For many years, ABTECH have been at the forefront in the design and manufacture of high voltage connection solutions for use in hazardous areas.

All ABTECH high voltage enclosures are manufactured in 316 grade stainless steel and have an IP rating of IP66 as standard. IP67 versions are also available.

All enclosures are ATEX certified by SIRA for use in a Category 2/Zone 1 areas and Category 3/Zone 2 areas.

The entire range offers flexibility in terms of both connection options and mounting arrangements.

New variations are continually being added to the High Voltage range. For example, we can now offer Category 2/Zone 1 high voltage enclosures capable of operation at 35kV.

Whatever your requirement may be for high voltage connections in hazardous areas, call ABTECH for the solution.

Our High Voltage ranges currently consist of the following types:

- **MJB Range**

  The MJB range provides a simple, low cost but effective solution for the connection of cables. Used primarily for joining cables or as a connection box. Maximum voltage 8.3kV.
### DPJ B Range
The original high voltage ‘down hole pump’ connection box which has been used by many customers all over the world.

![DPJ B Range Image]

### HVJB Range
The latest in the High Voltage range offering enhanced flexibility over the choice of cables, entries and cable terminations. Maximum voltage 35kV.

![HVJB Range Image]

### LR Range
The LR range was originally designed for a specialist application for a specific customer. However, this type of enclosure has since been used in more general applications where a need for the flexible connection arrangements is required. Maximum voltage 11kV

![LR Range Image]

### Busbar Box
A busbar enclosure with a maximum voltage of 11kV, a current capacity of 3000A per phase and a fault rating of 80kA for 1 second. Capable of connecting 3 phase & neutral and up to 6 cables per phase.

![Busbar Box Image]

### SX125 Box
A unique solution to the termination of umbilical cables to offshore platforms or on-shore distribution systems. A power conductor compartment is provided for use at up to 15 kV and a separate control compartment for terminating optical fibres and/or control conductors.

![SX125 Box Image]
**Application**
Industrial and Hazardous areas

**Protection Degree**
IP66 or 67

**Certification**
- ATEX Ex e (Zone 1 & Zone 2) to BS EN 60079-7
- ATEX Ex nA (Zone 2) to BS EN 60079-15
- ATEX Ex nR (Zone 2) to BS EN 60079-15
- NEMA 4X (CSA, UL & FM) Class 1 Division 2
- Deluge Tested to DTS-01

**Material**
Stainless steel 316 (1.4404) or Mild steel

**Temperature Rating**
- Standard: -20°C to 40°C (-4°F to 104°F)
- Option: -50°C to 65°C (-58°F to 149°F)

**Maximum Voltage**
8.3 kV

### Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Depth (mm)</th>
<th>Dimension C (mm)</th>
<th>Dimension D (mm)</th>
<th>Power Rating (W)</th>
<th>Maximum Voltage (kV)</th>
<th>Maximum Ways</th>
<th>Maximum Conductor Size (mm²)</th>
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<td>300</td>
<td>560</td>
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<td>780</td>
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<td>580</td>
<td>23</td>
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<td>780</td>
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<td>560</td>
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<td>750</td>
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<td>200/300</td>
<td>850</td>
<td>1050</td>
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</table>
**High Voltage Enclosures**

**Application**
Industrial and Hazardous areas

**Protection Degree**
IP66 or 67

**Certification**
ATEX EEx e (Zone 1 & Zone 2) to BS EN 60079-7
NEMA 4X (CSA, UL & FM) Class 1 Division 2
Deluge Tested to DTS-01

**Material**
Stainless steel 316 (1.4404) or Mild steel

**Temperature Rating**
Standard: -20°C to 40°C (-4°F to 104°F)
Option: -50°C to 65°C (-58°F to 149°F)

**Maximum Voltage**
11 kV

**Fault Rating**
50kA for 1 second

---

## Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Width (mm)</th>
<th>Height/Depth (mm)</th>
<th>Depth (mm)</th>
<th>Power Rating (W)</th>
<th>Maximum Voltage (kV)</th>
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</table>

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## Notes

The DPJB utilises the SX7 and SX8 enclosures in either 200 or 300mm depth, depending on the operating voltage. By using the SX range design the same benefits are afforded to the DPJB range. These benefits include: ingress protection to IP66 as standard with IP67 available as an option, enclosure tested to the Shell/ERA deluge specification, heavy duty construction, padlock facility and internal/external earth stud fitted as standard. A double compartment version is available with a separate compartment which can be used to terminate control cables or fibre optic cables. This allows access to the low voltage/ fibre compartment without having to de-energise the high voltage compartment. Versions are also available with purge protection for use in Class 1/Division 2 areas. Phase segregation is fitted as standard. The DPJB range can be used as either a through box or with both the incoming and outgoing cable entering via one end. In the latter instance it is important to consider the bending radii of the cables to ensure the enclosure is large enough.

Spare copper crimp lugs are available from ABTECH to allow repairs or re-use of the enclosure. Please contact the Sales Department for further details.
**High Voltage Enclosures**

**Application**
Industrial and Hazardous areas

**Protection Degree**
IP66 or 67

**Certification**
ATEX EEx e (Zone 1 & Zone 2) to BS EN 60079-7
NEMA 4X (CSA, UL & FM) Class 1 Division 2
Deluge Tested to DTS-01

**Material**
Stainless steel 316 (1.4404) or Mild steel

**Temperature Rating**
Standard: -20°C to 40°C (-4°F to 104°F)
Option: -50°C to 65°C (-58°F to 149°F)

**Maximum Voltage**
11 kV

---

### Specifications

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<tr>
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<th>Maximum Voltage (kV)</th>
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<th>Top Cables</th>
<th>Bottom Cables</th>
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<tr>
<td>HVJB x3 (1-2)</td>
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<tr>
<td>HVJB x3 (2-1)</td>
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<td>3</td>
<td>2</td>
<td>1</td>
<td>630</td>
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<tr>
<td>HVJB x3 (2-2)</td>
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<td>11</td>
<td>3</td>
<td>2</td>
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<td>630</td>
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<tr>
<td>HVJB x3 (3-1)</td>
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<td>11</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>630</td>
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<tr>
<td>HVJB x3 (3-2)</td>
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<td>11</td>
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<td>3</td>
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<td>630</td>
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<td>HVJB x3 (3-3)</td>
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<td>3</td>
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<td>630</td>
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<td>HVJB x4 (0-2)</td>
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<td>3</td>
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<td>4</td>
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<td>HVJB x4 (1-2)</td>
<td>980</td>
<td>11</td>
<td>4</td>
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<tr>
<td>HVJB x4 (2-1)</td>
<td>980</td>
<td>11</td>
<td>4</td>
<td>2</td>
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<td>630</td>
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<tr>
<td>HVJB x4 (2-2)</td>
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<tr>
<td>HVJB x4 (1-3)</td>
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<td>11</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>630</td>
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<tr>
<td>HVJB x4 (3-1)</td>
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<td>4</td>
<td>3</td>
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<td>630</td>
</tr>
<tr>
<td>HVJB x4 (2-3)</td>
<td>980</td>
<td>11</td>
<td>4</td>
<td>3</td>
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<td>630</td>
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<tr>
<td>HVJB x4 (3-3)</td>
<td>980</td>
<td>11</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>630</td>
</tr>
</tbody>
</table>

The letter ‘x’ in the Part Number above should be replaced with the number 7 or 8 depending on the size of enclosure required. 7 refers to an SX7 size enclosure measuring 650 x 950 x 300mm. 8 refers to an SX8 enclosure measuring 800 x 1250 x 300mm. If cables greater than 300mm² are used it is advisable to use the SX8 size enclosure. For voltages greater than 11kV enclosures are available to special order - please contact our Sales Department for further information.
High Voltage Enclosures

**Application**
Industrial and Hazardous areas

**Protection Degree**
IP66 or 67

**Certification**
ATEX EEx e (Zone 1 & Zone 2) to BS EN 60079-7
NEMA 4X (CSA, UL & FM) Class 1 Division 2
Deluge Tested to DTS-01

**Material**
Stainless steel 316 (1.4404) or Mild steel

**Temperature Rating**
Standard: -20°C to 40°C (-4°F to 104°F)
Option: -50°C to 65°C (-58°F to 149°F)

**Maximum Voltage**
11 kV

---

**Specifications**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Depth (mm)</th>
<th>Max. Current (A)</th>
<th>Max. Voltage (kV)</th>
<th>Max. Ways</th>
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<td>LR52(300)</td>
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<td>LR73(200)</td>
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<td>LR73(300)</td>
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The LR52 version ATEX certification is based on the SX5-3GP-200 (3 gland plates, 200mm deep) and SX5-3GP-300 (3 gland plates, 300mm deep).

The LR73 version ATEX certification is based on the SX7-3GP-200 (3 gland plates, 200mm deep) and SX7-3GP-300 (3 gland plates, 300mm deep).

Other sizes are available on request.
Busbar Box

High Voltage Enclosures

Application
Industrial and Hazardous areas

Protection Degree
IP66 or 67

Certification
ATEX EEx e (Zone 1 & Zone 2) to BS EN 60079-7
NEMA 4X (CSA, UL & FM) Class 1 Division 2
Deluge Tested to DTS-01

Material
Stainless steel 316 (1.4404) or Mild steel

Temperature Rating
Standard: -20°C to 40°C (-4°F to 104°F)
Option: -50°C to 65°C (-58°F to 149°F)

Maximum Voltage
8.3 kV

Specifications

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<thead>
<tr>
<th>Part Number</th>
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<th>Maximum Depth (mm)</th>
<th>Maximum Current (A)</th>
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<th>Maximum Ways</th>
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<td>4</td>
<td>1000</td>
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</table>

Notes

The ABTECH Busbar box is used for the connection of cables or equipment where the conductor size and number of cables being connected would make it very difficult in any other ABTECH High Voltage range.

The Bus-Bar box is ideally suited for conductor sizes over 400mm², as the design allows cables to enter the enclosure and be terminated onto the busbar without having to be bent. This makes for quick and easy installation in applications which have normally been considered difficult to accomplish.

Although not based on a particular size of standard enclosure, the Bus-Bar box utilises the SX range features and is consequently afforded the same benefits from the use of these. These benefits include: ingress protection to IP66 as standard with IP67 available as an option, heavy duty construction, padlock facility and an internal/external earth stud fitted as standard. Additionally, the Bus-Bar box incorporates heavy duty mounting facilities which can be adapted to suit the customer's requirements.
### SX125 Range

**High Voltage Enclosures**

<table>
<thead>
<tr>
<th>Application</th>
<th>Industrial and Hazardous areas</th>
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<tbody>
<tr>
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| Certification | ATEX Ex e (Zone 1 & 2) to BS EN 60079-7  
NEMA 4X (CSA, UL & FM) Class I Division 2 |
| Material | Stainless steel 316 (1.4404) or Mild steel |
| Temperature Rating | Standard: -20°C to 40°C (-4°F to 104°F)  
Option: -50°C to 65°C (-58°F to 149°F) |
| Maximum Voltage | 15 kV |

**Notes**

The SX125 provides a unique solution to the termination of umbilical cables to offshore platforms or onshore distribution systems. Based on the successful and service-proven SX range, they are available as either a left-hand or right-hand configuration. A power conductor compartment is provided for use at up to 15 kV and a separate control compartment for terminating optical fibres and/or control conductors. For voltages greater than 15 kV, enclosures are available to special order – please contact our Sales Department for further information.

Each compartment gives independent protection to IP 66. This facilitates working on the optical fibres or control conductors without the need to isolate the feed to the power compartment.

The SX125 is available with either 3 couplers or 4 couplers, each capable of connecting up to 3 power conductors. In the control compartment there is the option to mount the optical fibre splice cassettes either directly onto a chassis plate or inside an additional Ex e certified enclosure for increased environmental protection. Terminals for control conductors can be treated in the same manner as optical fibres. For higher voltage applications, the SX125 is available with a purging system.

**HVJ B 125**

For high current applications, the HVJB 125 was developed as an extension to the SX125 range. Offering all the facilities of the SX125, the HVJB 125 adds the facility for a suitably certified anti-condensation heater.