

D5546 High Current Oil - Cooled Rectifiers.

The D5546 range of High Current Oil cooled Rectifiers provides adjustable high current dc for cathodic protection of pipes and structures. This range of rectifiers is oil cooled and a wide variety of capacities and enclosures can be provided.

The D5546 cathodic protection rectifier range is our series of high current oil cooled type transformer rectifiers with manual control of the output voltage by variable autotransformer or by tapchanger switch. Full wave output rectifiers give low ripple and high short term capacity. The transformers and rectifier bridge are oil cooled in a separate section of the rectifier tank.

The D5546 systems take a 3 phase ac supply and adjust it by either a primary toroidal 3 phase variable transformer or by a primary tap changer transformer. Variable auto transformers give continuous adjustment from 0 - 100% of output and primary tap changer transformers have the taps set to give easy setting by interlocking adjustment ranges with sensible voltage steps.

The adjusted ac voltage is then supplied to a 3 phase load transformer and stepped down to a low voltage. The load transformer uses high quality grain oriented core steel and copper windings to reduce losses. The low ac voltage is passed through a full wave diode bridge and to the output terminals. Conservative design of the rectifier bridge, combined with a choice of transformer configurations, keep rectifier efficiency high and temperature rise low.

Standard rectifier features include AC circuit breaker, input transformer protection fuses, diode protection with fast semiconductor fuses and an output protection fuse.

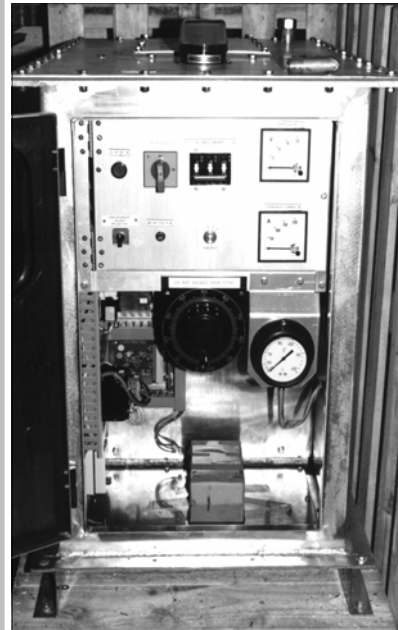
The D5546 is available with a very wide

D5546 OIL COOLED REV B 21/11/03

CATHODIC PROTECTION SYSTEMS , ACCESSORIES

range of options to match specific system requirements and these can include:

- a. Enclosures. These are available in coated steel or marine grade aluminium.
- b. Subcircuit distribution. Individual subcircuits can be fused and the current in



An internal view of the control panel of a D5546 rectifier rated at 15V 330A. This rectifier is in a marine grade aluminium enclosure, has variable autotransformer adjustment, oil temperature gauge and local and remote fault monitoring

- each circuit measured.
- c. Advanced protection. This can include phase failure protection for input current or voltage , blown fuse indication, ripple detection, low current or voltage indication, high temperature indication.
- d. Monitoring. Monitoring with local meters or remote

transducers can be provided for the parameters you need to measure, including voltage, current, rectifier status and reference potentials.

MANUFACTURED BY

M. Brodribb
PTY. LTD.

15 CARROLL CRESCENT, GLEN IRIS, VIC, 3146 AUSTRALIA.

PHONE + 61 3 9832 0222, FAX +61 3 9824 7372

www.brodribb.com.au

© M. BRODRIBB PTY LTD