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**B&R Enclosures** 

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CONTROL STATIONS AND JUNCTION BOXES

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.

Our unrivalled industry and application knowledge puts us 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 mining projects. These include 'plug and play' switchboard solutions for Rio Tinto's Oyu Tolgoi mine, control stations for Ichthys on-shore LNG processing plant and Australia's NBN Rollout. 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 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

Southeast Asia *Kuala Lumpur* Hazardous 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 (18,000m<sup>2</sup>), Adelaide (4,000m<sup>2</sup>) and Sydney (1,874m<sup>2</sup>), providing local labour and logistics
- · Complete in-house design and engineering services to assist with creating custom solutions
- 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, 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.

# **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 "A 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.

# **Customisable Project Services**

### 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 indentifiers
- 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





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# 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 ensures we understand and provide value as our customer's needs vary greatly across the different types of project application and technical requirements.

- 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.

- 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.
- 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.







# **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.



QUAIITY ISO 9001 SAIGLOBAL

### 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.



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.



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 equipment.



#### 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.

### **Control Stations - Stainless Steel**

Pushbutton Enclosures with Mounting Flanges



- Designed to house pushbuttons in heavy duty industrial or harsh and demanding environments.
- Suitable for applications where an IP66 protection rating is required\* Mounting flanges for ease of installation. •
- .
- Available with or without cut outs.
- Cut outs available as 22.5mm or 30.8mm.
- Up to 9 cut outs, dependent on enclosure size. •
- Range of pushbuttons able to be fitted as part of the order. •
- Earth stud included internally.
- Manufactured from 1.5mm 316 stainless steel • with N4 surface finish.



\*IP66 rating applies when fitted with appropriate IP rated pushbuttons or plug

#### **ORDERING GUIDE**

			Di	mensions (mm)							
		External		Internal	Mounting	g Centres Body					
Part Number	Height (A)	Width (B)	Depth (C)	Useable Depth (D)	Height (E)	Width (F)	Height (G)	Width (H)	Push Button Cut Outs	Cable Entries	Weight (kg)
CS11/S	152	97	93	90	132	67	112	90	-	-	1.1
CS12/S	199	97	93	90	179	67	159	90	-	-	1.5
CS13/S	245	97	93	90	225	67	205	90	-	-	1.8
CS14/S	290	97	93	90	270	67	250	90	-	-	2.0
CS16/S	383	97	93	90	363	67	343	90	-	-	2.7
CS11/SH22	152	97	93	90	132	67	112	90	1 x 22mm	1 x M20	1.1
CS12/SH22	199	97	93	90	179	67	159	90	2 x 22mm	1 x M20	1.5
CS13/SH22	245	97	93	90	225	67	205	90	3 x 22mm	1 x M25	1.8
CS14/SH22	290	97	93	90	270	67	250	90	4 x 22mm	1 x M25	2.0
CS16/SH22	383	97	93	90	363	67	343	90	6 x 22mm	1 x M25	2.7
CS33/SH22	245	272	93	90	225	197	205	90	9 x 22mm	2 x M25	3
CS11/SH30	152	97	93	90	132	67	112	90	1 x 30mm	1 x M20	1.1
CS12/SH30	199	97	93	90	179	67	159	9	2 x 30mm	1 x M20	1.5
CS13/SH30	245	97	93	90	225	67	205	265	3 x 30mm	1 x M25	1.8
CS14/SH30	290	97	93	90	270	67	250	90	4 x 30mm	1 x M25	2.0
CS16/SH30	383	97	93	90	363	67	343	90	6 x 30mm	1 x M25	2.7
CS33/SH30	245	272	93	90	225	197	205	265	9 x 30mm	2 x M25	3





Assembled product solution - dust cover (CSDC33/S), control station (CS33/SH30) and plug (CSP30/S)

CSDC33/S





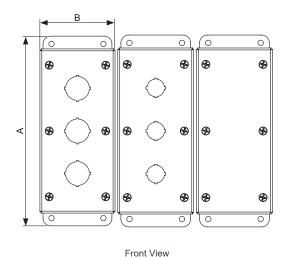
CS33/SH30

CSP30/S

Pushbutton Enclosures with Mounting Flanges

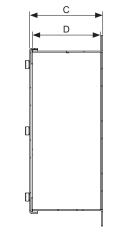
#### **TECHNICAL DRAWINGS**





22mm Cut Outs

No Cut Outs





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37.5

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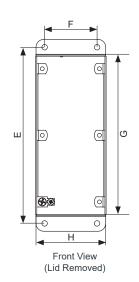
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37.5 Ð

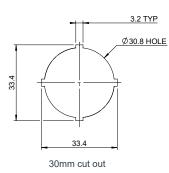
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3.2 TYP Ø22.5 HOLE 25 25

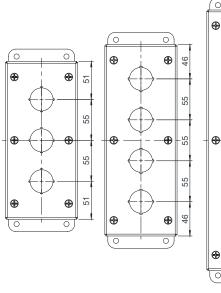
30mm Cut Outs

22.5mm cut out









#### **ACCESSORIES**

A002000		Dimensions (mm)							
Part Number	Product	Height	Width	Depth	Weight (kg)				
CSDC1-6/S	Dust cover suitable for CS1*	400	170	145	2.9				
CSDC33/S	Dust cover suitable for CS3*	400	310	165	3.8				
CSP22/S	M22 Plug	-	-	_	-				
CSP30/S	M30 Plug	-	-	-	-				

### **Connector TEMF**

Termination Enclosures with Mounting Flanges



- Suitable for housing terminations, pushbuttons or switchgear in industrial or demanding environments.
- Designed for applications where a smaller enclosure is required.
  Captive 316 stainless steel combo head screws to prevent loss
- when fastening.
- Provision for mounting DIN rails or a mounting pan, increasing application flexibility.
- Conformity, Approvals: Lloyds Register #06/10007 (E2)
- Region D wind rated to AS1170.2-2002: Structural design actions Wind actions
- Manufactured from 1.2mm thick 316 stainless steel.
- N4 surface finish.

Comes standard with:

Earth strap kit



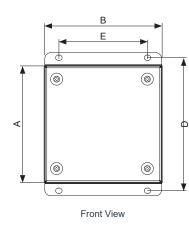
#### **ORDERING GUIDE**

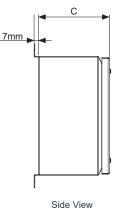
		Dimensions (mm)											
		External		Usea	able Depth	Mounting	Centres	Ope	ning				
Part Number	Height (A)	Width (B)	Depth (C)	With DIN Rail*	With Mounting Pan*	Height (D)	Width (E)	Height (F)	Width (G)	Weight (kg)			
TE1108MF/S	150	150	80	47	60	175	100	125	125	1.4			
TE3112MF/S	300	150	120	87	100	325	100	275	125	2.6			
TE2212MF/S	200	200	120	87	100	225	150	175	175	2.4			
TE3212MF/S	300	200	120	87	100	325	150	275	175	3.1			
TE4212MF/S	400	200	120	87	100	425	150	375	175	3.8			
TE6212MF/S▲	600	200	120	87	100	625	150	575	175	5.0			

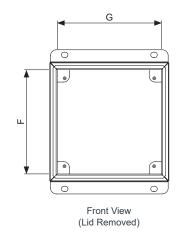
\* Mounting pan and DIN rail are an optional extra

Available on request

#### **TECHNICAL DRAWINGS**







# **Connector TEMF**

Termination Enclosures with Mounting Flanges



F/S F/S F/S F/S F/S F/S F/S

#### ACCESSORIES

			Dimensions (mm)			3112M	2212M	E3212M	E4212M	E6212M
Product	Description	Part Number	Height	Width	TE1108M	TE3	TE22	Ш	ΤĒ	ΤE
		TEMP11	123	120	•					
Mounting pan – 2mm (powdercoated white)	Metal	TEMP22	173	170			•			
		TEMP31	273	120		•				
		TEMP32	273	170				•		
		TEMP42	373	170					•	
		TEMP62	573	170						•
		TED1	140	35	•					
DIN Rail	Aluminium	TED2	190	35			•			
		TED3	290	35		•		•		
		TED4	390	35					•	
		TED6	590	35						•





Metal mounting pan

DIN Rail

# **Connector TE – Zinc Coated Steel**

**Termination Enclosures** 



- Suitable for housing terminations, push buttons or switchgear in industrial or demanding environments.
- Designed for installations where smaller enclosures are required.
- Captive 316 stainless steel combo head screws, used to prevent loss when fastening.
- Provision for mounting DIN rails or a mounting pan, increasing application flexibility.
- Conformity, Approvals:
- Lloyds Register #06/10007 (E2)
- Manufactured from 1.2mm thick zinc coated steel.
- Powdercoated Pebble Grey RAL7032.
- Comes standard with:
- Earth strap kit

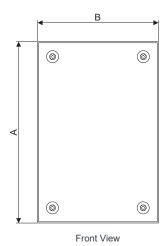


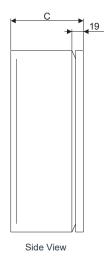
#### **ORDERING GUIDE**

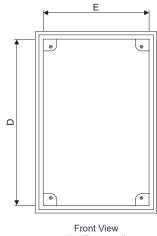
	Dimensions (mm)								
		External		Usea	Openir	ng Size	_		
	Height	Width	Depth		Height	Width			
Part Number	(A)	(B)	(C)	With DIN Rail*	With Mounting Pan*	(D)	(E)	Weight (kg)	
TE1108	150	150	80	47	60	125	125	1.2	
TE3112	300	150	120	87	100	275	125	2.4	
TE2212	200	200	120	87	100	175	175	2.2	
TE3212	300	200	120	87	100	275	175	2.9	
TE4212	400	200	120	87	100	375	175	3.6	
TE6212	600	200	120	87	100	575	175	4.9	

\* Mounting pan and DIN rail are available as optional extra

#### **TECHNICAL DRAWINGS**







# **Connector TE – Zinc Coated Steel**

**Termination Enclosures** 



#### ACCESSORIES

			Dimensions (mm)			TE3112	2212	3212	1212	3212
Product	Description	Part Number	Height	Width	TE1108	ΞĒ	TE221	TE321	TE42	TE62
		TEMP11	123	120	•					
		TEMP22	173	170			•			
Mounting pan – metal	2mm	TEMP31	273	120		•				
(powdercoated white)	2000	TEMP32	273	170				•		
		TEMP42	373	170					•	
		TEMP62	573	170						•
		TED1	140	35	•					
		TED2	190	35			•			
DIN Rail	Aluminium	TED3	290	35		•		•		
		TED4	390	35					•	
		TED6	590	35						•
Wall mounting brackets – 316 stainless steel	Set of 4 (1 Tonne SWL)	MEB/S	-	_	•	•	•	•	•	•
Touch up paint (300g)	Pebble Grey RAL7032	TUP/P20	-	-	•	•	•	•	•	•



Metal mounting pan

DIN Rail



MEB/S (set of 4)

# **Connector TE – 316 Stainless Steel**

**Termination Enclosures** 



- Suitable for housing terminations, pushbuttons or switchgear in industrial • or demanding environments.
- Designed for installations where smaller enclosures are required. •
- . Captive 316 stainless steel combo head screws, used to prevent loss when fastening.
- Provision for mounting DIN rails or a mounting pan, increasing application • flexibility.
- Conformity, Approvals: .
- Lloyds Register #06/10007 (E2) Manufactured from 1.2mm thick 316 stainless steel. .
- Powdercoated N4 surface finish. •
- Comes standard with:
- Earth strap kit

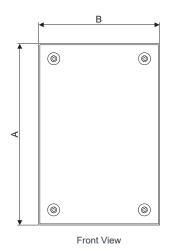


#### **ORDERING GUIDE**

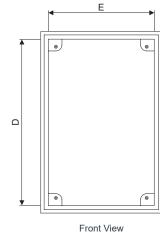
		External		Usea	Useable Depth			
Part Number	Height (A)	Width (B)	Depth (C)	With DIN Rail*	With Mounting Pan*	Height (D)	Width (E)	Weight (kg)
TE1108/S	150	150	80	47	60	125	125	1.2
TE3112/S	300 150 120		87	100	275	125	2.4	
TE2212/S	200	200	120	87	100	175	175	2.2
TE3212/S	300	200	120	87	100	275	175	2.9
TE4212/S	400	200	120	87	100	375	175	3.6
TE6212/S	600	200	120	87	100	575	175	4.9

\* Mounting pan and DIN rail are available as optional extra

#### **TECHNICAL DRAWINGS**



С 19 Side View



(Lid Removed)

# **Connector TE – 316 Stainless Steel**

**Termination Enclosures** 



#### ACCESSORIES

ACCESSORIES										
			Dimensio	ons (mm)	1108/S	3112/S	2212/S	3212/S	TE4212/S	6212/S
Product	Description	Part Number	Height	Width	È	Ĕ	Ĩ	Ĕ	ŢĘ	Ĕ
		TEMP11	123	120	•					
Mounting pan – 2mm (powdercoated white)	Metal	TEMP22	173	170			•			
		TEMP31	273	120		•				
		TEMP32	273	170				•		
		TEMP42	373	170					•	
		TEMP62	573	170						•
		TED1	140	35	•					
		TED2	190	35			•			
DIN Rail	Aluminium	TED3	290	35		•		•		
		TED4	390	35					•	
		TED6	590	35						•
Wall mounting brackets – 316 stainless steel	Set of 4 (1 Tonne SWL)	MEB/S	-	-	•	•	•	•	•	·



Metal mounting pan

DIN Rail



MEB/S (set of 4)








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