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CTO S.A.
Notified Body No. 2434

CENTRUM TECHNIKI OKRĘTOWEJ S.A.
PRODUCT CERTIFICATION DIVISION

PCA
POLSKIE CENTRUM AKREDYTACJI
CERTYFIKACJA WYROBÓW
AC 170

CERTIFICATE OF CONSTANCY OF PERFORMANCE

2434-CPR-0037

In compliance with *Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011* (the Construction products Regulation or CPR), this certificate applies to the construction product

Uninsulated multi-blade fire damper ELR

placed on the market under the name or trade mark of:

Halton Oy,
Haltonintie 1 – 3,
47400 Kausala, Finland

and produced in the manufacturing plant:

Halton Oy,
Haltonintie 1 – 3,
47400 Kausala, Finland

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 15650:2010

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.

This certificate was first issued on 17.04.2019 and will remain valid as long as neither the harmonised standard, the construction product, the assessment and verification of constancy of performance methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Małgorzata Sulimierska
Head of Product Certification Division of CTO S.A.

Zbigniew Karpiński
President of Board

Gdańsk, 17.04.2019

Certificate of constancy of performance No. 2434-CPR-0037, issued on 17.04.2019

Performance of uninsulated fire damper ELR mounting onto the face of separating element

Essential characteristics	Requirements of EN 15650:2010 Standard	Level and/or class	Conformity
Nominal activation conditions/sensitivity	4.2.1.2	E 60 (ho o↔i) S E 120 (ve, ho i↔o) S	fulfils
Sensing element response temperature	4.2.1.2.2	-	fulfils
Sensing element load bearing capacity	4.2.1.2.3	-	fulfils
Response delay (response time)			
Closure time	4.2.1.3	≤ 2 min	fulfils
Operational reliability			
Cycling	4.3.1a	50 cycles	fulfils
Fire resistance			
- integrity	4.1.1a	E60 (ve, ho) E 120 (ve, ho)	fulfils
- insulation	4.1.1.b	-	fulfils
- smoke leakage	4.1.1c	S	fulfils
- mechanical stability (under E)	4.1.1a	-	fulfils
- maintenance of the cross section (under E)	4.1.1a	-	fulfils
Durability of response delay			
Sensing element response to temperature and load bearing capacity	4.2.1.2.2 4.2.1.2.3	-	fulfils
Durability of operational reliability			
Open and closing cycle tests	4.3.3.2	10 000	fulfils fulfils

Performance of uninsulated fire damper ELR mounting remote from the separating element

Essential characteristics	Requirements of EN 15650:2010 Standard	Level and/or class	Conformity
Nominal activation conditions/sensitivity	4.2.1.2	E 120 (ve, ho i↔o) S	fulfils
Sensing element response temperature	4.2.1.2.2	-	fulfils
Sensing element load bearing capacity	4.2.1.2.3	-	fulfils
Response delay (response time)			
Closure time	4.2.1.3	≤ 2 min	fulfils
Operational reliability			
Cycling	4.3.1a	50 cycles	fulfils
Fire resistance			
- integrity	4.1.1a	E 120 (ve, ho)	fulfils
- insulation	4.1.1.b	-	fulfils
- smoke leakage	4.1.1c	S	fulfils
- mechanical stability (under E)	4.1.1a	-	fulfils
- maintenance of the cross section (under E)	4.1.1a	-	fulfils
Durability of response delay			
Sensing element response to temperature and load bearing capacity	4.2.1.2.2 4.2.1.2.3	-	fulfils
Durability of operational reliability			
Open and closing cycle tests	4.3.3.2	10 000	fulfils fulfils

Certificate of constancy of performance No. 2434-CPR-0037, issued on 17.04.2019

Technical parameters of uninsulated fire damper ELR mounting onto the face of separating element

Shape, dimensions :	Rectangular of 200 x 200 mm minimum, 1000 x 1000 mm maximum dimensions
Housing material	galvanized steel sheet, painted steel sheet, stainless steel metal, 1,0 mm thickness
Blades:	double skin, 0,5 mm thick galvanized steel, blade axles positioned vertically or horizontally (in the vertical position)
Release mechanism:	Siemens actuator GNA126.1E/T12 Siemens actuator GNA326.1E/T12 Siemens actuator GNA166.1E/T12 with modulating control
Separating elements:	
Vertical: Mounting onto the face of the separating element	- 125 mm thick standard, insulated, flexible supporting construction EI60 class - 135 mm thick standard, insulated, flexible supporting construction EI120 class - Rigid supporting construction of the thicknesses greater than or equal to that of the element used in the test with the fire resistance greater than or equal to that of the standard supporting construction used in the test.
Horizontal: Mounting onto the face of the separating element	-110 mm thick normal concrete floor construction of 2200±200 kg/m^3 density (EI60 class) - 150 mm thick normal concrete floor construction, the density of the floor was 2200+-200 kg/m3

Supporting construction of the same type with the fire resistance greater than or equal to that of the standard supporting construction used in the test is allowed.

Cellular or hollow masonry blocks or slabs that have the fire resistance time equal to or greater than the fire resistance required for the fire damper installation.

Minimal distance between dampers installed in separate ducts:	200 mm
Minimal distance between damper installed in separating element and nearby wall or ceiling:	75 mm
Assembly method	The gaps between the housing of the damper and the supporting construction (wall/floor) were filled with 80 kg/m^3 (for the floor) and 85 kg/m^3 (for the wall) dense mineral wool.

Detailed technical parameters and final classification conditions in accordance with EN 13501-3 + A1: 2009 can be found in Classification Reports No. LBO-1210-K/18E dated 30.01.2019, LBO-1223-K/18E dated on 24.01.2019.

Technical parameters of uninsulated fire damper ELR mounting remote from the separating element

Shape, dimensions :	Rectangular of 200 x 200 mm minimum, 1000 x 1000 mm maximum dimensions
Housing material	galvanized steel sheet, painted steel sheet, stainless steel metal, 1,0 mm thickness
Release mechanism:	Siemens actuator GNA126.1E/T12 Siemens actuator GNA326.1E/T12 Siemens actuator GNA166.1E/T12 with modulating control
Separating elements, mounting within the separating element	
Vertical: Mounting remote from the separating element	- 135 mm thick standard, insulated, flexible supporting construction EI120 class Rigid supporting construction of the thicknesses greater than or equal to that of the element used in the test with the fire resistance greater than or equal to that of the standard supporting construction used in the test.
Horizontal Mounting remote from the separating element	- 150 mm thick normal concrete floor construction, the density of the floor was 2200+-200 kg/m^3

Supporting construction of the same type with the fire resistance greater than or equal to that of the standard supporting construction used in the test is allowed.

Minimum distance between dampers installed in separate ducts:	200 mm
Minimum distance between damper installed in separating element and nearby wall or ceiling:	75 mm
Maximum distance between damper and the separating element	1000 mm
Assembly method	The gaps between the housing of the damper and the supporting construction (wall/floor) were filled with 80 kg/m^3 dense mineral wool.

Detailed technical parameters and final classification conditions in accordance with EN 13501-3 + A1: 2009 can be found in Classification Reports No. LBO-1252-K/18E dated on 11.02.2019.

Intended use:
In air ventilation systems for protection of ventilation crossing in separating elements. Works against spreading of fire and smoke by ventilation installations through maintaining of integrity and/or insulation and/or smoke leakage criteria.