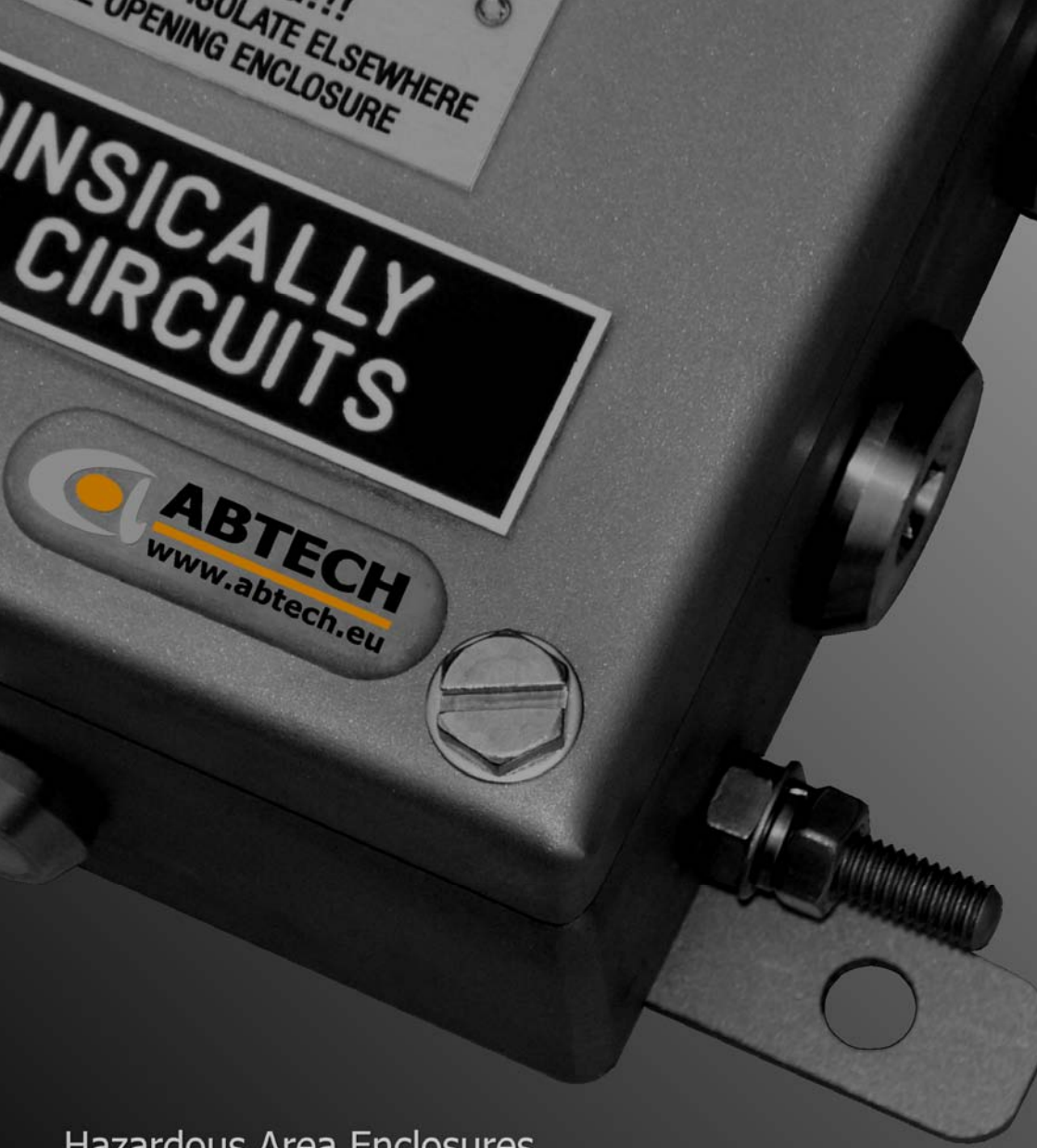


Hazardous Area Enclosures

High Voltage Junction Boxes

Special Purpose Enclosures

Electrical Enclosures

Cable Glands and Adaptors

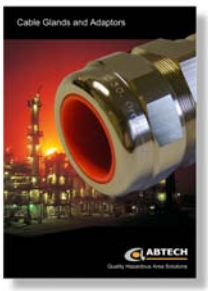
How to Contact Abtech



If you require any additional information regarding our products, please contact us at one of the listed locations. Alternatively, our website includes detailed product information along with the ability to download certificates, software and drawings.

Other Products Available from Abtech...

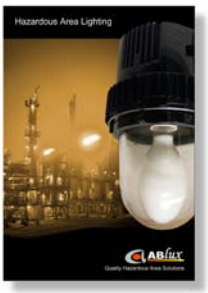
Cable Glands and Adaptors



A range of cable glands, adaptors, reducers and stopping plugs manufactured from brass and suitable for use in hazardous area Zone 1 and Zone 2.

Please see the Glands Section of this catalogue on page 208.

Hazardous Area Lighting



A range of hazardous area lighting products from Ablux (an Abtech Group company). The product line includes various floodlights and luminaires suitable for both Zone 1 and Zone 2 areas hazardous areas along with associated specialist lighting components. Ablux are also able to provide custom lighting solutions designed to the customer's specifications.

ABlux

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Belgium	UAE
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Finland	China
France	Hong Kong
Italy	Indonesia
Russia	Malaysia
Sweden	Taiwan
Oman	Thailand
Qatar	Vietnam
Saudi Arabia	

www.abtech.eu

Since the first ABTECH sheet steel enclosure was manufactured in the 1970's the company has never lost sight of it's goal, to become a leading supplier of quality electrical enclosures and junction boxes suitable for both industrial and hazardous area markets. This we believe has been achieved through innovation, market leading design, rigorous testing and adherence to quality.



In recent years ABTECH have extended their range of enclosures to cope with ever increasing customer demands for unique solutions to their problems. These solutions include high current connection boxes (up to 3000Amps), high temperature junction boxes (up to 950°C for 3 hours) and IP68 enclosures (up to 120ft depth).

ABTECH rose to the challenge when the Channel Tunnel was being constructed and produced over 12,500 junction boxes and emergency lighting actuators to the most exacting of standards. With the emphasis on reliability and safety, ABTECH designed a solution that more than met the rigorous specification laid down by Eurotunnel.



The new millennium has seen ABTECH once more expanding their range of products and services to help their customers cope with the need to meet ever changing international standards.

In addition to fulfilling the requirements of the ATEX legislation, the majority of ABTECH products also comply with the IEC Ex scheme and are certified for use in Category 2 (Zone 1) and Category 3 (Zone 2) areas for both gas and dust hazards.



ABTECH operate in the global market place as the nature of the Oil & Gas & Petrochemical industry demands and to meet this requirement ABTECH operate at an International level. With the headquarters based in Sheffield, UK and factories and offices in USA, Germany, Netherlands, South Korea and Singapore and a network of agents covering over 40 countries worldwide, ABTECH have the coverage to manage any project. Indeed over the last 25 years, ABTECH have been involved in many projects throughout the world. Please refer to our Major Projects List in the Appendix section of this catalogue.



ABTECH also manufacture restricted breathing enclosures (EEx'nR') which are capable of housing sparking and hot components and are suitable for use in Zone 2 areas and can often be a cost effective alternative to flameproof enclosures (EEx'd').

The durability of our products is measured in decades. Whether the product is for an industrial or hazardous area application, ABTECH place the utmost importance on quality as would be expected from a leading manufacturer. The success of the company has been built on this dedication to total quality control and with over 30 years history of supply to the leading oil & gas companies throughout the world it is a policy that has been proven to work.

With approvals such as BS EN ISO 9001:2000, certification to British, European and International standards and approvals from certifying authorities in the UK, USA, Canada and Russia, the company's commitment to quality ensures that safety is never compromised.



Technical support at ABTECH begins long before the order is placed. Our dedicated sales staff based at our regional offices can offer advice on enclosure type, terminal selection, cable entry placement and any other requirements that might dictate the eventual selection. Technical assistance is also available at any time during the order process or indeed after the equipment is installed and ABTECH staff will be only too happy to help with any questions you may have.

The ABTECH range of products are suitable for both industrial and hazardous area applications.

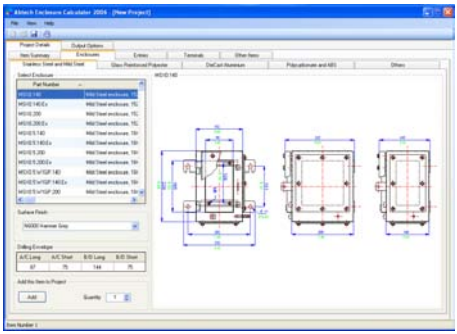
Enclosures manufactured in stainless steel, mild steel, glass reinforced polyester, aluminum, polycarbonate and ABS are suitable for a wide range of industrial and OEM applications and we have the facilities to modify the standard enclosure to meet the customer's requirements.

These services include machining, painting, silk screen printing and electro-polishing. We are also able to mould any of the plastic range of enclosures in a wide range of colours (subject to minimum order quantity).

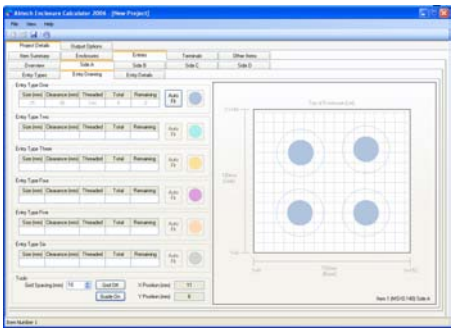


ABTECH Enclosure Calculator

One of the most difficult and time consuming steps in the selection of a suitable enclosure to meet your particular requirements is trying to calculate if the size chosen will accommodate the terminals and cable entries you require. At ABTECH we have, for many years, been using our Enclosure Calculation software which was designed specifically for use with our enclosures.

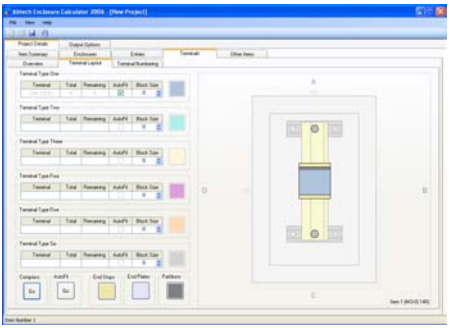


Some years ago we decided to make this program available to all our customers, free of charge, and this has been a tremendous success. The software allows users to easily design complex arrangements of entries and generates a drawing which ABTECH can subsequently use for manufacturing purposes.

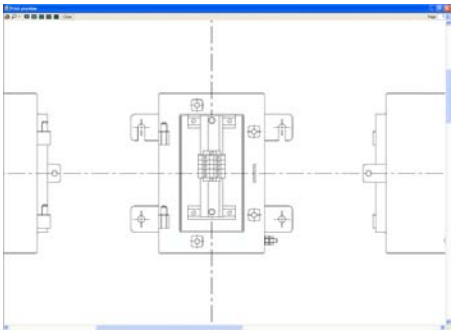


The program also incorporates a terminal calculation program which lets you see at a glance whether or not the desired number of terminals can be accommodated within your chosen enclosure and as with the Entry Calculator will print a drawing of your finished design.

The software greatly simplifies the enclosure design process. The latest version will also produce general arrangement drawings which can printed or emailed as required.



The program can be used on any Windows based PC and is simple to install and use. It includes a comprehensive help menu to allow users to start using the software immediately without the need of expert tuition. The ABTECH Enclosure Calculator CD can be obtained by contacting our sales desk or for immediate download from our website at www.abtech.eu



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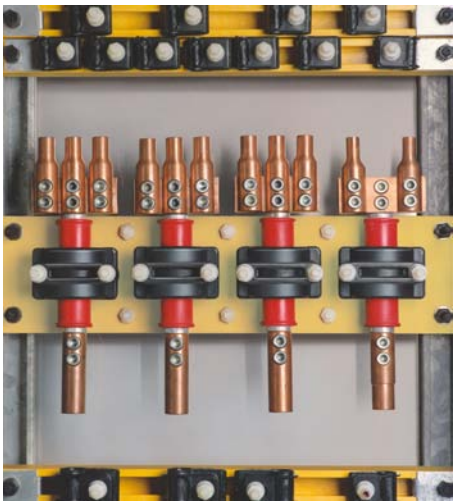


High Voltage

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



Through constantly listening to customers needs, the range has been developed and expanded to the five major ranges shown in this section. Different sizes and options result in more than 50 combinations to choose from.



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.



DPJB Range

The original high voltage 'down hole pump' connection box which has been used by many customers all over the world.



HVJB Range

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



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



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.



SX125 Box

A unique solution to the termination of umbilical cables to offshore platform 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.

MJB Range

High Voltage Enclosures

8.3kV

Application
Industrial and Hazardous areas

Protection Degree
IP66 or 67

Certification
ATEX EEx e (Zone 1 & Zone 2) to BS EN 60079-7
ATEX EEx nA (Zone 2) to BS EN 60079-15
ATEX EEx nR (Zone 2) to BS EN60079-15
NEMA 4X (CSA, UL & FM) Class 1 Division 2
Deluge Tested to DTS-01

Material
Stainless steel 316 (1.4404) or Mild steel

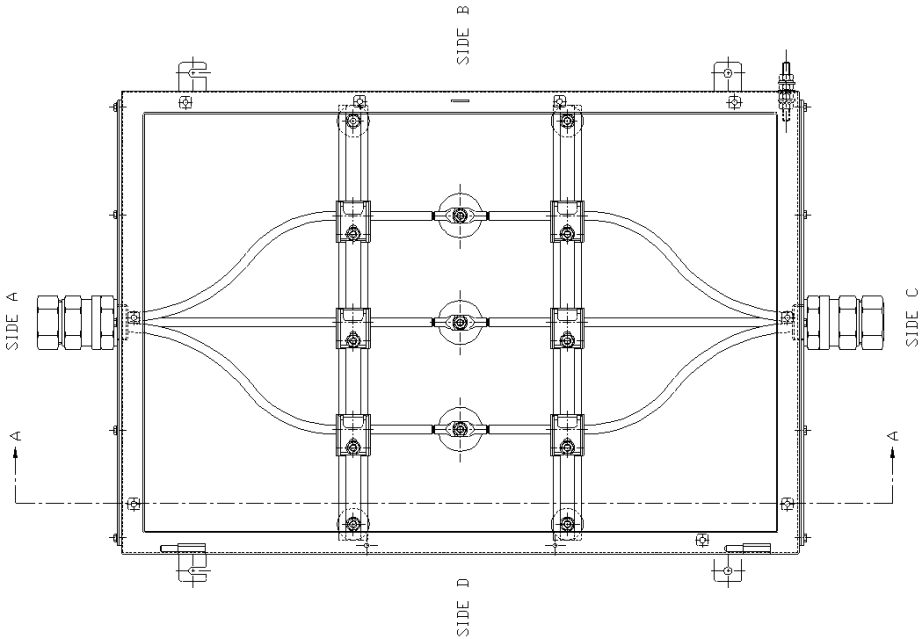
Temperature Rating
Standard: -20º to 40º C (-4º to 104º F)
Option: -50º to 65º C (-58º to 149º F)

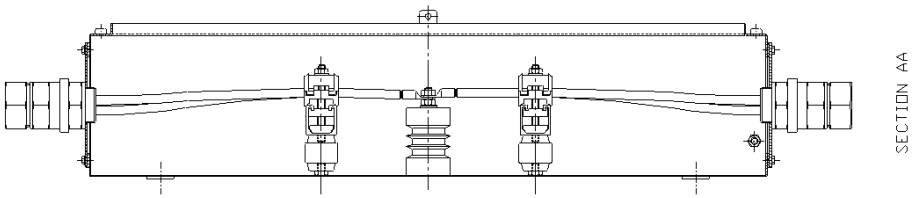
Maximum Voltage
8.3 kV



Specifications

Part Number	Width (mm) (Dimension B)	Height (mm) (Dimension A)	Depth (mm)	Dimension C (mm)	Dimension D (mm)	Power Rating (W)	Maximum Voltage (kV)	Maximum Ways	Maximum Conductor Size (mm^2)
MJB5	510	510	200/300	560	360	16	6.6	3	120
MJB5/3	510	510	300	560	360	16	8.3	3	35
MJB6	510	780	200/300	560	580	23	6.6	3	120
MJB6/3	510	780	300	560	580	23	8.3	3	35
MJB7	650	950	200/300	700	750	33	6.6	4	240
MJB7/3	650	950	300	700	750	33	8.3	4	240
MJB8	800	1250	200/300	850	1050	50	6.6	4	240
MJB8/3	800	1250	200/300	850	1050	50	8.3	4	240


SIDE B
SIDE A
SIDE C
SIDE D
A
A


SECTION AA

DPJB Range

High Voltage Enclosures

11kV

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: -20º to 40º C (-4º to 104º F)
Option: -50º to 65º C (-58º to 149º F)

Maximum Voltage
11 kV

Fault Rating
50kA for 1 second



Specifications

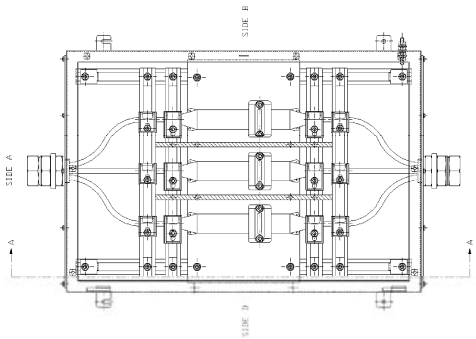
Part Number	Width (mm) (Dimension B)	Height (mm) (Dimension A)	Depth (mm)	Power Rating (W)	Maximum Voltage (kV)	Maximum Ways	Max. Conductor Size (mm^2)
DPJB1	650	950	200	48.6	6.6	3	630
DPJB3	650	950	200	48.6	6.6	4	630
DPJB5	800	1250	300	48.6	6.6	3	630
DPJB7	800	1250	300	48.6	6.6	4	630
DPJB9	800	1250	300	48.6	11	3	630
DPJB11	800	1250	300	48.6	11	4	630
DPJB2	650	950	200	50.0	6.6	4	120

Notes

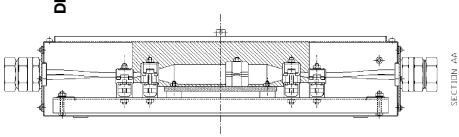
The DPJB utilises the SX7 and SX8 enclosures in either 200 or 300mm depth, depending on the operating voltage. By using the SX range design the same benefits are afforded to the DPJB range. These benefits include: ingress protection to IP66 as standard with IP67 available as an option, enclosure tested 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 later instance it is important to consider the bending radii of the cables to ensure the enclosure is large enough

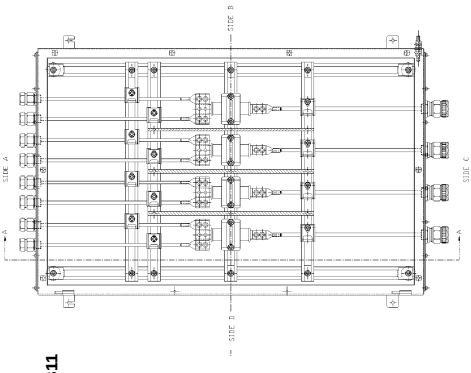
Spare copper crimp lugs are available from ABTECH to allow repairs or re-use of the enclosure. Please contact the Sales Department for further details.

Technical Drawing

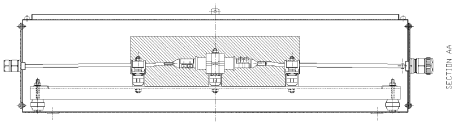


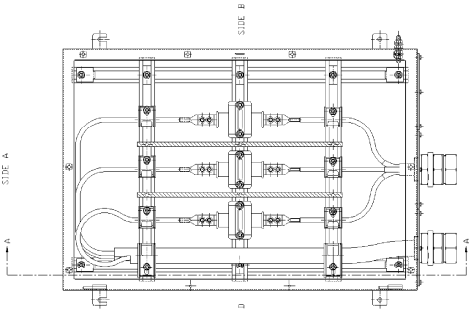
DPJB2



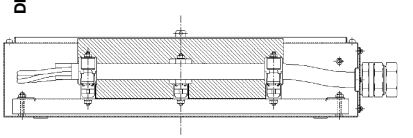


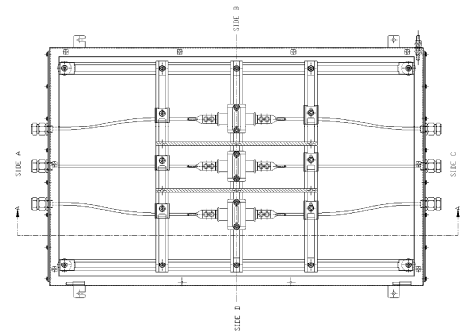
DPJB11



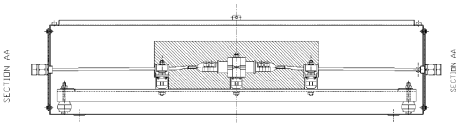


DPJB1





DPJB9



HVJB Range

High Voltage Enclosures

35kV

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

Maximum Voltage
11 kV

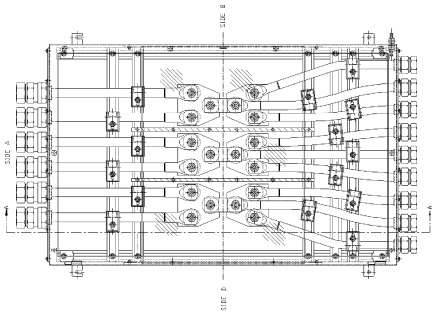


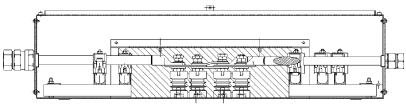
Specifications

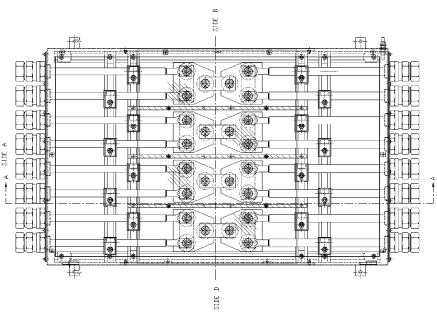
Part Number	Maximum Current (A)	Maximum Voltage (kV)	Maximum Ways	Top Cables	Bottom Cables	Max. Conductor Size (mm²)
HVJB x3 (0-2)	980	11	3	0	2	630
HVJB x3 (0-3)	980	11	3	0	3	630
HVJB x3 (2-0)	980	11	3	2	0	630
HVJB x3 (3-0)	980	11	3	3	0	630
HVJB x3 (1-1)	980	11	3	1	1	630
HVJB x3 (1-2)	980	11	3	1	2	630
HVJB x3 (2-1)	980	11	3	2	1	630
HVJB x3 (2-2)	980	11	3	2	2	630
HVJB x3 (1-3)	980	11	3	1	3	630
HVJB x3 (3-1)	980	11	3	3	1	630
HVJB x3 (2-3)	980	11	3	2	3	630
HVJB x3 (3-2)	980	11	3	3	2	630
HVJB x3 (3-3)	980	11	3	3	3	630
HVJB x4 (0-2)	980	11	4	0	2	630
HVJB x4 (0-3)	980	11	4	0	3	630
HVJB x4 (2-0)	980	11	4	2	0	630
HVJB x4 (3-0)	980	11	4	3	0	630
HVJB x4 (1-1)	980	11	4	1	1	630
HVJB x4 (1-2)	980	11	4	1	2	630
HVJB x4 (2-1)	980	11	4	2	1	630
HVJB x4 (2-2)	980	11	4	2	2	630
HVJB x4 (1-3)	980	11	4	1	3	630
HVJB x4 (3-1)	980	11	4	3	1	630
HVJB x4 (2-3)	980	11	4	2	3	630
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HVJB x4 (3-3)	980	11	4	3	3	630

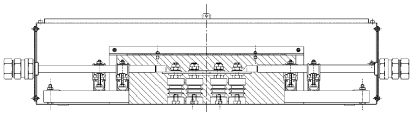
The letter 'x' in the Part Number above should be replaced with the number 7 or 8 depending on the size of enclosure required. 7 refers to an SX7 size enclosure measuring 650 x 950 x 300mm. 8 refers to an SX8 enclosure measuring 800 x 1250 x 300mm. If cables greater than 300mm² are used it is advisable 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.

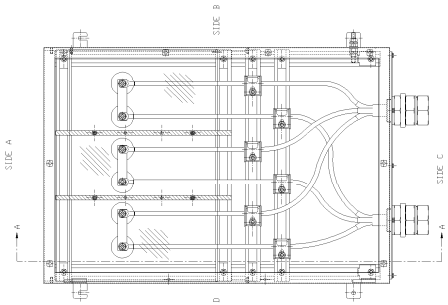
Technical Drawing



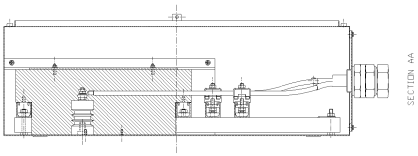


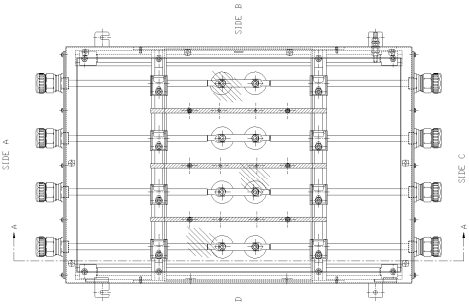




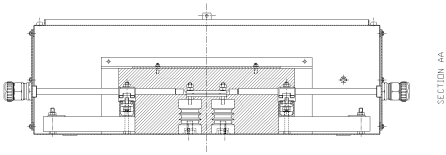


HVJB73(0-2)





HVJB74(1-1)



LR Range

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

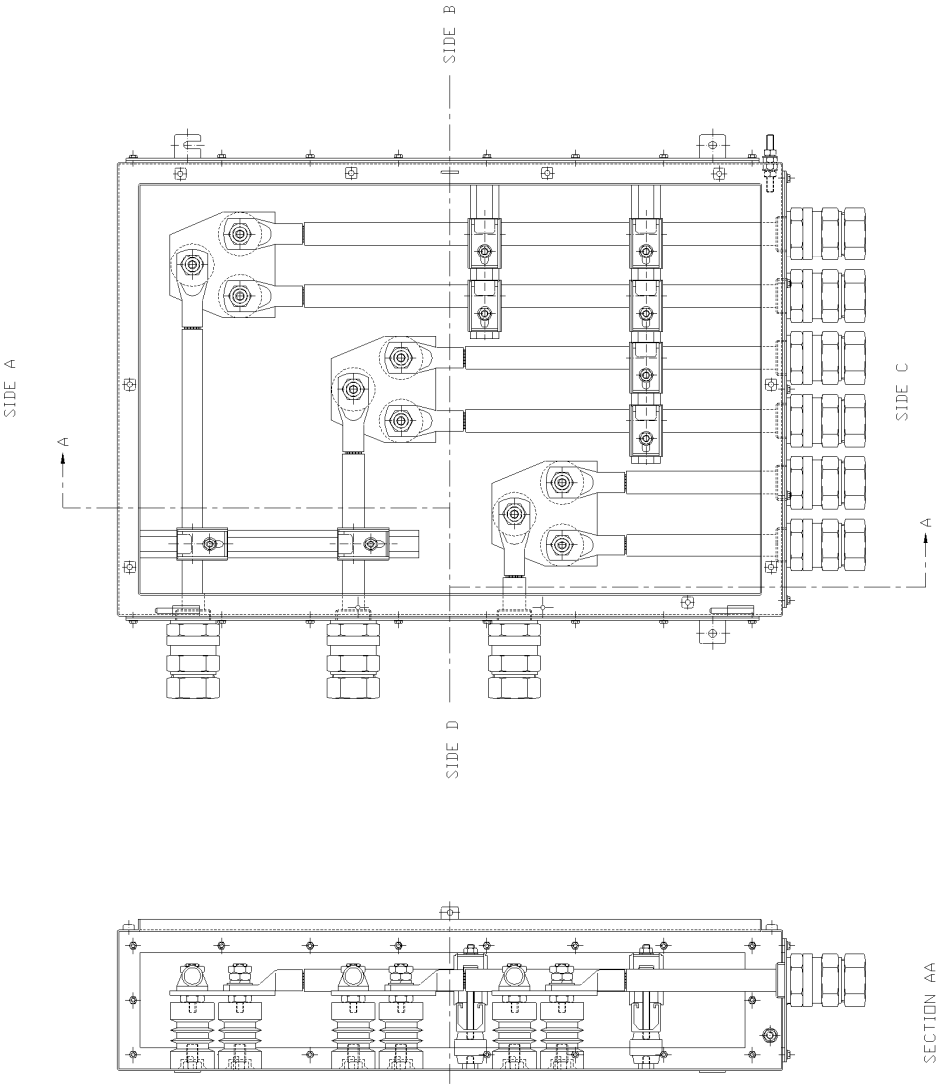
Maximum Voltage
11 kV



Specifications

Part Number	Width (mm)	Height (mm)	Depth (mm)	Maximum Current (A)	Maximum Voltage (kV)	Maximum Ways	Max. Conductor Size (mm²)
LR52(200)	510	510	200	1250	3.3	2	630
LR52(300)	510	510	300	1250	3.3	2	630
LR73(200)	650	950	200	1250	3.3	3	630
LR73(300)	650	950	300	1250	3.3	3	630

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.


SIDE B
SIDE A
SIDE C
SIDE D
A
A
SECTION AA

Busbar Box

Application
Industrial and Hazardous areas

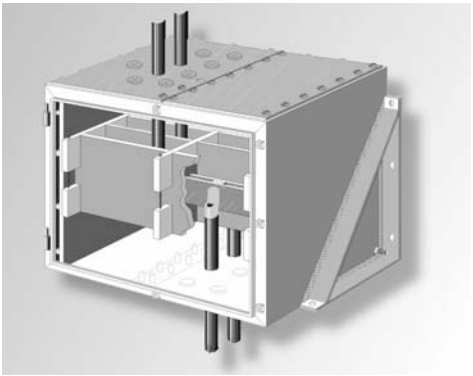
Protection Degree
IP66 or 67

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

Maximum Voltage
8.3 kV



Specifications

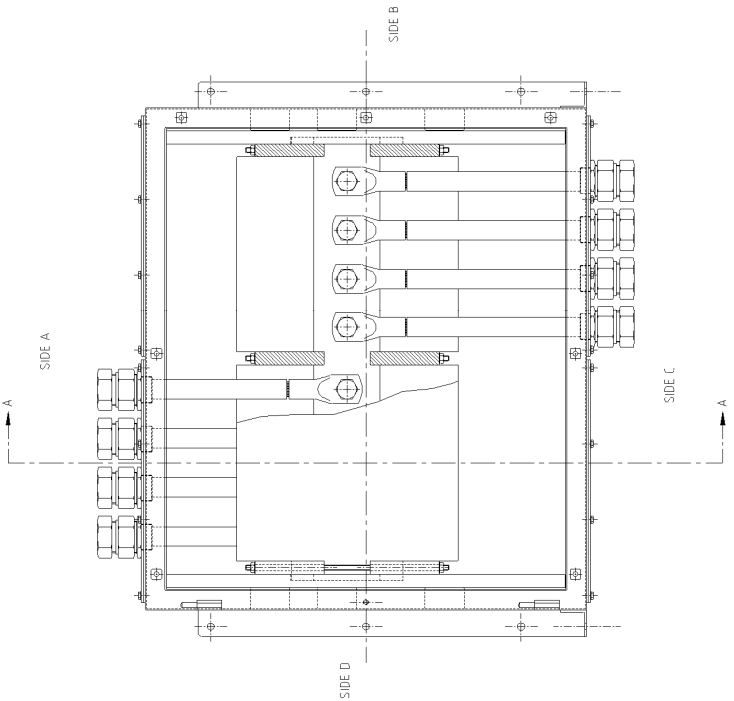
Part Number	Maximum Width (mm)	Maximum Height (mm)	Maximum Depth (mm)	Maximum Current (A)	Maximum Voltage (kV)	Maximum Ways	Maximum Conductors per Way	Maximum Ways	Max. Conductor Size (mm^2)
Busbar Box	770	770	1250	3000	11	4	6	4	1000

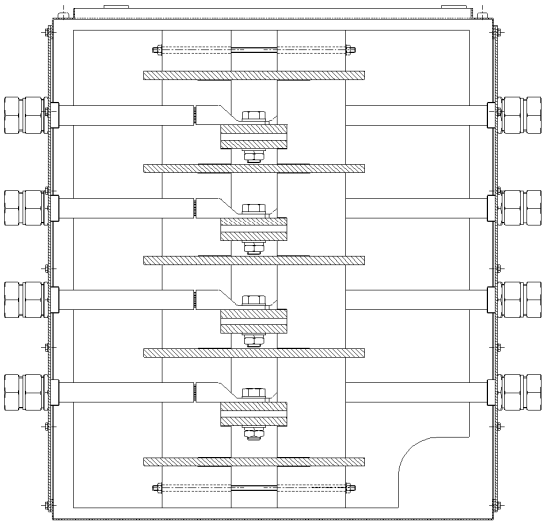
Notes

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 400mm^2, 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.


SIDE B
SIDE A
SIDE C
SIDE D
A
A


SECTION AA

Application
Industrial and Hazardous areas

Protection Degree
IP66

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

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

Maximum Voltage
11 kV

Notes

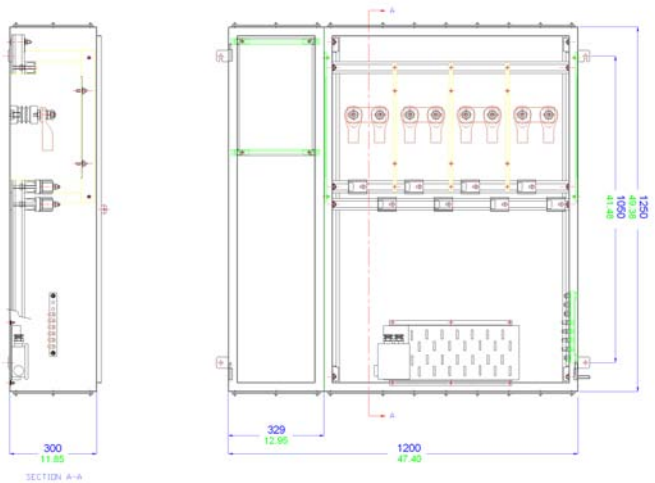
The SX125 provides a unique solution to the termination of umbilical cables to offshore platform or on-shore distribution systems. Based on the successful and service proven SX range, they are available as either a left hand or right hand configuration. A power conductor compartment is provided for use at up to 15 kV and a separate control compartment for terminating optical fibres and/or control conductors. For voltages greater than 15kV 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.

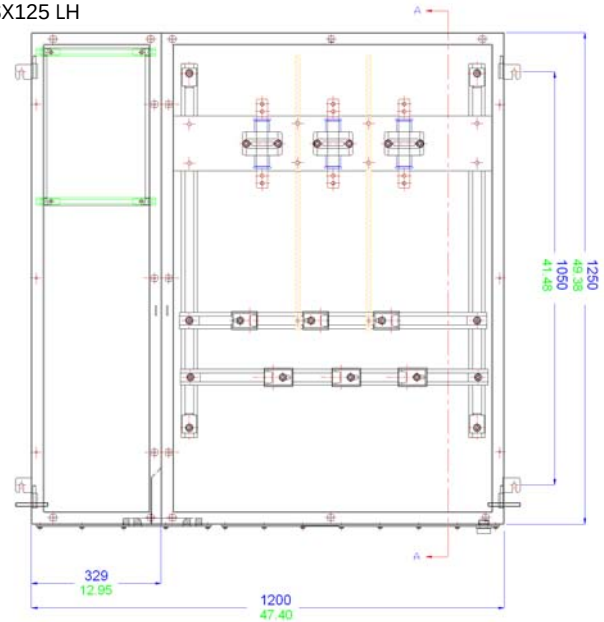
The SX125 is available with either 3 couplers or 4 couplers, each capable of connecting up to 3 power conductors. In the control compartment there is the option to mount the optical fibre splice cassettes either directly onto a chassis plate or inside an additional EEx'e' certified enclosure for increased 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.

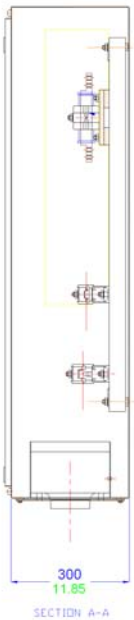
HVJB 125

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.



SX125 LH





SX125 RH

