



B&R Enclosures

HAZARDOUS AREAS

Enclosures & Accessories

brenclosures.com.au



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About B&R Enclosures

Since 1955, B&R Enclosures has built a reputation for excellence in design and production, culminating in our position as Australia's largest enclosure manufacturer and electrical equipment integration specialist.

As an independent, 100% Australian family owned and operated business, we champion the virtues of quality, innovation, service and value. The emphasis on these aspects has sustained B&R's growth leading to Australian manufacturing and distribution facilities in Brisbane, Adelaide and Sydney and internationally in China and Saudi Arabia.

B&R's knowledge, precision, quality and unwavering commitment to creating repeatable solutions for our clients supports our position as preferred manufacturer for many private, government and commercial projects in some of Australia's harshest environments.

B&R champions the virtues of quality, service and value. Combined with our unrivalled industry and application knowledge, we are in a unique position to meet the needs of our clients. The business encompasses four divisions: Industrial, Data ICT, Hazardous Areas and Residential Commercial. Each division focuses on the unique needs of different market segments.

B&R regularly works with partners to provide integrated solutions for major infrastructure and hazardous projects. These include 'plug and play' switchboard solutions for Rio Tinto's Oyu Tolgoi mine and local control stations for Ichthys on-shore LNG processing plant. Ongoing relationships and collaboration are results of our ability to articulate the customer's problem and combine previous experience and knowledge with compliance to local standards.

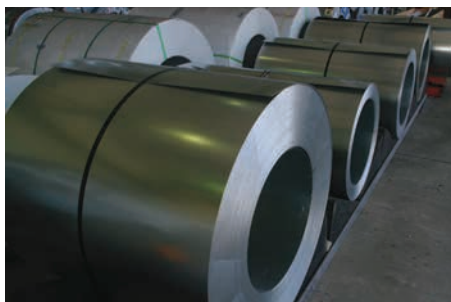
Electrical integration usually involves the installation, commissioning and testing of 3rd party components and we are adept at managing the acquisition and storage of technical components through a global supply chain that is structured, customised, agile, repeatable and results-based.

Project management and execution is effectively managed at B&R by the co-location of design, supervision, supply coordination and quality control along with manufacturing. Our incorporation of Industry 4.0 delivers real-time data to our project management teams, built around the requirements of individual projects.

Extensive investment in research and development includes an environmental testing facility focussing on climate control to support cooling solutions for equipment exposed to high ambient temperatures and solar radiation.

When utilised as designed, B&R's enclosures are built to out-perform against expectations.

Contact us today to find out how B&R can deliver reliable and trusted outcomes for your project.



Our Locations



B&R Enclosures have purpose-built manufacturing facilities in three locations across Australia, as well as strategic locations in the Gulf and China.



Australia

Brisbane (QLD)

Global head office, manufacturing, sales and warehousing

Sydney, NSW

Hazardous manufacturing, sales and warehousing

Adelaide, SA

Manufacturing, sales and warehousing

Townsville (QLD), Newcastle (NSW),

Melbourne (VIC), Perth (WA)

Sales and warehousing

Launceston (TAS), Darwin (NT)

Distribution

New Zealand

Auckland

Sales and warehousing

Saudi Arabia

Dammam

Hazardous manufacturing, sales and warehousing

China

Suzhou

Manufacturing, sales and warehousing

Our Capabilities

Over the years as the company has grown, we have invested significantly in machinery, technology and testing to be able to provide capabilities which our customers benefit from in every order they place. Our current capabilities include:

- Purpose-built Australian facilities in Brisbane (18,000m²), Adelaide (4,000m²) and Sydney (1,874m²), providing local labour and logistics
- Complete in-house design and engineering services to assist with creating custom solutions
- Dedicated facilities for design, manufacture, wiring and distribution of hazardous area electrical equipment
- End-to-end manufacturing, from coiled steel raw material to commissioning the end product, we provide efficiency and complete quality control
- Variety of substrates and high quality finishes including stainless steel, powder coated and zinc to suit even the most demanding application
- Modern machinery for any design to be formed and fabricated including automated sheet metal panel benders, punching and shearing centres, electrical equipment integration lines, press brakes, powder coat lines, fabrication cells and assembly lines
- Fully documented process available with full configuration management to support a detailed documentation experience
- Complete project management including supply chain, warehousing and logistics
- In-house and external testing for hazardous area electrical equipment and impact, IP, type testing, static load, seismic, wind load, salt spray, line inspection, shock, vibration, 2000A high current switchboard temperature rise type testing, EMC and MIL-STD
- Continuous improvement with our environmental testing facility for ongoing research and development
- Existing supply agreements with leading OEMs and major raw products distributors supporting loyal and valued relationships climate control and cooling solutions

Our Supply Strategies



Made to Stock

These products are available ex-stock from all our sales & warehousing branches. Contact your local sales representative to discuss requirements.



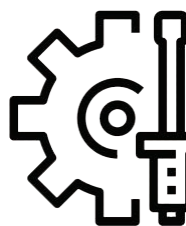
Assembled-to-Order

These products are assembled to order upon receipt of a customer order. All components required to build an ATO item cannot be sold separately and must form part of a kit. Standard lead time is 4-6 weeks from date of order.



Made to Order

These products are manufactured according to a customer's specification. They are marked in our catalogues as "▲ Available on request" and have a standard lead time of 2-3 weeks.

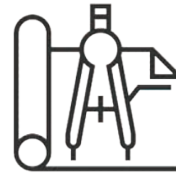


Engineered-to-Order

These products are a custom designed product that is 100% fit-for-purpose, delivered on-site and ready for installation. Our design & engineering team can customise an enclosure to suit the application requirements. Contact us for more information.

Collaboration

- Convert customer requirements to product build specifications
- Work to customer delivery schedule
- Initiate procurement or consignment of stock allocations
- Supply of equipment configuration

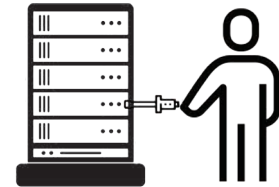


Complete Project Management

- One point of contact
- Responsive communication channels
- DIFOTIS - Delivered In Full On Time In Specification
- Accountability for the delivery of our commitment to customers

Electrical & Equipment Integration

- Wiring and equipment installed to exact requirements
- Management of free issue, consigned and/or B&R sourced components and equipment
- Stock reporting and job allocation



Testing & Reporting To Customer Specifications

- Digital reports of product testing and acceptance
- Serialised codes to customer requirements, digital signature, component traceability and unique identifiers
- Real time quality assurance authorisation, approval and confirmation

Customer Specific Logistics

- Storage and warehouse management
- Site delivery logistics
- Option for removal of product packaging after installation



The B&R Engagement Loop (Project Services)

In order to engage successfully with our project customer's, B&R representatives follow a structured service plan.

We take our responsibility seriously, and pride ourselves on the collaborative and open relationships we undertake with our project customers. This makes sure we understand and provide value, because our customer's needs vary greatly across the different types of project applications and technical requirements.

1. Our first action before we reach out or after a customer had reached out to us, is to **INVESTIGATE**. This includes researching the customer/ project and any other relevant stakeholders.
2. The second action of **UNDERSTAND** is when we speak to the customer at length about their issue and challenges for current and future projects. From these discussions we can begin to see how our product solutions can solve the customer's issues and challenges.
3. We take our newly acquired customer knowledge back to our in-house design, engineering and estimating teams for our third action to **SCOPE** the work, and prepare quotes and drawings as required.
4. Once we have created the tailored offer for the customer we process any variations which might be needed before our fourth action of **AGREE**. With everything signed off we move into manufacturing and equipment integration.
5. Once the product solution is ready our fifth action of **DELIVER** takes place. We make sure the goods are shipped to site according to agreed upon timelines.
6. To learn from our experience and confirm our service level we take an **EVALUATION** action. This is when we reflect on the job we've completed and depending on the size and extent of the order we will seek customer feedback as well.



Our Customers



أرامكو السعودية
saudi aramco



GrainCorp



CALTEX



Accreditations & Compliance

At B&R, quality and value are just the beginning. We strive to deliver quality products developed and manufactured by a team dedicated to excellence, backed by standards, approvals and industry accreditations.



Quality
ISO 9001
SAI GLOBAL

ISO 9001:2015

Every B&R Enclosures manufacturing facility is externally audited to ensure that the quality of our products meet the stringent ISO9001 standards. B&R's products are carefully inspected at the end of lines during the manufacturing process to ensure that the enclosures will withstand their intended environment and application.



Environment
ISO 14001
SAI GLOBAL

ISO 14001:2015

Sets out the criteria for an environmental management system. It maps out a framework that a company or organisation can follow to set up an effective environmental management system.



OHS
ISO 45001
SAI GLOBAL

ISO 45001:2018

An externally audited Occupational Health and Safety Management System.



RoHS

The RoHS directive aims to restrict certain dangerous substances commonly used in electronic and electronic equipment.



Australian Stainless Steel Development Assoc.

ASSDA

The Australian Stainless Steel Development Association provides comprehensive technical information on stainless steel. This includes information for users, equipment manufacturers and stainless steel suppliers.



IEC IECEX

IECEX is the IEC System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres. It uses quality assessment specifications that are based on International Standards prepared by the International Electrotechnical Commission (IEC).

Technical Information

B&R Hazardous Area products are certified and approved for use in above ground Group II applications.

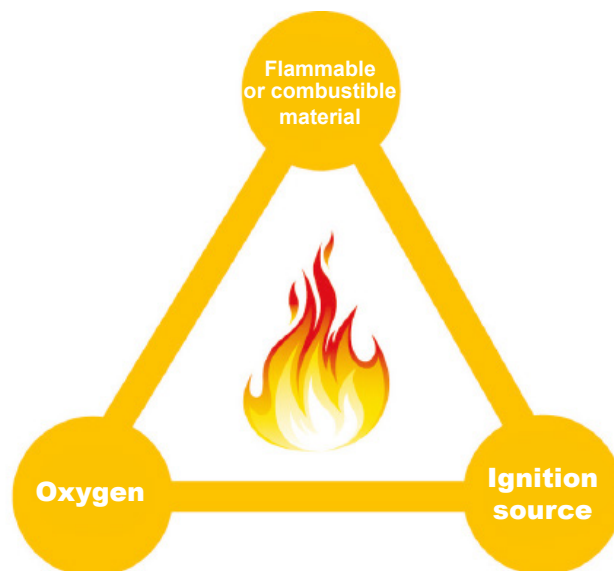
WHAT IS A HAZARDOUS AREA?

A hazardous area is an area where flammable liquids, vapours, gases or combustible dusts are likely to occur in sufficient quantities to cause fire or explosion.

There are three basic conditions that must be satisfied to create a fire or explosion.

1. Flammable or combustible material – such as flammable liquid, vapour or combustible dust must be present in sufficient quantity and concentration.
2. Oxygen
3. Ignition source

Hazardous area electrical equipment works by suppressing or separating one or more of these three components to avoid a fire or explosion. Where suppression cannot be done the use of explosion containment Ex d is used.



IGNITION SOURCES

- Electric arc and sparks
- Flames
- Hot surfaces
- Electrostatic sparks
- Thermite sparks
- Mechanical friction
- Mechanical sparks produced by grinding
- Smouldering deposits
- Compression ignition
- Electromagnetic radiation
- Chemical reactions
- Ultrasonics

IEC STANDARDS & CERTIFICATIONS

IECEx is an internationally recognised scheme for the certification of hazardous area electrical equipment. The IECEx system is designed to facilitate international trade in equipment and services for use in hazardous areas, whilst maintaining the required level of safety.



SELECTION OF ELECTRICAL EQUIPMENT

There are important pieces of information required when selecting equipment for hazardous areas. These include:

- Zone classification
- Gas group
- Temperature or 'T' Rating
- IP Rating
- Application

TYPICAL HAZARDOUS AREA INDUSTRIES:

Gases and Vapours

- Oil refineries & chemical plants
- Offshore drilling rigs
- Spray booths
- Sewerage treatment plants
- Oxygen and acetylene
- Aircraft hangers
- LNG plants
- Wharves for petroleum & LNG vessels
- Paint manufacturers
- Distilling
- Laboratories & fume cupboards

Dust

- Food manufacturing
- Grain handling & storage
- Chemicals / fertiliser
- Plastics
- Wood / pulp / paper
- Milk powder
- Flour mills
- Pharmaceuticals
- Metal processing
- Recycling operations
- Fibreglass manufacturing
- Explosive factories

ZONE CLASSIFICATIONS

Equipment that is used in hazardous areas is classified into zones, depending on the potential of an explosion under normal operating conditions. The table below is a guide to zone classification of hazardous areas. B&R Enclosures do not classify areas for customers, it is the responsibility of the installer or end user to know which zone their area falls within.

It is recommended a qualified person is engaged to complete a risk analysis and classify the area in accordance with standard IEC 60079-14.

The hazardous areas are classified in the table below according to IEC 60079-10-1 and IEC 61241-10-2. The IEC Standard is the international standard and local standard must be used where applicable.

Gases and Vapours		Dust	
Zone 0 Ga	An area in which an explosive gas-air mixture is continuously present or present for long periods.	Zone 20 Da	An area in which an explosive dust-air mixture is continuously present or present for long periods.
Zone 1 Gb	Area in which an explosive gas-air mixture is likely to occur for short periods in normal operation.	Zone 21 Db	Combustible or conductive dusts are present, and is likely to occur for short periods in normal operation.
Zone 2 Gc	Area in which an explosive gas-air mixture is not likely to occur and if it occurs it will only exist for a very short time due to an abnormal condition.	Zone 22 Dc	Area in which an explosive dust mixture is not likely to occur and if it occurs it will only exist for a very short time due to an abnormal condition.



Technical Information

Gas groups, temperature ratings and dust

GAS GROUPS

Electrical apparatus for use in areas with flammable gases and vapours are divided into groups:

Group I	Underground coal mining applications.
Group II	Industries other than underground coal mining.
Group III	Industries having combustible dust or fibres.

Group II is subdivided into 3 group groups based on their explosive properties (see table below).

Groups	Example Types
Group I	Methane
Group IIA	Propane
Group IIB	Ethylene
Group IIC	Hydrogen, Acetylene, Carbon Disulphide

TEMPERATURE OR 'T' RATING

Hot surfaces are a potential ignition source in hazardous applications. Hazardous materials will have different minimum temperatures at which ignition becomes a danger.

Electrical equipment for hazardous areas is tested and allocated a 'T Rating' based on the maximum temperature of the equipment.

The 'T Rating' must always have a lower maximum temperature than the ignition temperature of the gas group present. Temperatures are either measured internally or externally depending on protection.

T Rating	Maximum Temperature
T1	450°C
T2	300°C
T3	200°C
T4	135°C
T5	100°C
T6	85°C

Examples of ignition temperatures and 'T' ratings for gases.

Example Gas	Ignition Temperature	T Rating
Methane	580°C	T1
Hydrogen	500°C	T1
Kerosene	295°C	T3
Petroleum	400°C	T2
Carbon Disulphide	95°C	T6
Diethyl Ether	160°C	T4
Ethyl Nitrite	95°C	T6
Hydrogen Sulphide	270°C	T3

COMBUSTIBLE DUST

Dust fibres or flyings, which are combustible or ignitable when mixed with air are known as combustible dusts. Dust explosions may be initiated by ignition of a cloud of dust. It is not unusual for an explosion, which starts from the ignition of a dust layer, to cause the dislodging of dust accumulated on various surfaces, which then leads to a chain reaction dust cloud explosion.

Characteristics of some common combustible dusts are:

Material	Ignition temperature	
	Cloud, °C	Layer, °C
Coal Dust	380	225
Polythene	420	(melts)
Methyl Cellulose	420	320
Starch	460	435
Flour	490	340
Sugar	490	460
Grain Dust	510	300
Phenolic Resin	530	>450
Aluminium	590	>450
PVC	700	>450
Soot	810	570

NOTE: The data given in this table is derived from AS 2430.2:1986 (superseded by AS/NZS 61241.3 which is superseded by AS/NZS 61241.10)

Technical Information

Types of protection for electrical equipment



TYPE OF EXPLOSION PROTECTION FOR ELECTRICAL EQUIPMENT

Type of Protection	Description	Standard	Zone
Flameproof enclosure Ex d	Containment – explosion within an enclosure will not be propagated outside the enclosure.	IEC 60079-1	Zone 1 & 2
Pressurised enclosure Ex p	Enclosure in a protective gas is maintained at a pressure greater than that of the external atmosphere.	IEC 60079-2	Zone 1 & 2
Powder Filling Ex q	Mounting of potentially incandive components in an enclosure filled with quartz or solid glass particles.	IEC 60079-5	Zone 1 & 2
Oil Immersion Ex o	Equipment or parts are immersed in protective liquid such as oil. The protective liquid acts as an insulating medium.	IEC 60079-6	Zone 1 & 2
Increased safety Ex e	Non sparking components are designed to substantially reduce the likelihood of the occurrence of fault conditions which could cause ignition.	IEC 60079-7	Zone 1 & 2
Intrinsic safety Ex i	The potential spark energy of a circuit is reduced to below the amount required for ignition.	IEC 60079-11	Zone 0, 1 & 2
Non-sparking Ex n	Electrical apparatus in normal operating conditions and in certain specified abnormal conditions, that is not capable of igniting a surrounding explosive gas atmosphere.	IEC 60079-15	Zone 2
Encapsulation Ex m	Parts that are capable of igniting an explosive atmosphere by either sparking or heating, are enclosed in a compound so that the explosive atmosphere cannot be ignited under operating or installation conditions.	IEC 60079-18	Zone 0, 1 & 2
Dust protection by enclosure Ex t	Electrical equipment is protected by the enclosure and surface temperature limitation for use in explosive and dust atmospheres.	IEC 60079-31	Zone 20, 21 & 22

Sloping Roof Control Station

Zones 1 & 2, 21 & 22



- Suitable for use within chemical, petrochemical, dust and grain applications where a small enclosure is required.
- 40° sloping roof with 40mm overhang ensures material slides off the roof and is directed away from the top of the door.
- Available with or without gland plate.
- Gasket material Black Neoprene.
- Silicon option available on request IP65 and IP66 only.
- Certified IP66 glass viewing windows available (298 x 218 or 198 x 118).
- Manufactured from 1.5mm 316 stainless steel with N4 surface finish.

Comes standard with:

- Steel mounting pan
- 7mm stainless steel lock
- External mounting flange
- Internal and external 6mm or 8mm earth stud (10mm available on request)
- 3mm stainless steel gland plate
- Earth strap kit
- Brass gland plate available on request
- Customised etched identification and certification label



PROTECTION RATINGS

Ex e IIC T6 Gb
Ex nA IIC T6 Gb
Ex de IIC T6 Gb
Ex tD A21/22 T80°C
DIP A21/22 Ta80°C
Ex t IIIC T80°C Db

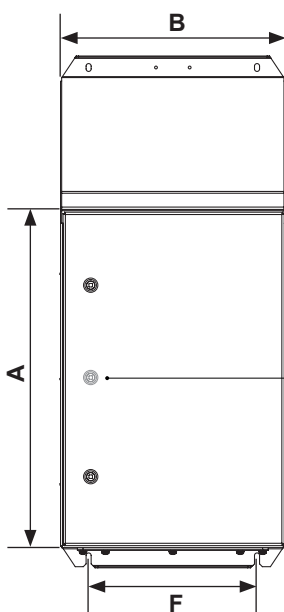
CERTIFICATION

IECEx ITA 10.0023X

AMBIENT TEMPERATURE

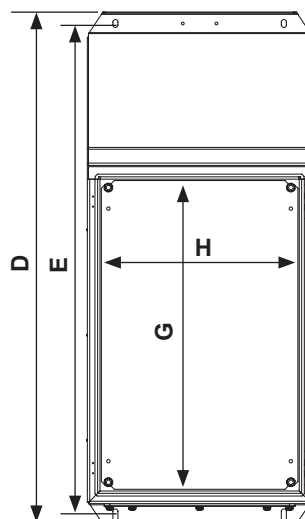
-20°C up to +40°C | 55°C

TECHNICAL DRAWINGS

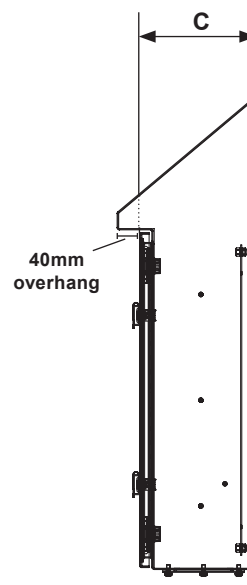


Front View

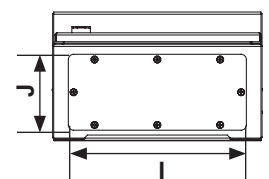
Is indicative of lock position when there is only one lock on enclosures



Front View
With Internals



Side View
With Internals



Bottom View With Internals

Sloping Roof Control Station

Zones 1 & 2, 21 & 22



ORDERING GUIDE

⚠ These enclosures are only sold with IECEx certified operators and/or terminals fitted. Empty enclosures are not available for sale. Contact your local sales engineer to discuss your specific requirements.

Part Number	Description	Dimensions (mm)										No. of Locks
		External				Mounting Centres		Mounting Pan		Gland Opening		
		Height (A)	Width (B)	Depth (C)^	Total Height (D)*	Height (E)	Width (F)	Height (G)	Width (H)	Height (I)	Width (J)	
CBK-S*030215/G0^	No gland plate	300	200	150	551	512	100	250	150	—	—	1
CBK-S*030420/G0^		300	400	200	551	571	300	250	350	—	—	1
CBK-S*040315/G0^		400	300	150	651	612	200	350	250	—	—	1
CBK-S*040420/G0^		400	400	200	651	671	300	350	350	—	—	1
CBK-S*040620/G0^		400	600	200	710	671	500	350	550	—	—	1
CBK-S*040630/G0^		400	600	300	794	755	500	350	550	—	—	1
CBK-S*060420/G0^		600	400	200	910	871	300	550	350	—	—	1
CBK-S*060630/G0^		600	600	300	994	955	500	550	550	—	—	1
CBK-S*080620/G0^		800	600	200	1110	1071	500	750	550	—	—	2
CBK-S*080630/G0^		800	600	300	1194	1155	500	750	550	—	—	2
CBK-S*100620/G0^		1000	600	200	1310	1271	500	950	550	—	—	2
CBK-S*120830/G0^		1200	800	300	1594	1555	700	1150	750	—	—	2
CBK-S*030215^	1 x bottom gland plate	300	200	150	551	512	100	250	150	100	55	1
CBK-S*030420^		300	400	200	551	571	300	250	350	300	105	1
CBK-S*040315^		400	300	150	651	612	200	350	250	200	55	1
CBK-S*040420^		400	400	200	651	671	300	350	350	300	105	1
CBK-S*040620^		400	600	200	710	671	500	350	550	500	105	1
CBK-S*040630^		400	600	300	794	755	500	350	550	500	205	1
CBK-S*060420^		600	400	200	910	871	300	550	350	300	105	1
CBK-S*060630^		600	600	300	994	955	500	550	550	500	205	1
CBK-S*080620^		800	600	200	1110	1071	500	750	550	500	105	2
CBK-S*080630^		800	600	300	1194	1155	500	750	550	500	205	2
CBK-S*100620^		1000	600	200	1310	1271	500	950	550	500	105	2
CBK-S*120830^		1200	800	300	1594	1555	700	1150	750	700	245	2
CBK-S*030215/G3^	1 bottom gland plate, 2 side gland plates	300	200	150	551	512	100	250	150	100	55	1
CBK-S*030420/G3^		300	400	200	551	571	300	250	350	300	105	1
CBK-S*040315/G3^		400	300	150	651	612	200	350	250	200	55	1
CBK-S*040420/G3^		400	400	200	651	671	300	350	350	300	105	1
CBK-S*040620/G3^		400	600	200	710	671	500	350	550	500	105	1
CBK-S*040630/G3^		400	600	300	794	755	500	350	550	500	205	1
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CBK-S*080620/G3^		800	600	200	1110	1071	500	750	550	500	105	2
CBK-S*080630/G3^		800	600	300	1194	1155	500	750	550	500	205	2
CBK-S*100620/G3^		1000	600	200	1310	1271	500	950	550	500	105	2
CBK-S*120830/G3^		1200	800	300	1594	1555	700	1150	750	700	245	2

[^] Available on request

^{*} Total height includes sloping roof and mounting flanges

[^] Total depth space required is depth plus 40mm for roof overhang

Replace the asterisk (*) in the part number above, with a letter from the table below for the corresponding protection technique that is required.

E	Ex e, Ex d e
N	Ex nA
T	Ex tD, DIP, Ex t

Sloping Roof Terminal Enclosure

Zones 1 & 2, 21 & 22



- Suitable for use within chemical, petrochemical, dust and grain applications where a small enclosure is required.
- 40° sloping roof with 40mm overhang ensures material slides off the roof and is directed away from the top of the door.
- Available with or without gland plate.
- Gasket material Black Neoprene.
- Silicon option available on request IP65 and IP66 only.
- Certified IP66 glass viewing windows available (298 x 218 or 198 x 118).
- Manufactured from 1.5mm 316 stainless steel with N4 surface finish.

Comes standard with:

- Steel mounting pan
- 7mm stainless steel lock
- External mounting flange
- Internal and external 6mm or 8mm earth stud (10mm available on request)
- 3mm stainless steel gland plate
- Earth strap kit
- Brass gland plate available on request
- Customised etched identification and certification label



PROTECTION RATINGS

Ex e IIC T6 Gb
Ex nA IIC T6 Gb
Ex de IIC T6 Gb
Ex tD A21/22 T80°C
DIP A21/22 Ta80°C
Ex t IIIC T80°C Db

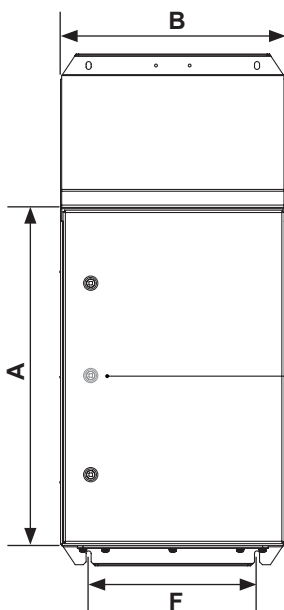
CERTIFICATION

IECEX ITA 10.0023X

AMBIENT TEMPERATURE

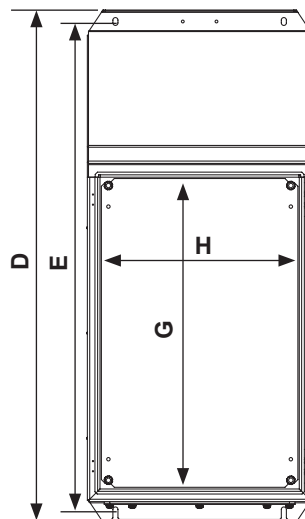
-20°C up to +40°C | 55°C

TECHNICAL DRAWINGS

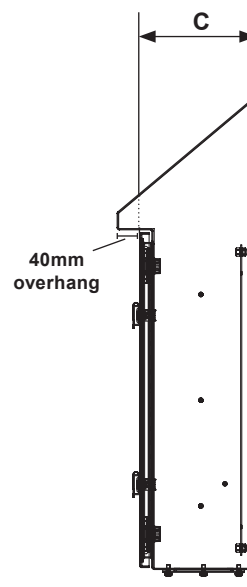


Front View

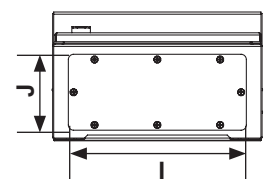
Is indicative of lock position when there is only one lock on enclosures



Front View
With Internals



Side View
With Internals



Bottom View

Sloping Roof Terminal Enclosure

Zones 1 & 2, 21 & 22



ORDERING GUIDE

! These enclosures are only sold with terminals fitted. Empty enclosures are not available for sale.
Contact your local sales engineer to discuss your specific requirements.

Part Number	Description	Dimensions (mm)										No. of Locks
		External				Mounting Centres		Mounting Pan		Gland Opening		
		Height (A)	Width (B)	Depth (C)^	Total Height (D)*	Height (E)	Width (F)	Height (G)	Width (H)	Height (I)	Width (J)	
TBK-S*030215/G0^	No gland plate	300	200	150	551	512	100	250	150	—	—	1
TBK-S*030420/G0^		300	400	200	551	571	300	250	350	—	—	1
TBK-S*040315/G0^		400	300	150	651	612	200	350	250	—	—	1
TBK-S*040420/G0^		400	400	200	651	671	300	350	350	—	—	1
TBK-S*040620/G0^		400	600	200	710	671	500	350	550	—	—	1
TBK-S*040630/G0^		400	600	300	794	755	500	350	550	—	—	1
TBK-S*060420/G0^		600	400	200	910	871	300	550	350	—	—	1
TBK-S*060630/G0^		600	600	300	994	955	500	550	550	—	—	1
TBK-S*080620/G0^		800	600	200	1110	1071	500	750	550	—	—	2
TBK-S*080630/G0^		800	600	300	1194	1155	500	750	550	—	—	2
TBK-S*100620/G0^		1000	600	200	1310	1271	500	950	550	—	—	2
TBK-S*120830/G0^		1200	800	300	1594	1555	700	1150	750	—	—	2
TBK-S*030215^	1 x bottom gland plate	300	200	150	551	512	100	250	150	100	55	1
TBK-S*030420^		300	400	200	551	571	300	250	350	300	105	1
TBK-S*040315^		400	300	150	651	612	200	350	250	200	55	1
TBK-S*040420^		400	400	200	651	671	300	350	350	300	105	1
TBK-S*040620^		400	600	200	710	671	500	350	550	500	105	1
TBK-S*040630^		400	600	300	794	755	500	350	550	500	205	1
TBK-S*060420^		600	400	200	910	871	300	550	350	300	105	1
TBK-S*060630^		600	600	300	994	955	500	550	550	500	205	1
TBK-S*080620^		800	600	200	1110	1071	500	750	550	500	105	2
TBK-S*080630^		800	600	300	1194	1155	500	750	550	500	205	2
TBK-S*100620^		1000	600	200	1310	1271	500	950	550	500	105	2
TBK-S*120830^		1200	800	300	1594	1555	700	1150	750	700	245	2
TBK-S*030215/G3^	1 bottom gland plate, 2 side gland plates	300	200	150	551	512	100	250	150	100	55	1
TBK-S*030420/G3^		300	400	200	551	571	300	250	350	300	105	1
TBK-S*040315/G3^		400	300	150	651	612	200	350	250	200	55	1
TBK-S*040420/G3^		400	400	200	651	671	300	350	350	300	105	1
TBK-S*040620/G3^		400	600	200	710	671	500	350	550	500	105	1
TBK-S*040630/G3^		400	600	300	794	755	500	350	550	500	205	1
TBK-S*060420/G3^		600	400	200	910	871	300	550	350	300	105	1
TBK-S*060630/G3^		600	600	300	994	955	500	550	550	500	205	1
TBK-S*080620/G3^		800	600	200	1110	1071	500	750	550	500	105	2
TBK-S*080630/G3^		800	600	300	1194	1155	500	750	550	500	205	2
TBK-S*100620/G3^		1000	600	200	1310	1271	500	950	550	500	105	2
TBK-S*120830/G3^		1200	800	300	1594	1555	700	1150	750	700	245	2

* Available on request

* Total height includes sloping roof and mounting flanges

^ Total depth space required is depth plus 40mm for roof overhang

Replace the asterisk (*) in the part number above, with a letter from the table below for the corresponding protection technique that is required.

E	Ex e, Ex d e
N	Ex nA
T	Ex tD, DIP, Ex t

Flat Roof Control Station

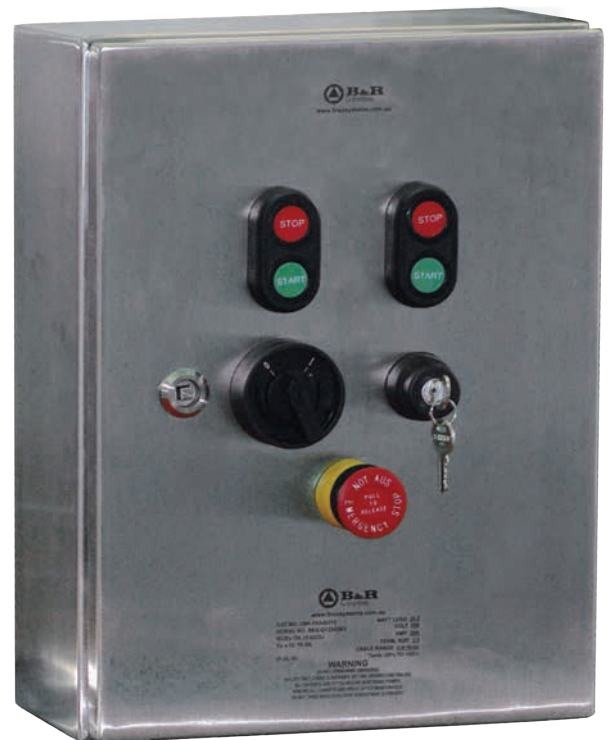
Zones 1 & 2, 21 & 22



- Suitable for Hazardous environments in the most demanding conditions.
- Enclosures suited for Zones 1 & 2, 21 & 22.
- Gasket material Black Neoprene.
- Silicon gasket available on request for IP65 and IP66 only.
- Wall mounting brackets, ordered separately (M8 fixings).
- Certified IP66 glass viewing windows available (298 x 218 or 198 x 118).
- Manufactured from 1.5mm thick 316 stainless steel.
- N4 surface finish.

Comes standard with:

- Steel mounting pan
- 3mm stainless steel gland plate
- 7mm stainless steel lock
- Internal and external 6mm or 8mm earth stud (10mm available on request)
- Earth strap kit
- Brass gland plates available on request
- Customised etched identification and certification label
- Factory fitted, full range of IECEx certified operators available



PROTECTION RATINGS

Ex e IIC T6 Gb
Ex nA IIC T6 Gc
Ex de IIC T6 Gb
Ex tD A21/22 T80°C
DIP A21/22 Ta80°C
Ex t IIIC T80°C Db

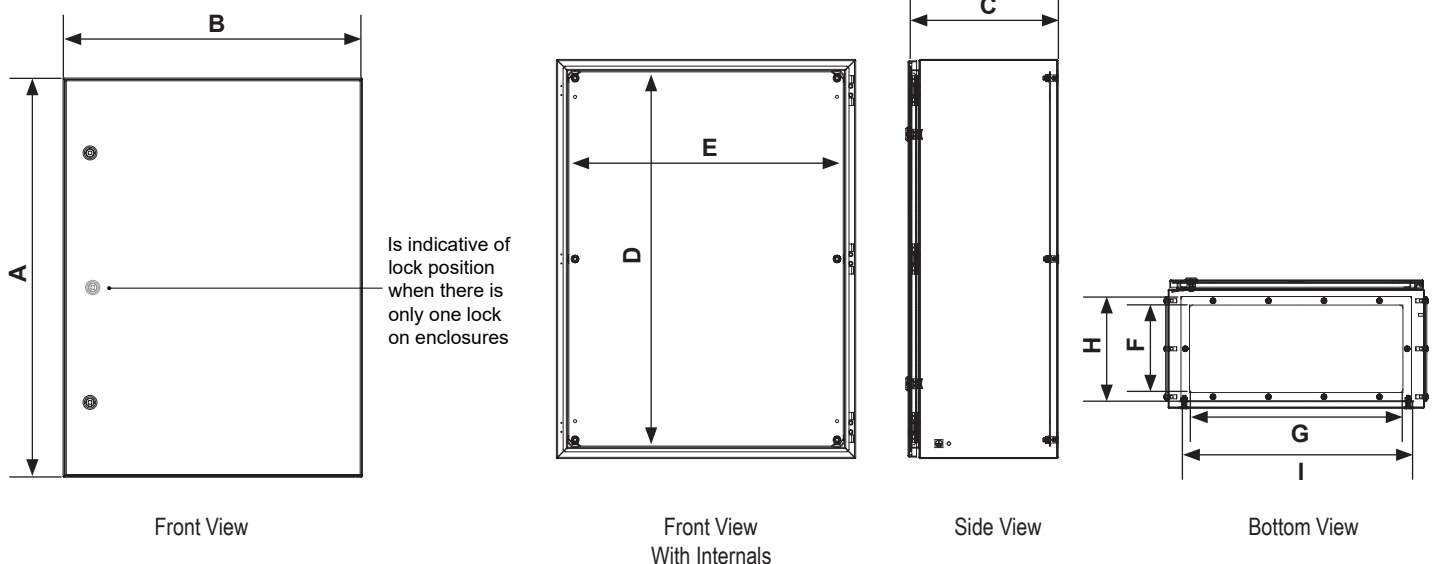
CERTIFICATION

IECEx ITA 10.0023X

AMBIENT TEMPERATURE

-20°C up to +40°C | 55°C

TECHNICAL DRAWINGS



Flat Roof Control Station

Zones 1 & 2, 21 & 22



ORDERING GUIDE

! These enclosures are only sold with IECEx certified operators and/or terminals fitted. Empty enclosures are not available for sale. Contact your local sales engineer to discuss your specific requirements.

Part Number	Description	Dimensions (mm)									
		External			Mounting Pan		Gland Opening		Gland Plate		No. of Locks
		Height (A)	Width (B)	Depth (C)^	Height (D)	Width (E)	Height (F)	Width (G)	Height (H)	Width (I)	
CBK-F*030215/G0^	No gland plate	300	200	150	250	150	55	100	—	—	1
CBK-F*030420/G0^		300	400	200	250	350	105	300	—	—	1
CBK-F*040315/G0^		400	300	150	350	250	55	200	—	—	1
CBK-F*040420/G0^		400	400	200	350	350	105	300	—	—	1
CBK-F*040620/G0^		400	600	200	350	550	105	500	—	—	1
CBK-F*040630/G0^		400	600	300	350	550	205	500	—	—	1
CBK-F*050420/G0^		500	400	200	450	350	105	300	—	—	1
CBK-F*060420/G0^		600	400	200	550	350	105	300	—	—	1
CBK-F*060630/G0^		600	600	300	550	550	205	500	—	—	1
CBK-F*080620/G0^		800	600	200	750	550	105	500	—	—	2
CBK-F*080630/G0^		800	600	300	750	550	205	500	—	—	2
CBK-F*100620/G0^		1000	600	200	950	550	105	500	—	—	2
CBK-F*120830/G0^		1200	800	300	1150	750	245	700	—	—	2
CBK-F*030215^		1 x bottom gland plate	300	200	150	250	150	55	100	95	140
CBK-F*030420^	300		400	200	250	350	105	300	145	340	1
CBK-F*040315^	400		300	150	350	250	55	200	95	240	1
CBK-F*040420^	400		400	200	350	350	105	300	145	340	1
CBK-F*040620^	400		600	200	350	550	105	500	145	540	1
CBK-F*040630^	400		600	300	350	550	205	500	245	540	1
CBK-F*050420^	500		400	200	450	350	105	300	145	340	1
CBK-F*060420^	600		400	200	550	350	105	300	145	340	1
CBK-F*060630^	600		600	300	550	550	205	500	245	540	1
CBK-F*080620^	800		600	200	750	550	105	500	145	540	2
CBK-F*080630^	800		600	300	750	550	205	500	245	540	2
CBK-F*100620^	1000		600	200	950	550	105	500	145	540	2
CBK-F*120830^	1200		800	300	1150	750	245	700	245	740	2
CBK-F*030215/G3^	1 bottom gland plate, 2 side gland plates		300	200	150	250	150	55	100	95	140
CBK-F*030420/G3^		300	400	200	250	350	105	300	145	340	1
CBK-F*040315/G3^		400	300	150	350	250	55	200	95	240	1
CBK-F*040420/G3^		400	400	200	350	350	105	300	145	340	1
CBK-F*040620/G3^		400	600	200	350	550	105	500	145	540	1
CBK-F*040630/G3^		400	600	300	350	550	205	500	245	540	1
CBK-F*050420/G3^		500	400	200	450	350	105	300	145	340	1
CBK-F*060420/G3^		600	400	200	550	350	105	300	145	340	1
CBK-F*060630/G3^		600	600	300	550	550	205	500	245	540	1
CBK-F*080620/G3^		800	600	200	750	550	105	500	145	540	2
CBK-F*080630/G3^		800	600	300	750	550	205	500	245	540	2
CBK-F*100620/G3^		1000	600	200	950	550	105	500	145	540	2
CBK-F*120830/G3^		1200	800	300	1150	750	245	700	245	740	2

[▲] Available on request

Replace the asterisk (*) in the part number above, with a letter from the table below for the corresponding protection technique that is required.

E	Ex e, Ex d e
N	Ex nA
T	Ex tD, DIP, Ex t

Flat Roof Terminal Enclosure

Zones 1 & 2, 21 & 22



- Suitable for Hazardous environments in the most demanding conditions.
- Enclosures suited for Zones 1 & 2, 21 & 22.
- Silicon gasket available on request for IP65 and IP66 only.
- Wall mounting brackets, ordered separately (M8 fixings).
- Certified IP66 glass viewing windows available (298 x 218 or 198 x 118).
- Manufactured from 1.5mm thick 316 stainless steel.
- N4 surface finish.

Comes standard with:

- Steel mounting pan
- 3mm stainless steel gland plate
- 7mm stainless steel lock
- Internal and external 6mm or 8mm earth stud (10mm available on request)
- Earth strap kit
- Brass gland plates available on request
- Customised etched identification and certification label



PROTECTION RATINGS

Ex e IIC T6 Gb

Ex nA IIC T6 Gb

Ex de IIC T6 Gb

Ex tD A21/22 T80°C

DIP A21/22 Ta80°C

Ex t IIIC T80°C Db

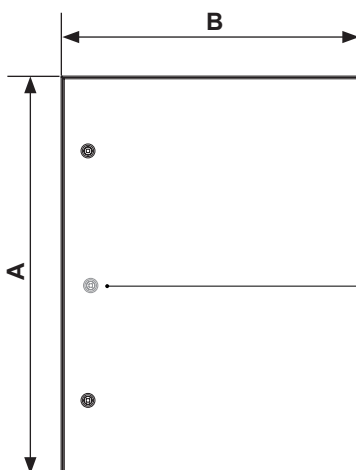
CERTIFICATION

IECEx ITA 10.0023X

AMBIENT TEMPERATURE

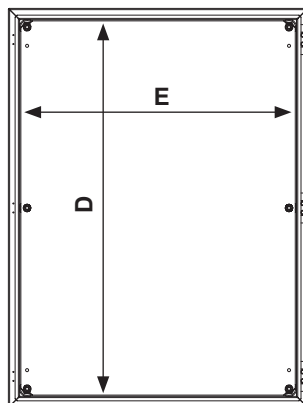
-20°C up to +40°C | 55°C

TECHNICAL DRAWINGS



Front View

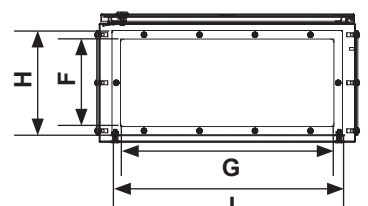
Is indicative of lock position when there is only one lock on enclosures



Front View
With Internals



Side View



Bottom View

Flat Roof Terminal Enclosure

Zones 1 & 2, 21 & 22



ORDERING GUIDE



These enclosures are only sold with terminals fitted. Empty enclosures are not available for sale. Contact your local sales engineer to discuss your specific requirements.

Part Number	Description	Dimensions (mm)									
		External			Mounting Pan		Gland Opening		Gland Plate		No. of Locks
		Height (A)	Width (B)	Depth (C)^	Height (E)	Width (F)	Height (G)	Width (H)	Height (I)	Width (J)	
TBK-F*030215/G0^	No gland plate	300	200	150	250	150	—	—	—	—	1
TBK-F*030420/G0^		300	400	200	250	350	—	—	—	—	1
TBK-F*040315/G0^		400	300	150	350	250	—	—	—	—	1
TBK-F*040420/G0^		400	400	200	350	350	—	—	—	—	1
TBK-F*040620/G0^		400	600	200	350	550	—	—	—	—	1
TBK-F*040630/G0^		400	600	300	350	550	—	—	—	—	1
TBK-F*050420/G0^		500	400	200	450	350	—	—	—	—	1
TBK-F*060420/G0^		600	400	200	550	350	—	—	—	—	1
TBK-F*060630/G0^		600	600	300	550	550	—	—	—	—	1
TBK-F*080620/G0^		800	600	200	750	550	—	—	—	—	2
TBK-F*080630/G0^		800	600	300	750	550	—	—	—	—	2
TBK-F*100620/G0^		1000	600	200	950	550	—	—	—	—	2
TBK-F*120830/G0^		1200	800	300	1150	750	—	—	—	—	2
TBK-F*030215^	1 x bottom gland plate	300	200	150	250	150	—	—	95	140	1
TBK-F*030420^		300	400	200	250	350	105	300	145	340	1
TBK-F*040315^		400	300	150	350	250	55	200	95	240	1
TBK-F*040420^		400	400	200	350	350	105	300	145	340	1
TBK-F*040620^		400	600	200	350	550	105	500	145	540	1
TBK-F*040630^		400	600	300	350	550	205	500	245	540	1
TBK-F*050420^		500	400	200	450	350	105	300	145	340	1
TBK-F*060420^		600	400	200	550	350	105	300	145	340	1
TBK-F*060630^		600	600	300	550	550	205	500	245	540	1
TBK-F*080620^		800	600	200	750	550	105	500	145	540	2
TBK-F*080630^		800	600	300	750	550	205	500	245	540	2
TBK-F*100620^		1000	600	200	950	550	105	500	145	540	2
TBK-F*120830^		1200	800	300	1150	750	205	700	245	740	2
TBK-F*030215/G3^	1 bottom gland plate, 2 side gland plates	300	200	150	250	150	55	100	95	140	1
TBK-F*030420/G3^		300	400	200	250	350	105	300	145	340	1
TBK-F*040315/G3^		400	300	150	350	250	55	200	95	240	1
TBK-F*040420/G3^		400	400	200	350	350	105	300	145	340	1
TBK-F*040620/G3^		400	600	200	350	550	105	500	145	540	1
TBK-F*040630/G3^		400	600	300	350	550	205	500	245	540	1
TBK-F*050420/G3^		500	400	200	450	350	105	300	145	340	1
TBK-F*060420/G3^		600	400	200	550	350	105	300	145	340	1
TBK-F*060630/G3^		600	600	300	550	550	205	500	245	540	1
TBK-F*080620/G3^		800	600	200	750	550	105	500	145	540	2
TBK-F*080630/G3^		800	600	300	750	550	205	500	245	540	2
TBK-F*100620/G3^		1000	600	200	950	550	105	500	145	540	2
TBK-F*120830/G3^		1200	800	300	1150	750	205	700	245	740	2

^ Available on request

Replace the asterisk (*) in the part number above, with a letter from the table below for the corresponding protection technique that is required.

E	Ex e, Ex d e
N	Ex nA
T	Ex tD, DIP, Ex t

Screwed Flat Roof Control Station

Zones 1 & 2, 21 & 22



- Suitable for Hazardous environments in the most demanding conditions.
- Enclosures suited for Zones 1 & 2, 21 & 22.
- Manufactured from 1.5mm thick 316 stainless steel.
- N4 surface finish.

Comes standard with:

- External fixed mounting flanges
- External earth stud
- Internal earth strap kit
- Gasket material Black Neoprene.
- Silicon gasket available on request for IP65 and IP66
- Screwed lid
- Stainless steel fixings
- Internal mounting pan available on request
- Customised etched certification and identification label
- Factory fitted, full range of IECEx certified operators available



PROTECTION RATINGS

Ex e IIC T6 Gb
Ex nA IIC T6 Gc
Ex d e IIC T6 Gb
Ex tD A21/22 T80°C
DIP A21/22 T80°C
Ex t IIIC T80°C Db

CERTIFICATION

IECEx ITA 10.0023X

AMBIENT TEMPERATURE

-20°C ~ +40°C / 55°C option

Screwed Flat Roof Control Station

Zones 1 & 2, 21 & 22



ORDERING GUIDE



These enclosures are only sold with IECEx certified operators and/or terminals fitted. Empty enclosures are not available for sale. Contact your local sales engineer to discuss your specific requirements.

Part Number	Dimensions (mm)						Fixings (mm)		Openings		No. of fixings
	Height* (A)	Width (B)	Depth^ (C)	Total Height* (D)	Depth to rail (E)	Distance From Mounting Surface^ (F)	Height (G)	Width (H)	Height (I)	Width (J)	
CBS-F*010108^	150	150	80	203	59	10	180	125	125	125	4
CBS-F*020212^	200	200	120	253	99	10	230	125	175	175	4
CBS-F*030212^	300	200	120	353	99	10	330	125	275	175	4
CBS-F*040212^	400	200	120	453	99	10	430	125	375	175	6
CBS-F*060212^	600	200	120	653	99	10	630	125	575	175	6

^Available on request

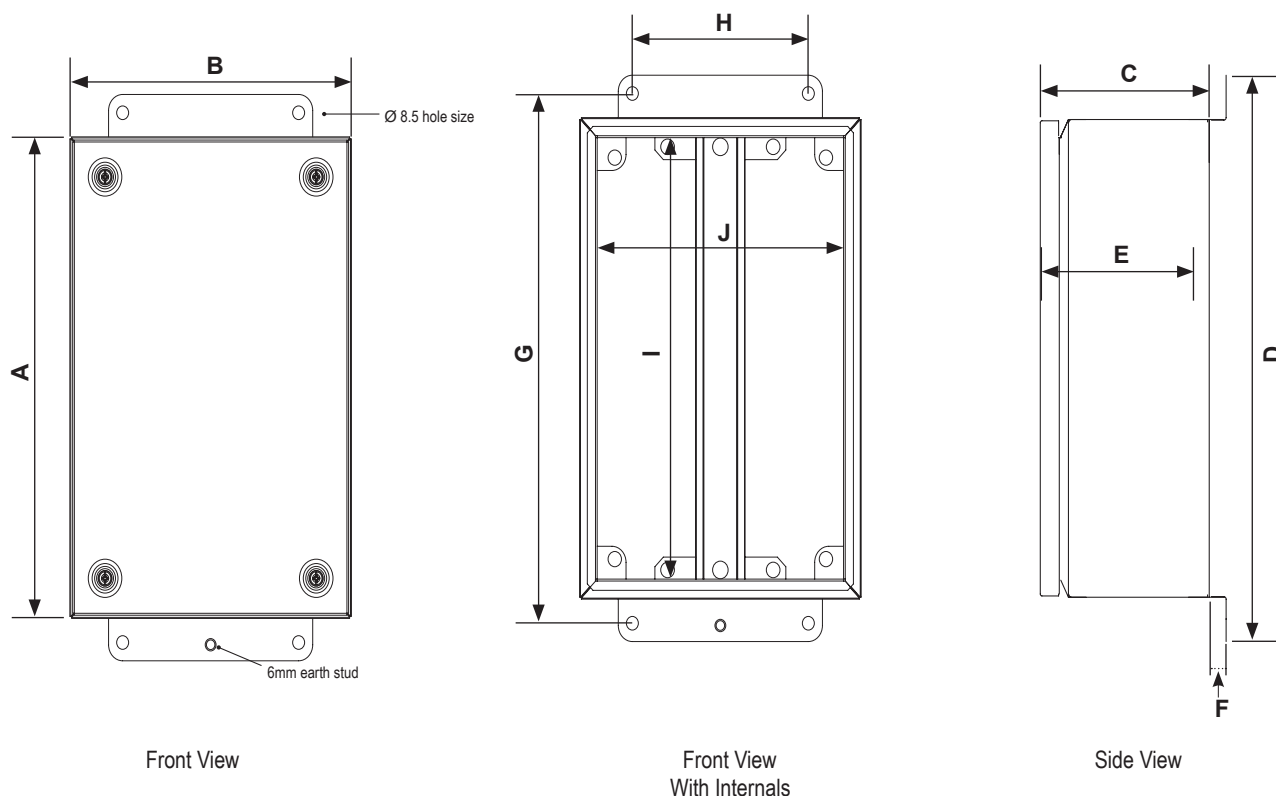
*Height (A) is enclosure only, Total Height (D) includes top & bottom mounting flanges.

^Total protrusion of enclosure from mounting surface is Depth (C) plus Distance From Mounting Surface (F).

Replace the asterisk (*) in the part number above, with a letter from the table below for the corresponding protection technique that is required.

E	Ex e, Ex d e
N	Ex nA
T	Ex tD, DIP, Ex t

TECHNICAL DRAWINGS



Screwed Flat Roof Terminal Enclosure

Zones 1 & 2, 21 & 22



- Suitable for Hazardous environments in the most demanding conditions.
- Enclosures suited for Zones 1 & 2, 21 & 22.
- Manufactured from 1.5mm thick 316 stainless steel.
- N4 surface finish.

Comes standard with:

- External fixed mounting flanges
- External earth stud
- Internal earth strap kit
- Gasket material Black Neoprene.
- Silicon gasket available on request for IP65 and IP66
- Internal DIN rail
- Screwed lid
- Stainless steel fixings
- Factory fitted terminals
- Internal mounting pan available on request
- Customised etched certification and identification label



*certified enclosures not supplied empty

PROTECTION RATINGS

Ex e IIC T6 Gb
Ex nA IIC T6 Gc
Ex d e IIC T6 Gb
Ex tD A21/22 T80°C
DIP A21/22 T80°C
Ex t IIIC T80°C Db

CERTIFICATION

IECEx ITA 10.0023X

AMBIENT TEMPERATURE

-20°C ~ +40°C / 55°C option

Screwed Flat Roof Terminal Enclosure

Zones 1 & 2, 21 & 22



ORDERING GUIDE



These enclosures are only sold with terminals fitted. Empty enclosures are not available for sale. Contact your local sales engineer to discuss your specific requirements.

Part Number	Dimensions (mm)						Fixings (mm)		Openings		No. of fixings
	Height* (A)	Width (B)	Depth^ (C)	Total Height* (D)	Depth to rail (E)	Distance From Mounting Surface^ (F)	Height (G)	Width (H)	Height (I)	Width (J)	
TBS-F*010108 [▲]	150	150	80	203	59	10	180	125	125	125	4
TBS-F*020212 [▲]	200	200	120	253	99	10	230	125	175	175	4
TBS-F*030212 [▲]	300	200	120	353	99	10	330	125	275	175	4
TBS-F*040212 [▲]	400	200	120	453	99	10	430	125	375	175	6
TBS-F*060212 [▲]	600	200	120	653	99	10	630	125	575	175	6

[▲]Available on request

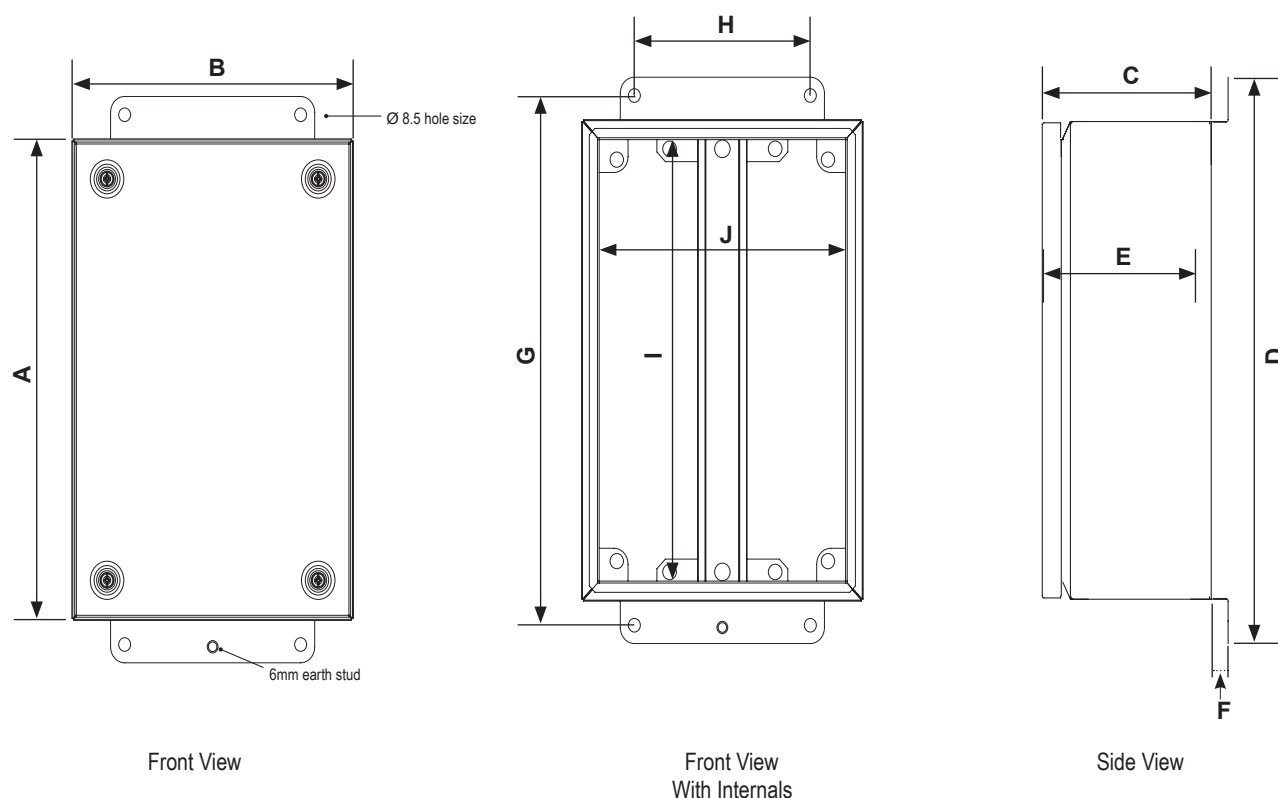
*Height (A) is enclosure only, Total Height (D) includes top & bottom mounting flanges.

[▲]Total protrusion of enclosure from mounting surface is Depth (C) plus Distance From Mounting Surface (F).

Replace the asterisk (*) in the part number above, with a letter from the table below for the corresponding protection technique that is required.

E	Ex e, Ex d e
N	Ex nA
T	Ex tD, DIP, Ex t

TECHNICAL DRAWINGS



Fixed Lid Control Station

Zones 1 & 2, 21 & 22



- Suitable for use within chemical, petrochemical, dust and grain applications where a small enclosure is required.
- Available pre-configured or customer built for ease of installation from one to six operators.
- Specially designed gutter system to protect equipment.
- Certified control operators.
- Gasket material EDPM black.
- Silicon gasket available on request for IP65 and IP66 only.
- Mounting hardware NOT supplied with product.
- Manufactured from 1.5mm 316 stainless steel with N4 surface finish.

Comes standard with:

- Stainless steel cover fixings
- Mounting flanges
- Earth strap kit
- Customised etched certification and identification label
- 2 x M20 bottom clearance holes, 1 entry fitted with certified plastic plug

PROTECTION RATINGS

Ex e IIC T6 Gb

Ex nA IIC T6 Gb

Ex de IIC T6 Gb

Ex tD A21/22 T80°C

DIP A21/22 Ta80°C

Ex t IIIC T80°C Db

CERTIFICATION

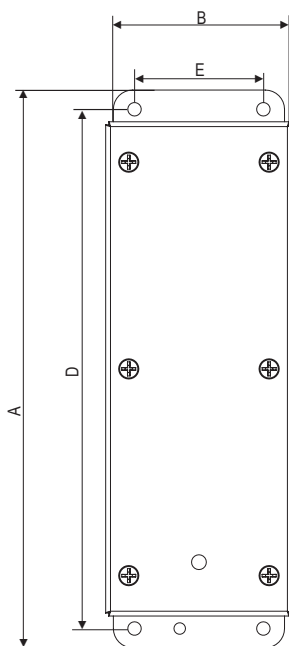
IECEX ITA 10.0023X

AMBIENT TEMPERATURE

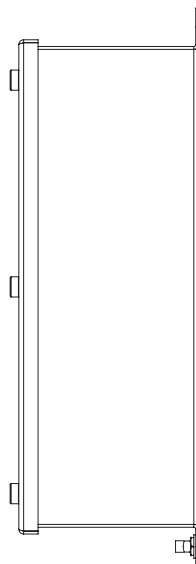
-20°C ~ +40°C / 55°C option



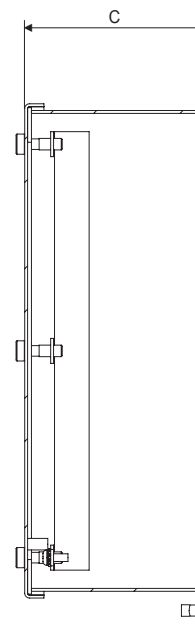
TECHNICAL DRAWINGS



Front View



Side View



Side View With Internals

Fixed Lid Control Station

Zones 1 & 2, 21 & 22



ORDERING GUIDE

⚠ These enclosures are only sold with IECEx certified operators fitted. Empty enclosures are not available for sale. Contact your local sales engineer to discuss your specific requirements.

Part Number		Pole	Dimensions (mm)			Mounting centers		Description
			Height (A)	Width (B)	Depth (C)	Height (D)	Width (E)	
CSS1P1GRN	Pushbutton	—	112	90	90	132	67	1NO+1NC, Start, Green
CSS1P1RED		—	112	90	90	132	67	1NO+1NC, Stop, Red
CSS1P3MH		—	112	90	90	132	67	1NO+2xNC, emergency stop self-locking,
CSS1P2		—	112	90	90	132	67	1NO+1NC, double button, Stop-Start
CSS1P4		—	112	90	90	132	67	1NO+1NC, mushroom head button, Black
CSS2PGPR	Pushbutton & Lamp	—	159	90	90	179	67	1NO+1NC, 2 pushbuttons 1 x Red 1 x Green
CSS2P1GRNLR		—	159	90	90	179	67	1NO+1NC, Green PB Red Lamp
CSS2P1REDLR		—	159	90	90	179	67	1NO+1NC, Red PB Red Lamp
CSS2P1REDLG		—	159	90	90	179	67	1NO+1NC, Red PB Green Lamp
CSS2P1GRNLY		—	159	90	90	179	67	1NO+1NC, Green PB Yellow Lamp
CSS3PGPRLR		—	205	90	90	225	67	1NO+1NC, 2 pushbuttons, 1 x Green 1 + Red, Red Lamp
CSS3PGPRLG		—	205	90	90	225	67	1NO+1NC, 2 pushbuttons, 1 x Green 1 + Red, Green Lamp
CSS1LR	Lamp	—	112	90	90	132	67	AC24~240V, single lamp, Red
CSS1LG		—	112	90	90	132	67	AC24~240V, single lamp, Green
CSS2P2LR	Double Pushbutton & Lamp	—	159	90	90	179	67	1NO+1NC, AC24~240V, double PB Red Green, Lamp Red
CSS2P2LG		—	159	90	90	179	67	1NO+1NC, AC24~240V, double Red Green lamp, Green
CSS1K6	Switch	2-p	112	90	90	132	67	Small handle, Ø39mm
CSS2S6H4		4-p	159	90	90	179	67	2NO+2NC, LL 0

Other configurations are available on request

GRP Terminal Box

Zones 0 & 1, 2, 21 & 22



- Certified for use in Zones 0, 1, 2 & 21, 22 hazardous areas
- Designed to house terminals.
- For protection of electrical equipment in applications where flammable liquids, gases and vapours or combustible dusts are present.
- Light weight, compact and easy-to-install.
- Cable can connect to terminals from different directions.
- Max rated voltage AC690V.
- Anti-static glass fibre reinforced polyester (GRP) with stainless steel screws.

Comes standard with:

- Internal sealing silicone gasket
- Earth continuity
- Terminals



PROTECTION RATINGS

Ex ia IIC T6/T5 Ga

Ex ib IIC T6/T5 Gb

Ex eb IIC T6/T5 Gb

Ex tb IIIC T80°C/T95°C Db

(Refer to certificate for detailed markings)

CERTIFICATION

IECEx CNEX 18.0029X

AMBIENT TEMPERATURE

-40°C up to +40°C / 55°C option

ORDERING GUIDE

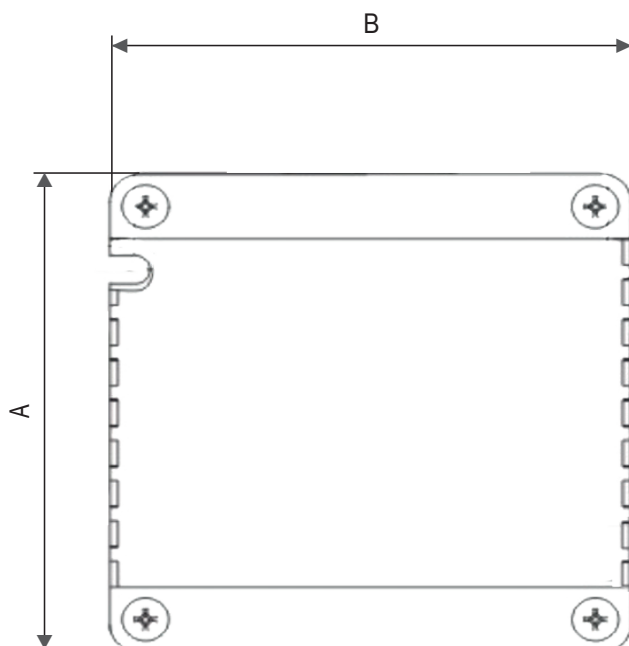


These enclosures are only sold with terminals fitted. Empty enclosures are not available for sale. Contact your local sales engineer to discuss your specific requirements.

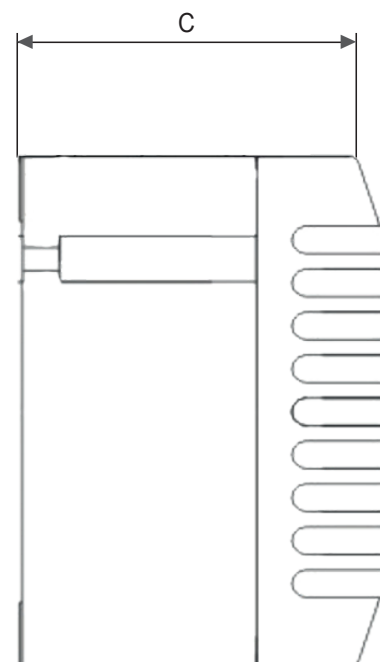
Part Number	Dimensions (mm)			Type	Terminals	Earth Terminals	Cable Entries	Plugs	Weight (kg)
	Height (A)	Width (B)	Depth (C)						
TBGS520E44320 [▲]	95	95	62	Ex e / Ex tb	4 x 2.5mm	2 x 2.5mm	4 x 20mm	3	0.24
TBGS520E44325 [▲]	95	95	62		4 x 2.5mm	2 x 2.5mm	4 x 25mm	3	0.24
TBGS520E64320 [▲]	95	95	62		6 x 2.5mm	2 x 2.5mm	4 x 20mm	3	0.24
TBGS520E64325 [▲]	95	95	62		6 x 2.5mm	2 x 2.5mm	4 x 25mm	3	0.24
TBGS520E88420 [▲]	125	125	69		8 x 2.5mm	4 x 2.5mm	8 x 20mm	4	0.39
TBGS520E88425 [▲]	125	125	69		8 x 2.5mm	4 x 2.5mm	8 x 25mm	4	0.39
TBGS520E18420 [▲]	125	125	69		10 x 2.5mm	4 x 2.5mm	8 x 20mm	4	0.39
TBGS520E18425 [▲]	125	125	69		10 x 2.5mm	4 x 2.5mm	8 x 25mm	4	0.39
TBGS520I44320 [▲]	95	95	62	Ex ia / Ex ib	4 x 2.5mm	2 x 2.5mm	4 x 20mm	3	0.24
TBGS520I44325 [▲]	95	95	62		4 x 2.5mm	2 x 2.5mm	4 x 25mm	3	0.24

[▲]Available on Request

TECHNICAL DRAWINGS



Front View



Side View

Plug & Socket Outlets

Zones 1 & 2, 21 & 22



- Provides electrical connection within a hazardous area for mobile or portable equipment.
- Designed with a switch on the inside, the Ex d e connection prevents sparking and has a high impact resistance.
- Protective cover for high degree of protection.
- Minimal force required when inserting or extracting.
- Protective cover for wall sockets are fitted with facility for padlocks
- Self-cleaning inserting sleeve and contact joints.
- Manufactured from
 - Body - SMC anti-static material
 - Surface finish - textured matt black

Comes standard with:

- Cable entries
- Internal brass gland plate
- Internal switch 16A>32A
- External switch for 63A<125A.



PROTECTION RATINGS

Ex d, Ex e, Ex t

CERTIFICATION

IECEx CQM 10.0013X (16A)

IECEx CQM 09.0009U (32A)

IECEx CQM 10.0002X (63A & 125A)

IECEx CQM 10.0014U (Panel)

(Refer to certificate for detailed markings, ambient temperature and IP ratings)

AMBIENT TEMPERATURE

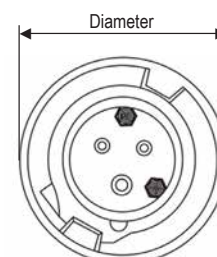
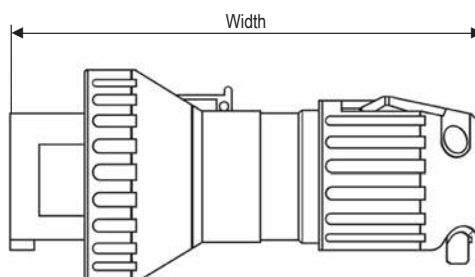
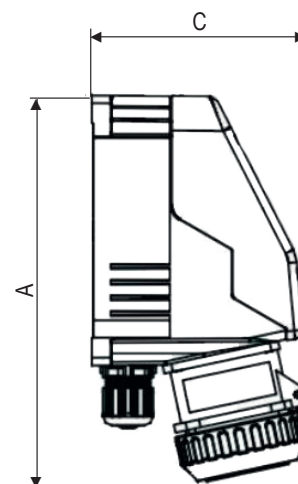
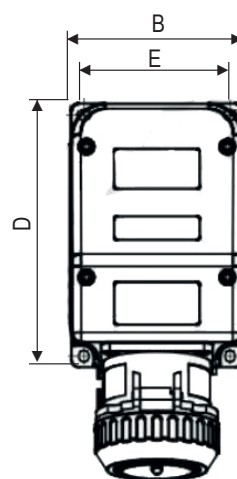
T6 -40°C ~ Ta +45°C

T5 -40°C ~ + Ta 55°C

ORDERING GUIDE AND TECHNICAL DRAWINGS

Type	Dimensions (mm)			Fixing Dimensions (mm)	
	Height (A)	Width (B)	Depth (C)	Height (D)	Width (E)
16Amp – 3 Poles	223	103	122	142	86
16Amp – 4 Poles	241	123	147	163	106
32Amp – 4 Poles	294	133	162	198	118
63Amp – 4 Poles	472	201	248	352	181
125Amp – 4 Poles	537	249	274	411	228

Type	Width (mm)	Diameter (mm)
16Amp – 2 Poles	163	73
16Amp – 3 Poles	163	73
16Amp – 4 Poles	187	77
32Amp – 4 Poles	237	96
63Amp – 4 Poles	262	111
125Amp – 4 Poles	298	121



Plug & Socket Outlets

Zones 1 & 2, 21 & 22



ORDERING GUIDE - PLUGS

Part Number	Cable Outside Ø	Amps	Volts	Colour	Pins	
SOPG016A024VSP [▲]	0.5-18.5 mm	16A	24V		2P	
SOPG016A042V2P [▲]			42V		2P	
SOPG016A110V2PE [▲]			110V		1PN+E	
SOPG016A240V2PE			220V		1PN+E	
SOPG016A240V3PE			220V		3P+E	
SOPG016A415V3PE [▲]			400V		3P+E	
SOPG016A490V3PE [▲]			480V		3P+E	
SOPG016A690V3PE [▲]			615V		3P+E	
SOPG016A415V4PE			400V		3PN+E	
SOPG032A240V3PE [▲]	Ø10-28mm	32A	220V		3P+E	
SOPG032A415V3PE [▲]			400V		3P+E	
SOPG032A490V3PE [▲]			480V		3P+E	
SOPG032A690V3PE [▲]			615V		3P+E	
SOPG032A415V4PE			400V		3PN+E	
SOPG063A240V3PE [▲]	Ø15-35mm	63A	220V		3P+E	
SOPG063A415V3PE [▲]			400V		3P+E	
SOPA063A415V3PE [▲]			400V		3P+E	Auxillary
SOPG063A490V3PE [▲]			480V		3P+E	
SOPA063A490V3PE [▲]			480V		3P+E	Auxillary
SOPG063A690V3PE [▲]			615V		3P+E	
SOPA063A690V3PE [▲]			615V		3P+E	Auxillary
SOPG063A415V4PE [▲]			400V		3P+E	
SOPA063A415V4PE [▲]			400V		3P+E	Auxillary
SOPG125A240V3PE [▲]	Ø20-57mm	125A	220V		3P+E	
SOPG125A415V3PE [▲]			400V		3P+E	
SOPA125A415V3PE [▲]			400V		3P+E	Auxillary
SOPG125A490V3PE [▲]			480V		3P+E	
SOPA125A490V3PE [▲]			480V		3P+E	Auxillary
SOPG125A690V3PE [▲]			615V		3P+E	
SOPA125A690V3PE [▲]			615V		3P+E	Auxillary
SOPG125A415V4PE [▲]			400V		3P+E	
SOPA125A415V4PE [▲]			400V		3P+E	Auxillary

[▲]Available on request

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E: salesnsw@brenclosures.com.au

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109-111 Broadmeadow Road
Broadmeadow NSW 2292
T: +61 2 4961 4433

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E: salesvic@brenclosures.com.au

TASMANIA Distribution

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SA & NT Manufacturing, Sales & Warehouse
505 Grand Junction Road
Wingfield SA 5013
T: +61 8 8417 6222
E: salessa@brenclosures.com.au

NORTHERN TERRITORY Distribution

Jewell Distributors Pty Ltd
Cnr Hidden Valley & Beaton Roads
Berrimah NT 0828
T: +61 8 8947 0870

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East Tamaki Auckland NZ 2013
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