay • Sensing element response to temperature and load-bearing capacity	ISO 10294-4:2001	Pass
Durability of operational reliability • Testing of the open and closing cycle, 10,000 cycles – B(L)F-T-(ST)-TR	EN 15650:2010	Pass
Protection against corrosion	EN 15650:2010	Pass
Damper blade leakage	EN 1751:1999	Class 3
Damper casing leakage	EN 1751:1999	Class C

The classification of the fire damper must not be higher than the classification of the wall or ceiling slab it is installed in.

The performance of the product identified above is in conformity with the set of declared performances. 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 TROX GmbH:

Neukirchen-Vluyn, 1 November 2014

i.V. Heymann

Jan Heymann • Authorised Representative • CE-marked products