



Declaration of Performance – No: SND-R-2434-CPR-0303-23

# Shaft Natural Damper – Residential (SND-R)

| Description                                       | Details  |
|---|--|
| 1. Unique identification code of the product-type | Smoke control damper Shaft Natural Damper SND-R type for multi-compartment smoke control systems.  |
| 2. Intended use                                   | Shaft Natural Damper SND-R type is intended to use in single and multi-compartment smoke and heat control systems.   |
| 3. Producent manufacturer                         | Sertus Ltd, Europa House, Alfold Road,<br>Cranleigh, GU6 8NQ   |
| 4. Authorised representative                      | Not applicable   |
| 5. System of AVCP                                 | System 1   |
| 6. Harmonised standard                            | EN 12101-8:2011  Notified body: CTO S.A.  Maritime Advanced Research Centre Szczecinska 65, 80–392 Gdansk, Poland  Notified body No. 2434  No. of Certificate of constancy of performance: 2434-CPR-0303 |

### 7. Declared performance

| Smoke Control Damper SND-R type for multi-compartment smoke control systems |   |  |  |  |  |
|---|---|--|--|--|--|
| Product Description   |   |  |  |  |  |
| Fire resistance classification according to EN 13501-4:2016                 | EI 120 ( $V_{ew}$ – i $\leftrightarrow$ o) S 500 $C_{10000}$ AA multi |  |  |  |  |
| Dimensions:   | Width (mm) Height (mm)  |  |  |  |  |
| External  | 408–1008 632–2082   |  |  |  |  |
| Internal  | 300-900 400-1850  |  |  |  |  |



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## Shaft Natural Damper – Residential (SND-R)

### 7. Declared performance (cont.)

| Smoke Control Damper SND-R type for multi-compartment smoke control systems  Product Description |   |  |  |  |
|--|---|--|--|--|
|  |   |  |  |  |
| Actuator   | Belimo electric actuators for dampers:<br>BE 230/24<br>BEN 230/24   |  |  |  |
| Installation   | In standard supporting construction, rigid or flexible, thickness 160mm or greater, wall opening finished with one layer of 15mm plasterboard to the sides and two layers to top and bottom 200 mm width, the gap filled with gypsum mortar |  |  |  |
| Minimum distance between dampers installed in separate ductwork                                  | 200mm   |  |  |  |
| Minimum distance between damper installed in building partition and the nearby wall or ceiling   | 75mm  |  |  |  |

| Essential Characteristics                   | EN 12101-8         | Mandated levels and/or classes                                       | Assessment |  |
|---|--------------------|--|------------|--|
| Nominal Activation Conditions / Sensitivity | 4.2.1.3            | EI 120 ( $V_{ew} - i \leftrightarrow o$ ) S 500 $C_{10000}$ AA multi | Pass       |  |
| Response Delay (Response Time)              | 4.2.1.4            | < 60 s   | Pass       |  |
| Durability of Operational Reliability       | 4.2.2.2            | < 120 s  | Pass       |  |
| Fire Resistance                             |                    |  |            |  |
| Integrity                                   | 4.1.1 (a)<br>4.4.1 | E120 (max. negative<br>pressure 500 Pa)                              | Pass       |  |
| Insulation                                  | 4.1.1 (b)<br>4.4.1 | El120 (max. negative<br>pressure 500 Pa)                             | Pass       |  |
| Smoke Leakage                               | 4.1.1 (c)<br>4.4.1 | EIS120 ( max. negative<br>pressure 500 Pa)                           | Pass       |  |
| Mechanical Stability (in the scope of E)    | 4.1.1 (d)          | N/A  | Pass       |  |



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### Shaft Natural Damper – Residential (SND-R)

### 7. Declared performance (cont.)

| Essential Characteristics                            | EN 12101-8         | Mandated levels and/or classes | Assessment |  |
|--|--------------------|--------------------------------|------------|--|
| Maintenance of the cross-section (in the scope of E) | 4.1.1 (e)          | N/A                            | Pass       |  |
| High Operating Temperature                           | 4.1.1 (f)<br>4.4.1 | N/A                            | NPD        |  |
| Durability   |                    |                                |            |  |
| Durability of Response Delay                         | 4.4.2.1            | N/A                            | Pass       |  |
| Durability of Operational Reliability                | 4.4.2.2            | 10000 cycles<br>< 120 s        | Pass       |  |

### 8. Declaration

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 the manufacturer by:

Steve Knight, Technical Director

Place and date of issue:

Cranleigh, November 2022

