Arc Explosion Pressure Relief for Switch Rooms
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Pressure Relief for Switch Rooms

"Protect your switch room with SHX Blast Relief Vents, 100% efficient, blast tested and universally approved"

THE ULTIMATE PRV

The New HIGH-X 100 SHX:
- 100% Efficient at 95.5 Pascal’s
- Fully opens in less than 15 milliseconds
- Performance Tests Verified By BRE
- Blast Tested to 5 Bar
- Fully Resettable
- Full European and US Fire Test Approval
- New Improved Design
- Patent Pending

The explosive nature of an electric arc has been documented in a number of case studies. The intense heat from an arc flash causes sudden expansion of air resulting in a blast and the associated pressure waves and the resulting explosions rival that of explosive substances. Energies produced by arc flash explosions have been known to propel large objects such as switchboard doors, bus bars and personnel several metres at very high speeds. As an example of an arc blast, a 50kA arcing fault will produce a pressure of approximately 10 kPa, 1 metre from the arc location.

The SHX pressure relief vent is specifically designed for installation in external walls of electrical switch rooms to relieve overpressure caused by arc explosions.

The average construction strength of switch room walls is only around 0.5 kPa and is therefore subject to catastrophic damage when subjected to the full pressure of an arc explosion.

This remarkable new leap forwards in the world of Blast venting is the only pressure relief vent to have undergone thorough live tests witnessed and verified by BRE (Building Research Establishment) Fire and Security. No other vent on the market has third party verification.

The SHX series of pressure relief vent is Fire Rated to EN 1363-1 to 4 hour and to UL555 for 2 hours.

PRESSURE RELIEF VENT COMPONENTS

Internal Kit

This is to fit walls that do not need weather proofing.

SHX-UN - is for internal walls and consist of;
- One HIGH-X-100 SHX vent,
- Wall Sleeve,
- Fitting Kit & full fitting instructions.

External Kit

DWL Dynamic Weather Louvre is used in addition to the above SHX-UN vent when fitting to an external wall. The Dynamic Weather Louvre is finished in a powder coated white aluminium colour to RAL9006.

Other colours are available

All kits come with a wall liner to increase fire protection integrity and form a neat finish to the necessary ‘cut’ hole into which the vent fits.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Vent Size</th>
<th>300</th>
<th>500</th>
<th>700</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (Width)</td>
<td>340</td>
<td>540</td>
<td>740</td>
<td>1040</td>
</tr>
<tr>
<td>B (Height)</td>
<td>350</td>
<td>550</td>
<td>750</td>
<td>1050</td>
</tr>
<tr>
<td>E</td>
<td>120</td>
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</tr>
<tr>
<td>F</td>
<td>415</td>
<td>615</td>
<td>815</td>
<td>1115</td>
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<td>G</td>
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<td>615</td>
<td>815</td>
<td>1115</td>
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<tr>
<td>Flange Size</td>
<td>50</td>
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<tr>
<td>Unit Weight</td>
<td>12kg</td>
<td>19kg</td>
<td>34kg</td>
<td>53kg</td>
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<td>Hole Cut Out Size</td>
<td>360 x 380</td>
<td>560 x 580</td>
<td>760 x 780</td>
<td>1060 x 1050</td>
</tr>
</tbody>
</table>

100% Efficient at 95.5 Pascal’s
PRODUCTS:

**Gaseous Suppression**
- Inert Gas (IG-01, IG-55, IG-100, IG-541)
- Novec 1230™ Fluid (FK-5-1-12)
- FM-200® / NAF S 227 (HFC-227ea.)
- Ecaro 125® / NAF S 125 (HFC-125)
- Carbon Dioxide (CO₂)
- Hybrid Systems (N₂ / Water)
- Pressure Relief Vents
- Enclosure Integrity Testing Equipment
- Pipe & Fittings

**Water Suppression**
- Water Mist - High Pressure
- Water Mist - Intermediate Pressure
- Water Mist - Low Pressure
- Hybrid Systems (Water / N₂)
- Monitors & Delivery Systems
- High Speed Deluge

**Foam Suppression**
- Foam Concentrates
- Foam Proportioning
- Foam Delivery Systems
- Foam Concentrate Testing

**Explosion Protection**
- Explosion Suppression
- Explosion Isolation
- Explosion Vents & Pressure Relief
- Spark Suppression
- Explosibility Testing

**Fire Detection**
- Linear Heat Detection - Digital
- Linear Heat Detection - Fibre Optic
- Linear Heat Detection - Micro Chip
- Flame Detection
- Video Imaging Detection
- Spark Detection
- Control & Indicating Equipment
- Thermal Imaging Detection

**Military & Defence**
- Military Vehicles
- Naval Vessels

**Special Applications**
- Micro Environment
- Oxygen Reduction
- Kitchen Protection Systems
- Dry Chemical
- Vehicle Systems
- Compressed Air Foam
- Marine & Offshore
- Vapour Mitigation

**Support Services**
- Design / Engineering
- Technical Support
- Services & Testing

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**Australia**

**Head Office**
Unit 1, 251 Ferntree Gully Road
Mt Waverley VIC 3149
Australia

**Brisbane Office**
Unit 7, 93 Rivergate Place
Murarrie QLD 4172
Australia

**Perth Office**
28 Hargreaves Street,
Belmont WA 6104
Australia

**Sydney Office**
Unit 29/10 Gladstone Road,
Castle Hill NSW 2154
Australia

1300 742 296
Int: +61 3 8542 8900
www.fire-protection.com.au

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**New Zealand**

**Auckland Office**
Unit 2, 13 Airborne Road
Albany North Shore 0632
New Zealand

+64 9 415 5488
www.fire-protection.net.nz

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**South East Asia**

**Regional Head Office**
11 Yishun Industrial Street 1,
#03-96 Singapore, 768089

+65 9614 6086
www.fire-protection.com.sg

Kuala Lumpur: +60 19 359 9339

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‘Every solution for your special hazard needs’