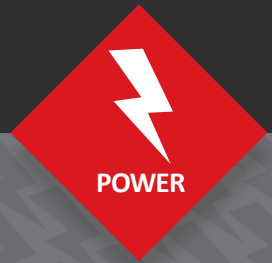


# Containerised Substation (CSS)



## Medium voltage containerised power substations for the mining, tunnelling and construction industries

**The CSS series has been designed to operate at medium voltages for construction projects. Commonly used in mining and tunnelling applications, the CSS is capable of distribution over long distances.**

The size of the CSS allows a larger capacity for the transformer, up to 5MVA. The 20' and 40' container designs are in accordance with ISO standard sizes making transportation by ship or truck an easy process.

Utilising standard voltages of 6.6kV, 11kV and 22kV, the design enables the user to power a complete site from a single unit and supply high voltage through supplies as well.

PBE's CSS Series Containerised Substation suits a multitude of environments with each designed to specified customer requirements. ◆

PBE Group acquired Rutherford Power Group in 2018, and now provide a global integrated solution for Power, Safety, Data & Communications for the mining and tunnelling industries.

### Specifications

- Rated Voltage  
6.6kV-22kV/1100-415V
- Rated Power  
315kVA - 5000kVA
- Weight 6t - 18t
- Length 4000mm - 9000mm  
Height 1650mm - 1800mm  
Width 1000mm - 1100mm

### Manufacture

- 3-10mm mild steel ISO container
- Continuous welded electrical enclosures
- Anti-corrosion treated
- Fire safety doors
- Non slip internal floors
- Transport certifications
- Suitability rated lifting points



**PBE**

INNOVATING SAFETY.  
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# Containerised Substation (CSS)



## Specifications

- Easy transportation, the dimensions are in accordance with ISO container standards – no requirement for flat rack shipping or oversized specialized transport
- Suitably rated lifting points for handling on site and designed within mechanical limitations. ISO locking corners, lifting points and forklift
- Access to the transformer compartment and provided with mechanically bolted doors and covers, fitted with safety switches
- Incoming and outgoing supplies from beneath or side with glanded or adaptor entry
- Natural ventilation obtained with suitable slats protected by anti-insect grids
- Fan forced ventilated options available



## LV Electrical Design

690V - 1100V rated MCCBs are used for power distribution and protection with access to switching through the dead front LV doors.

Indications included as standard:

- Ammeter
- Alarm and trip indication
- Tx monitoring

Ratings and options include:

- 415V - MCCBs are rated at 690V
- 1000V - MCCBs are rated at 1000V
- Power Factor Correction (PFC) module
- Exterior indication
- Copper bus are suitably rated and meet Australian and International Standards, conductive grease is utilised in connections
- Lighting protection and small power outlets are included as standard

## MV Electrical Design

The CSS conforms to International Standards and can be configured 'single incoming' or 'incoming through' transformer supply allowing distribution from the HT or LT end.

- Conforms to Australian and International Standards
- Integrated protection relays
- Single Incoming or Incoming through and Transformer supply allowing distribution from the HT and the LT end
- Custom builds are available to meet customer specification or provide the solution to specific outcomes

## Transformer

The substations robust construction enables it to be installed in harsh environments, it's accessibility to the incoming and outgoing power supply and feed gives a 'plug and play' characteristic.

## About Us

PBE Group ("PBE") provide an adaptive and flexible integrated solution where a reliance on safety and productivity is essential. PBE is a true global systems provider for the mining, tunnelling, construction and associated markets. Our specialised engineering team integrates our industry specific manufactured products and best in class 3rd party products to ensure a sophisticated, robust and commercially viable solution. Our growth in international markets is based on the key verticals of Technology, Power and Service Delivery – fundamental in any industrial project. Our experience in confined space and underground construction has enabled PBE to complete over 850 projects in more than 60 countries with 320 staff and 18 regional offices. ◆

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