



Distributor Services



Hazardous  
Area  
Electrical  
Equipment



Abtech has been supplying electrical connection products to hazardous and industrial markets since the 1970's. Our extensive range includes hazardous area lighting, stainless steel and GRP junction boxes, medium and high voltage enclosures, local control stations and connection accessories.

Based in Sheffield UK, a city synonymous with quality stainless steel manufacturing, Abtech also has sales support and manufacturing facilities in Germany, South Korea, Singapore and Houston USA as well as a fully integrated stockist assembler network.

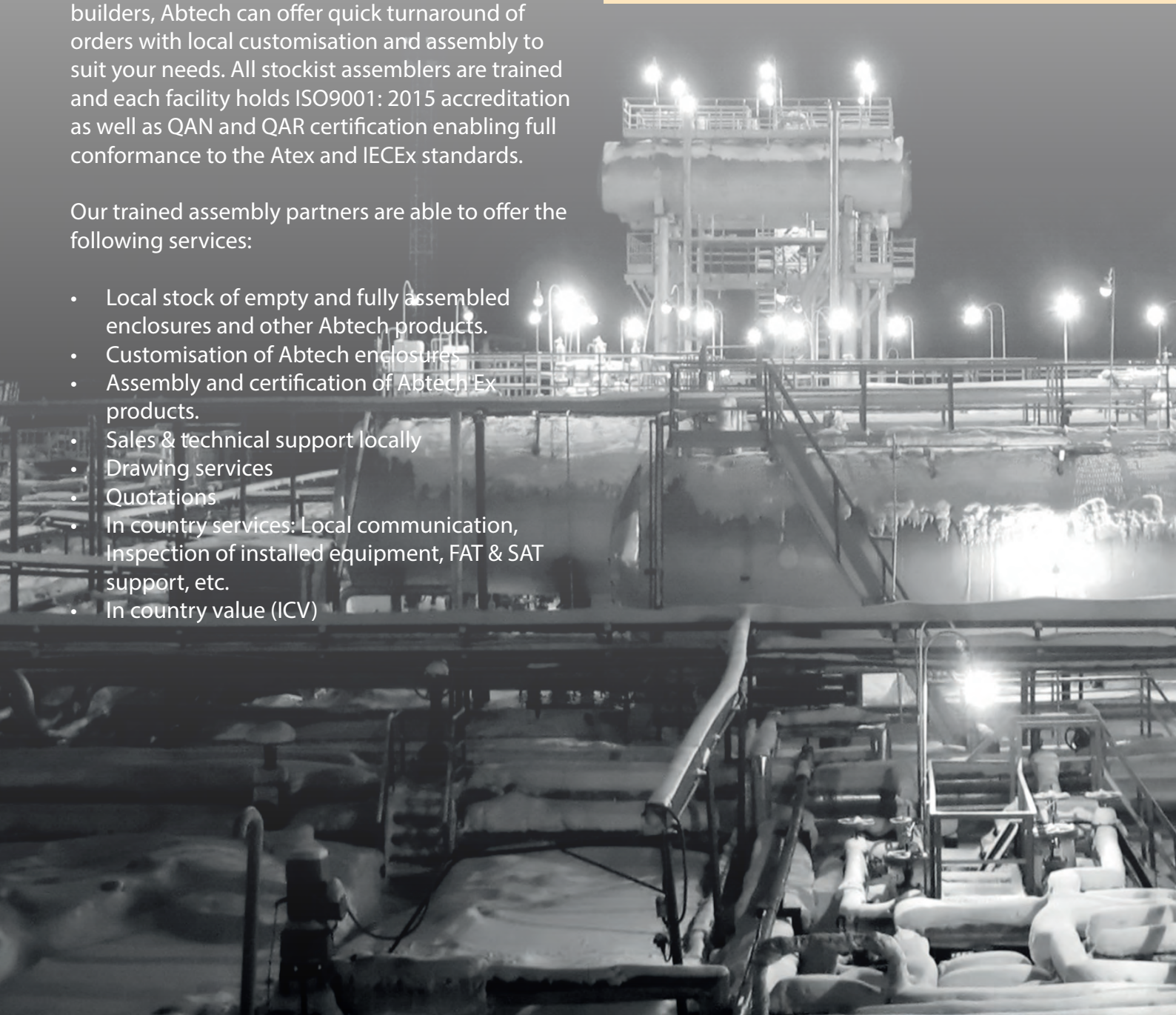
In conjunction with our network of stockist builders, Abtech can offer quick turnaround of orders with local customisation and assembly to suit your needs. All stockist assemblers are trained and each facility holds ISO9001: 2015 accreditation as well as QAN and QAR certification enabling full conformance to the Atex and IECEx standards.

Our trained assembly partners are able to offer the following services:

- Local stock of empty and fully assembled enclosures and other Abtech products.
- Customisation of Abtech enclosures
- Assembly and certification of Abtech Ex products.
- Sales & technical support locally
- Drawing services
- Quotations
- In country services: Local communication, Inspection of installed equipment, FAT & SAT support, etc.
- In country value (ICV)

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## BPG

The BPG terminal enclosure is manufactured in glass reinforced polyester (GRP). This material is highly resistant to hydrocarbons and other industrial compounds, providing a high level of mechanical strength. It is also suitable for use in LSZH (low smoke zero halogen) applications.

### IP66/67

#### Material

Glass reinforced polyester; available in grey or black (anti static)

#### Key Features

- Ambient temperature range -65°C to +130°C
- Fire resistant to IEC 331 & BS EN 50200
- Impact resistant >7 Nm
- UV resistant

#### Certification and Coding

Zone	0	20	1	21	2	22
Ex e			•	•	•	•
Ex ia	•	•	•	•	•	•
Ex ib			•	•	•	•
Ex ec					•	•
Ex nR					•	•
Ex t			•			•

Part No	W (mm)	H (mm)	D (mm)
BPG1	80	75	55
BPG2	110	75	55
BPG3	160	75	55
BPG4	190	75	55
BPG4.5	190	75	75
BPG5	230	75	55
BPG6	122	120	90
BPG7	220	120	90
BPG8	160	160	90
BPG9	260	160	90
BPG10	360	160	90
BPG11	560	160	90
BPG12	255	250	120
BPG13	400	250	120
BPG13.5	400	250	160
BPG14	600	250	120
BPG15	400	405	120

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## ZAG

The ZAG range comprises 19 sizes precision die cast in LM24 grade aluminium alloy, the most suitable for corrosion resistance in salt laden atmospheres. Optional protection such as a chrome, anodising and epoxy polyester painting further enhance its excellent anti-corrosion properties.

### IP65/66/67; Type 4x

#### Material

Die cast AL-Si 12 grade (LM24) aluminium alloy

#### Key Features

- Ambient temperature range -65°C to +150°C
- Impact resistant >7 Nm
- Corrosion resistant in salt laden atmospheres
- Suitable for engraving of instructions etc. to enhance durability
- Unpainted or painted finish

Part No	W (mm)	H (mm)	D (mm)
ZAG1	50	45	30
ZAG2	58	64	34
ZAG3	98	64	34
ZAG4	150	64	34
ZAG5	75	80	57
ZAG6	125	80	57
ZAG7	175	80	57
ZAG8	250	80	56
ZAG9	122	120	80
ZAG9/9	122	120	90
ZAG10	220	120	80
ZAG10/9	220	160	90
ZAG11	160	160	90
ZAG12	260	160	90
ZAG13	360	160	90
ZAG14	560	160	90
ZAG15	202	230	110
ZAG16	330	230	110
ZAG21	120	360	80





## SX

The SX range comprises of 14 standard sizes in depths of 140, 200 or 300mm. The majority can be fitted with gland plates on any or all of the four sides. Fabricated using 316L stainless steel, the SX can also be made in bespoke sizes to suit most applications.

### IP66/67/68

#### Material

Steel: 316L (1.404) Stainless

#### Key Features

- Ambient temperature range -50°C to +175°C
- Impact resistant >10 Nm
- Corrosion resistant

#### Certification and Coding

Zone	0	20	1	21	2	22
Ex e			•		•	
Ex ia	•		•		•	
Ex ib			•		•	
Ex op is	•		•		•	
Ex op pr			•		•	
Ex ec					•	
Ex t			•			•

Part No	W (mm)	H (mm)	D (mm)
SX45	114	114	51
SX64	102	152	63
SX66	152	152	140/200
SX0	152	229	140/200
SX0.5	184	274	140/200
SX1	234	324	140/200
SX1.5	306	306	140/200
SX2	372	324	140/200
SX3	372	448	140/200
SX4	372	510	140/200
SX5	510	510	140/200
SX6*	510	780	140/200
SX7*	650	950	140/200
SX8*	800	1250	140/200

\* also available D 300mm

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## SX Busbar

Utilising the rugged construction of the SX range, the SX Busbar has been designed for high current connections. A range of sizes are available to suit most applications. These are mounted in a tiered arrangement to allow maximum flexibility and are suitable for a full load current of 3kA.

### IP66/67/68

#### Material

Steel: 316L (1.404) Stainless

#### Key Features

- Simple connection for multiple and inflexible conductors
- Up to 3kA and 5.5kV\*
- Rated for T4, T5 & T6
- Ambient temperature range up to 90°C\*\*
- Single bottom or top gland plate
- Anti-rotation design for smaller conductors

\* May vary due to cable type and quantity

\*\* Ambient range is dependent on ΔT & A

Part No	W (mm)	H (mm)	D (mm)
SX5	510	510	400
SX6	510	780	400
SX7	650	950	400
SX8	800	1250	400

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## BPGA

The BPGA range comprises three types of pre-assembled enclosure in two sizes. They are supplied complete with terminals, links, earthing and pre-drilled M20 threaded entries. BPGA enclosures are ideal for use as lighting, power and instrumentation junction boxes.

### IP66/67

#### Material

Glass reinforced polyester; available in grey or black (anti static)

#### Key Features

- Ambient temperature range -65°C to +130°C
- Impact resistant >7 Nm
- UV resistant
- Supplied with SAK or WDU terminals

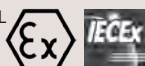
#### Certification and Coding

- Ex e apparatus certified
- Dual labelled ATEX & IECEx T5/T6

Part No	W (mm)	H (mm)	D (mm)
BPG6A120	122	120	90
BPG6A125	122	120	90
BPG8A160	160	160	90

Part No	Terminals	Power Rating (W)
BPG6A120	6 x SAK 2.5	90
BPG6A125	6 x WDU 6	90
BPG8A160	13 x SAK 2.5	90

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## BPGF

The BPGF is a fire resistant range comprising two enclosure sizes, pre-assembled with Abtech's ceramic terminal block.

Supplied complete with four M20 threaded entries, two stainless steel plugs and two transit plugs.

### Fire Resistant PH120

#### Material

Grey glass reinforced polyester

#### Key Features

- Increased fire survivability for safety critical electronic circuits
- PH120 (120 minutes) in accordance with BS EN 50200 and BS 8434-2
- Tested in accordance with IEC 311
- All fixings 316 stainless steel

Part No	W (mm)	H (mm)	D (mm)
BPG6F-120	122	120	90
BPG8F-160	160	160	90

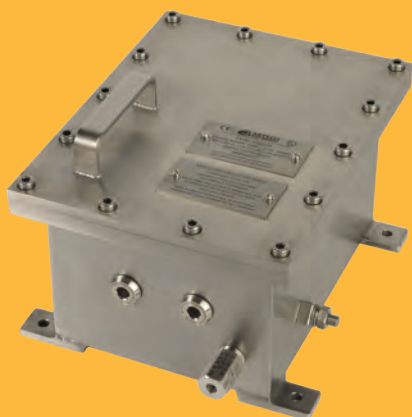
Part No	Terminals
BPG6F-120	8 way up to 6mm <sup>2</sup>
BPG8F-160	12 way up to 6mm <sup>2</sup>

In addition to the BPGF pre-assembled range, Abtech also manufactures a full range of fire rated enclosures in GRP and stainless steel.

These can be populated with rail mounted terminals or fitted with the ATB 8 and 12 way ceramic terminal blocks.

### IMPORTANT

Please consider cable selection when specifying fire resistant electrical systems



## SSD

The SSD is a marine grade stainless steel flameproof enclosure for use in Zone 1 and 21 hazardous areas. Any size of enclosure is possible as long as each dimension falls within the range (smallest to largest) as shown.

### IP66/67/68

#### Material

316L (1.404) stainless steel

#### Key Features

- Designed to house electrical apparatus safely within hazardous areas
- Ambient temperature range -20°C to +60°C

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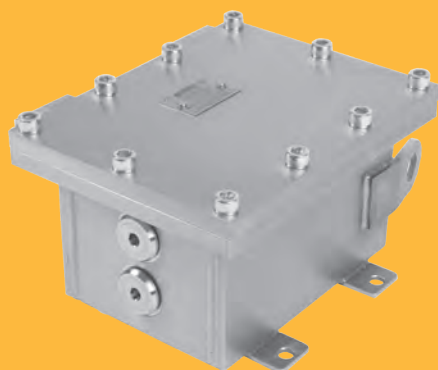


#### Certification and Coding

Zone	1	21	2	22
Ex db	•	•		
Ex td		•	•	

Part No	W (mm)	H (mm)	D (mm)
SSD113	100	130	80
SSD234	170	230	150
SSD434-A	170	340	150
SSD434-B	220	340	150
SSD435	210	400	190
SSD445-A	250	350	190
SSD445	310	390	190
SSD546	270	530	210
SSD556-A	270	430	210
SSD556-B	400	490	210
SSD646	250	630	250
SSD656	340	690	250
SSD667	450	700	250
SSD768	570	1020	390

Internal dimensions only  
Other sizes available on request



## NAUTILUS

The Nautilus combines hazardous area certification with an unparalleled level of ingress protection. Primarily designed for submersible applications, it is IP68 certified to 100 metres for 5 days, 50m for 14 days to EN60529.

### IP68

IP68 glands available, please contact Sales Office

#### Material

316L (1.404) stainless steel

#### Key Features

- Submersible terminal enclosure
- Ambient temperature range -50°C to +55°C

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#### Certification and Coding

Zone	1	21	2	22
Ex e	•	•		
Ex ib	•	•		
Ex ia	•	•		
Ex tb		•	•	
Ex ta		•	•	

Part No	W (mm)	H (mm)	D (mm)
NAUT1	100	130	80
NAUT2	170	230	140
NAUT3	170	340	140
NAUT3A	220	340	140
NAUT4	210	400	190
NAUT5	250	350	190
NAUT6	310	390	190
NAUT7A	270	530	210
NAUT7B	370	430	210
NAUT8	400	490	210
NAUT9	250	630	210
NAUT10	340	690	250
NAUT11	570	700	390

Internal dimensions only  
Other sizes available on request



## VisEx

The VisEx is a flameproof instrument housing suitable for various POE (Power Over Ethernet), vision and instrumentation systems where operation in a hazardous environment is required.

### IP66/67

#### Material

316L (1.404) stainless steel

#### Key Features

- Ambient temperature range -60°C to +65°C
- Custom mounting brackets
- Superior environmental protection

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#### Certification and Coding

Zone	1	21	2	22
Ex d	•	•		
Ex tb		•	•	

Part No	Entries	Max power rating
VISEX116A4	1 x M16	8 (T6) 47 (T4)
VISEX216A4	2 x M16	8 (T6) 47 (T4)
VISEX120A4	1 x M20	8 (T6) 47 (T4)
VISEX220A4	2 x M20	8 (T6) 47 (T4)
VISEX116120A4	1 x M16 1 x M20	8 (T6) 47 (T4)





## MJB

The MJB range provides a simple, low cost but effective solution for the connection of high voltage cables. Used primarily for jointing cables or as a connection box, the MJB is suitable for up to 4 phase connections (top and bottom) and a maximum of 8.3kV.

### Up to 8.3kV

#### Material

316L (1.404) stainless steel

#### Key Features

- Ambient temperature range -20°C to +40°C (standard) -50°C to +65°C (option)
- IP68 to EN60529
- DTS-01 deluge tested
- 180° in/out cable connection
- Suitable for low temperature applications
- Range of paint finishes available

Part No	W (mm)	H (mm)	D (mm)
MJB65	510	510	200
MJB85	510	510	300
MJB66	510	780	200
MJB86	510	780	300
MJB67	650	950	200
MJB87	650	950	300
MJB68	800	1250	200
MJB88	800	1250	300

#### Certification and Coding

Zone	1	21	2	22
Ex e	•		•	
Ex tD		•		•

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## ABJB & HVJB

The latest in our high voltage range, offering enhanced flexibility for choice of cables, entries and terminations. The HVJB can accept up to 4 phase connections, either straight through or bottom entry only. The unit accommodates up to 3 connections per phase.

### Up to 15kV

#### Material

316L (1.404) stainless steel

#### Key Features

- ABJB up to 15kV
- HVJB up to 11kV
- IP66 to EN60529
- Fault rated 45kA for 0.2 sec
- Ambient temperature range -20°C to +40°C or -50°C to +55°C
- DTS-01 deluge tested
- Suitable for low temperature applications
- Range of paint finishes available
- Heavy duty machined hinges with lift-off, pad-lockable cover

Part No	W (mm)	H (mm)	D (mm)
HVJB73	650	950	300
HVJB83	800	1250	300
HVJB84	800	1250	400

Part No	W (mm)	H (mm)	D (mm)
ABJB73	650	950	300
ABJB83	800	1250	300
ABJB84	800	1250	400

#### Certification and Coding

Zone	1	21	2	22
Ex e	•		•	
Ex s	•		•	
Ex tb		•		•

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## AB/HV 125

Up to 15kV

Material

316L (1.404) stainless steel

Key Features

- Unique termination solution to combine optical fibres and power cable supplies in a single enclosure
- IP66 to EN60529
- Fault rated 45kA for 0.2 sec
- DTS-01 deluge tested

Part No	W (mm)	H (mm)	D (mm)
HVJB1253 LH	1200	1250	300
HVJB1254 LH	1200	1250	300

Part No	W (mm)	H (mm)	D (mm)
ABJB1253 RH	1200	1250	300
ABJB1254 RH	1200	1250	300

### Certification and Coding

Zone	1	21	2	22
Ex e	•		•	
Ex s	•		•	
Ex op is	•		•	

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## TFJB

Up to 36kV

Material

316L (1.404) stainless steel

Key Features

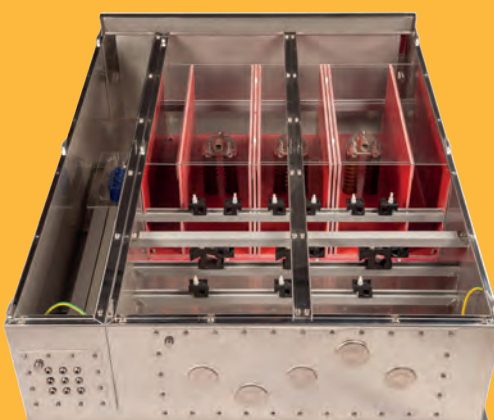
- IP66 to EN60529
- Maximum current 312A
- Three phase connections via bottom entry only
- One connector per phase in/out (standard configuration)
- DTS-01 deluge tested

Part No	W (mm)	H (mm)	D (mm)
TFJB 83 (0-2)	800	1250	400

### Certification and Coding

Zone	1	21	2	22
Ex e	•		•	
Ex tb		•		•

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## 4TJB/125

Up to 45kV

Material

316L (1.404) stainless steel

Key Features

- IP66 to EN60529
- Three phase connections either straight through or bottom entry
- One connector per phase in/out (standard configuration)
- DTS-01 deluge tested
- Optional fibre optic compartment

Part No	W (mm)	H (mm)	D (mm)
4TJB	1300	1500-2000	500

### Certification and Coding

Zone	1	21	2	22
Ex e	•		•	
Ex tb		•		•

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## Busbar Box

This enclosure is designed to safely carry supplies up to 11kV with extreme current loadings in Zone 1 hazardous areas. Suitable for connectors over 400mm<sup>2</sup>, the enclosure is capable of connecting three phases plus neutral and up to six conductors per phase.

### Up to 11kV

#### Material

316L (1.404) stainless steel

#### Key Features

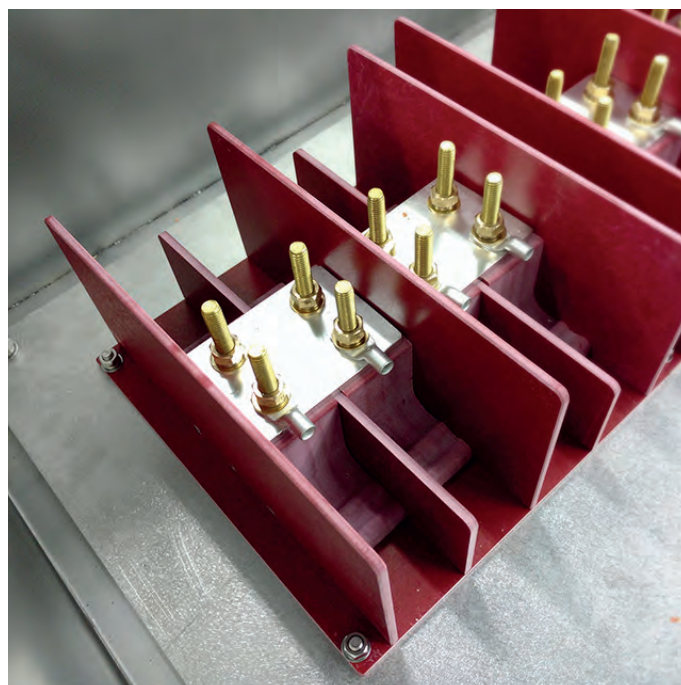
- Up to 3,200A per phase\*
- Available as bottom entry or through box configurations
- Fault rated 90kA for 1 second
- Ambient temperature range  
-40°C to +40°C or  
-40°C to +60°C (see certificate)
- IP66 to EN60529
- DTS-01 deluge tested

\*Maximum line current when connected in a Delta configuration

#### Certification and Coding

Zone	1	21	2	22
Ex e	•		•	
Ex tb		•		•

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## MV Terminal

The MV (medium voltage) terminal is a component certified device that simplifies the connection of 4.4 to 6.6kV electrical supplies.

It can be used with any suitably certified ATEX or IECEx Zone 1 enclosure.

### Up to 6.6kV

#### Material

Plastic UTR Laminate GP03  
Grade 1494

#### Key Features

- Available in three, four and six way configurations
- Linkable in pairs or multiples
- Ambient temperature range  
-40°C to +130°C

#### Certification and Coding

Zone	1	21	2	22
Ex eb	•		•	

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Part No	W (mm)	H (mm)	D (mm)
TATEM3	168	220	102
TATEM4	212	220	102
TATEM6	300	220	102
TATEMV3T	168	220	114
TATEMV4T	212	220	114
TATEMV6T	300	220	114

Part No	Max (kV)	Max (A)	Max Ways
TATEMV3	4.4	250	3
TATEMV4	4.4	250	4
TATEMV6	4.4	250	6
TATEMV3T	6.6	250	3
TATEMV4T	6.6	250	4
TATEMV6T	6.6	250	6



## PCS

### IP66

#### Material

Corrosion resistant polyamide

#### Key Features

- Universal contact block mounted direct to integral moulded rail
- Typical ambient temperature range -40°C to +40°C
- Linkable enclosure modules

#### Coding

Ex de IIC T6  
Ex e II T6  
Ex tD A21

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## ABCS

### IP66

#### Material

Carbon loaded GRP

#### Key Features

- Combine a wide range of operators and terminals for ease of installation
- Typical ambient temperature range -40°C to +55°C

#### Coding

Ex db eb IIC T\* Gb  
Ex db eb mb IIC T\* Gb  
Ex db IIIC T\* C Db

#### Terminals

Direct termination as standard,  
2.5/4mm<sup>2</sup> terminals available

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## SXCS

### IP66

#### Material

316L stainless steel

#### Key Features

- Combine a wide range of operators and terminals for ease of installation
- Typical ambient temperature range -40°C to +55°C

#### Coding

Ex db eb IIC T\* Gb  
Ex db eb mb IIC T\* Gb  
Ex db IIIC T\* C Db

#### Terminals

Direct termination as standard,  
2.5/4mm<sup>2</sup> terminals available

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## Available Operator, Ammeter and Terminal Types

Common to PCS, ABCS and SXCS - ranges available with 1NC/1NO, 2NC or 2NO contacts

Push Button	Momentary; single or double push; coloured/marked inserts are required	
Emergency Stop	Push-pull or twist to release; red/yellow mushroom head	
Key Release	Colour: red	
Mushroom Head	Momentary; colour: black, green and red	
Indicator Lamp	Red/green/yellow/blue or white; Ex e and Ex i versions available	
Illuminated Push Button	Red/green/yellow/blue or white; available with 1NC or 1NO contacts	
Selector Switch - Small Handle	39mm diameter; 2, 3 or 4 position; self-lock or self-reset; 2 pole contact configurations and label inserts to suit application	
Selector Switch - Large Handle	60mm diameter; 2, 3 or 4 position; self-lock or self-reset; 2 pole contact configurations and label inserts to suit application	
Ammeter	Direct measuring with x2 overload scale (max scale: 0-15A/30A); 1A or 5A current transformer with x2 or x5 overload scale (max scale: 0-600A/3000A)	



Notes







Local Stockist / Builder:

Abtech Limited  
199-201 Newhall Road  
Lower Don Valley  
Sheffield S9 2QJ  
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