



CASE STUDY:

Peak Downs Coal Mine Sewage Treatment Plant

Location

Winchester, QLD

Description

Motor Control Centre for a sewage treatment plant at Peak Downs Open Cut Coal Mine. This was part of a \$2 Billion continuation project to upgrade existing infrastructure and also construction of new infrastructure

Features

B&R Enclosure
Cisco Catalyst IE330 8P2S,
Littlefuse Earth Leakage Relay
230VAC relays
Schneider Altivar VSD's
Schneider M340 PLC

Scope

Design, construction, PLC & SCADA programming, onsite commissioning

Design Specifications:

- IP54
- Indoor installation
- Rated Operating Voltage (Ue): 600VAC
- Current Rating (In): 75A
- Operating Frequency (Fn): 50Hz
- Rated Insulation Voltage (Ui): 0.6/1kV
- Prospective Short Circuit (Icp): 10kA
- Board Short Circuit Rating: 25kA
- Earthing System: TN-S
- Form Rating: Form 3b
- Design Temp: 0-35°C

Enclosure Specifications:

- External material: 2.0mm Mild Steel
- Mounting Panel Material: 2.0mm Mild Steel
- Powdercoated Colour: X15 Orange
- Escutcheon Colour: Gloss White
- Door Locks: 7mm Sq Key compression door lock
- Cable Entry: Top
- Gland Plate Material: 5mm Brass

Plinth:

- 100mm Gal Dip

