



Over Flow Unit

PRD-X

**Motorised Pressure Relief Vent for
Fire Suppression and Blast Protection**



At Gerhman we are driven by a strong desire to continuously generate improvements. We do that by developing products and systems that are easy to use and energy efficient, together with industry-leading knowledge, support, logistics and efficient availability.



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Over Flow Unit

PRD-X

Motorised Pressure Relief Vent



Overview

This motorised pressure relief vent is designed for gas fire suppression and blast protection applications, safely relieving excess pressure to protect room integrity. Engineered for fast, reliable operation, it ensures controlled pressure discharge during system activation while supporting correct suppression performance.

Key Features

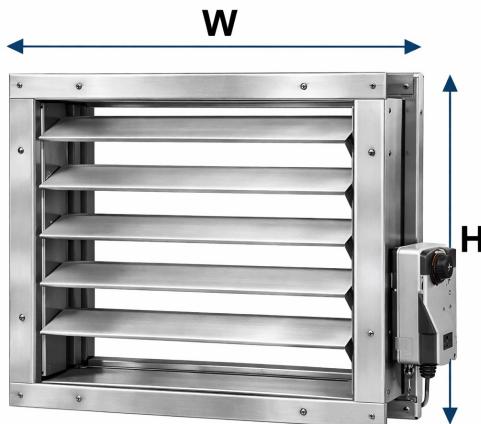
- Designed for **pressure relief in gas fire suppression and blast protection systems**
- Provides **controlled and directional pressure discharge** to maintain room integrity
- **Motorised operation** with repeatable and reliable actuation
- **Fast response time** suitable for rapid pressure rise during suppression discharge
- Compatible with **inert gas fire suppression systems**
- Engineered to operate at defined **activation pressure thresholds**
- Robust **steel construction** for high mechanical strength and durability
- **Powder-coated finish** for corrosion resistance and long service life
- Tested for **predictable and consistent performance** under real operating conditions
- Suitable for installation in **critical and high-risk protected enclosures**

Benefits

- Safety & Structural Protection**
Safely relieves excess pressure to protect room integrity and structural elements.
- System Performance**
Maintains correct internal pressure to support design gas concentration.
- Reliability**
Motorised operation ensures consistent and predictable performance.
- Fast Response**
Rapid pressure relief during sudden pressure rise.
- Long-Term Durability**
Robust steel construction for long service life and low maintenance.
- Compliance & Design Confidence**
Supports engineered fire suppression designs and approval requirements.

Sizes and Quick Selection

PRD-X



Product Code	PRD-X300	PRD-X500	PRD-X700	PRD-X1000
Free Vent Area	0.077 m ²	0.212 m ²	0.416 m ²	0.85 m ²
Overall (W × H × D) mm	420 × 420 × 220 mm	620 × 620 × 220 mm	820 × 820 × 220 mm	1120 × 1120 × 220 mm
Hole Cut-Out (W × H) mm	355 × 345 mm	555 × 545 mm	755 × 745 mm	1055 × 1045 mm
Weight	18 kg	29 kg	44 kg	70 kg

Performance

Feature	Specification
Pressure Rating	Rated for pressure above 10 kPa
vDc Factor	1.15, suitable for gas fire suppression applications
Opening Speed	Fully opens within 13 ms
Fire Resistance	4-hour fire rating
Warranty	5 Year

Operation & Installation

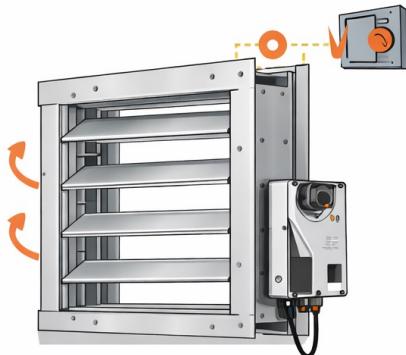
PRD-X

Feature	Description
Operation	Motorised with spring return (e.g. on fire alarm signal)
Wall Thickness Compatibility	Fits walls from thin panels up to 380 mm without additional parts
External Wall Installation	Requires Weather Louvre
Kit Contents	Belimo or Siemens motor, wall liner, wall liner extension, fitting kit and installation instructions



Operation

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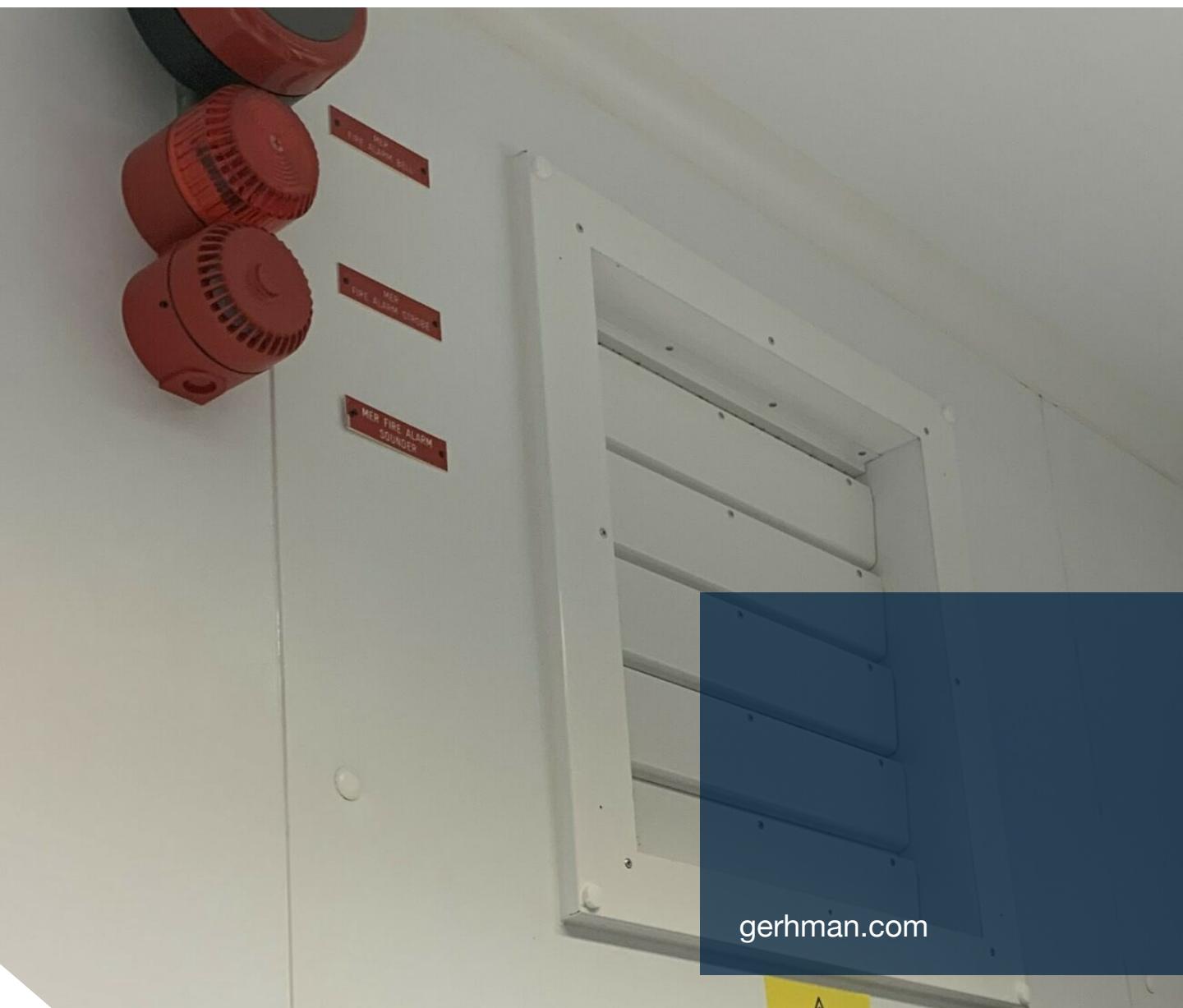


Motorised with Spring Return

Step-by-Step Operating Sequence

- 1. Standby Mode** Under normal conditions, the motorised pressure relief vent remains **fully closed** and sealed, maintaining room integrity.
- 2. System Monitoring** The vent is continuously connected to the **fire detection and alarm system**, ready to respond to a trigger signal.
- 3. Activation Signal** Upon activation of the gas fire suppression system or receipt of a **fire alarm signal**, the motorised actuator is energised.
- 4. Pressure Relief Operation** As internal pressure rapidly increases, the vent operates to **relieve excess pressure in a controlled manner**, preventing structural damage.
- 5. Spring Return Function** In the event of power loss or once the activation signal is removed, the **spring return mechanism** drives the vent back to its default safe position.
- 6. System Reset** After completion of the event, the vent remains closed and ready for **subsequent system operation**.

Gas Type	Chemical Name	Common Trade Name	Compatibility	Typical Applications
FK-5-1-12	Fluoroketone (C ₆ F ₁₂ O)	Novec™ 1230	Fully Compatible	Data centers, control rooms, laboratories
HFC-227ea	Heptafluoropropane (C ₃ HF ₇)	FM-200®	Fully Compatible	Server rooms, electrical rooms, critical enclosures



Overflow Units

PRD-X Motorised Pressure Relief Damper



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