



Cathtect

Engineering (Pty) Ltd.

Automatic Controlled Cathodic Protection

Rectifiers



Page no.

WHAT IT TAKES

- | | |
|---|---|
| 1 | Cathtect's Automatic Controlled Rectifiers |
| 1 | Benefits and Features of Cathtect's Automatic Controlled Rectifiers |
| 2 | Ordering Codes for Cathtect's Automatic Controlled Rectifiers |
| 2 | Enclosure details for Cathtect's Automatic Controlled Rectifiers |

Automatic Controlled Cathodic Protection Rectifiers

Cathtect Engineering (Pty) Ltd is a dynamic company that strives to give our clients the absolute best in all that we do. We are able to Design, Manufacture, Supply and Install Cathodic Protection systems and materials that will take care of your Corrosion problem. Cathtect's Automatic Controlled Rectifier units use the latest technology as we constantly seek innovative ways to improve our rectifiers, so that we can give our clients World Class Cathodic Protection systems and Materials.

Automatic Controlled Cathodic Protection Rectifiers are electrical systems employed to automatically impress current onto a structure. These structures are utilised to drive a structure more negative with respect to its surroundings, affording it protection in the process. Ancillary equipment to measure the variables in any given system is required. Cathtect's Automatic Controlled Rectifier units consist of four control modes that help monitor and control the Cathodic Protection system. These control modes include Potential Control, Current Control, Voltage Control and Iterative instant off. Our Automatically Controlled Rectifiers are more technically advanced than Manually Controlled Rectifiers and it can also be integrated into remote monitoring and telemetry systems. They are designed to withstand harsh conditions and have a long design life of 25 years. Cathtect's Automatically Controlled Rectifiers are highly beneficial and have a wider variety of features compared to the Manually Controlled Rectifier.

Benefits and Features of Cathtect's Automatic Controlled Cathodic Protection Rectifiers

Benefits of Cathtect's Automatic Controlled Cathodic Protection Rectifiers

- Multiple automatic control modes- Constant Voltage, Constant current, Constant Potential and Iterative instant off
- Secondary thyristor controlled
- High power applications
- Efficiency up to 75%
- Can accommodate client specific requirements
- Remote monitoring integrated

Some Features of Cathtect's Automatic Controlled Cathodic Protection Rectifiers

- Operating Ambient Temperature of -10 to 40°C (14 to 104°F)
- LCD Display 4 x 20 Character LCD Monochromatic Display
- Operating Ambient Humidity 0 to 100%
- DC Stray Current Interference $\pm 20V$ DC Minimum
- AC Stray Current interference 35V AC Minimum
- 3 Phase 415V AC tolerance $\pm 10\%$ supply voltage or specified by client
- Output Ripple less than 2%

**Please see the technical datasheet for all product specifications*

Automatic Controlled Cathodic Protection Rectifier Ordering Codes

Automatic Controlled Cathodic Protection Rectifiers are manufactured according to power ratings. We have 4 standard Automatic Controlled Rectifier Ratings: 1000W, 5000W, 3800W and 10000W. Within these power ratings, Automatic controlled Rectifiers have different maximum output voltages: 20V, 50V, 76V and 100V. Their maximum current varies accordingly.

Use the ordering code in the table provided below to select your Automatic Controlled Rectifier rating.

Automatic Controlled Rectifier Ordering Code	Power	Output Voltage	Output Current
RECA-20-50	1000W	20V	50A
RECA-50-100	5000W	50V	100A
RECA-76-50	3800W	76V	50A
RECA-100-100	10000W	100V	100A

** For Client specifications please contact us*

Automatic Controlled Rectifier Enclosure Details

Our rectifier enclosures are made from 3CR12 grade steel with a powder coat paint finish. Alternatively should the rectifier be situated in a Rocla type environment, the rectifier can be mounted on an open frame. There is only one standard frame size and two different types of enclosures which range in size depending on the rating of the rectifier. Our standard frame dimensions are 1300mm x 600mm x 1000mm and is made from 30mm² galvanized mild steel square tubing on a white powder coated chassis plate.

Types of Enclosures

1. Rectangular enclosure IP 55,56,65 & 66
2. Tall Narrow enclosure with a door in the front and the back IP 55,56,65 & 66

**Please note that each enclosure dimension is different depending on the rating, please contact us for your specifications*



TALL AND NARROW ENCLOSURE



RECTANGULAR ENCLOSURE

** Enclosures can be in a Canary Yellow, Orange or Grey and doors can be cut and customized to suit viewing holes or panel meters. Louvers, canopies and plinths are optional.*