Arc Explosion Pressure Relief for Switch Rooms
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“Protect your switch room with HIGH-X 100 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 13kPa, 1 metre from the arc location.

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.

The HIGH-X 100 SHX pressure relief vent is specifically designed for installation in external walls of electrical switch rooms to relieve overpressure caused by arc explosions.

PRESSURE RELIEF VENT COMPONENTS

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

HIGH-X 100 SHX – 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 HIGH-X 100 SHX 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>Free Vent Area (FVA/m²)</td>
<td>0.076</td>
<td>0.212</td>
<td>0.416</td>
<td>0.85</td>
</tr>
<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>
<td>120</td>
<td>120</td>
<td>120</td>
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<tr>
<td>F</td>
<td>415</td>
<td>615</td>
<td>815</td>
<td>1115</td>
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<tr>
<td>G</td>
<td>415</td>
<td>615</td>
<td>815</td>
<td>1115</td>
</tr>
<tr>
<td>Flange Size</td>
<td>50</td>
<td>50</td>
<td>50</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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<tr>
<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