

Buried pipelines running parallel to high voltage AC power transmission systems can be adversely affected by the close proximity of these overhead lines.



AC Mitigation Devices are used when AC interference is so caused on a pipeline. Because of the inductive coupling, AC voltages between the pipeline and surrounding soil are unavoidable. Induced voltages can reach dangerous levels, causing both a safety hazard to pipeline operating personnel and a risk of corrosion of the pipeline.

The units act as blocking devices to DC voltages but allow the discharge of AC current through the earths connected to them, thereby reducing AC interference effects without compromising the pipeline's cathodic protection system.

Standard cables are 2 metres long 16mm² black, green/yellow. Other cable types, lengths and sizes can be supplied to suit customer's specific requirements.

ADDITIONAL INFORMATION

- Maximum permissible safety voltages up to which personnel and equipment can be exposed are defined in international safety codes and standards.
- It is necessary to give consideration to earthing measures to keep the magnitude of AC voltages within acceptable limits.

WEIGHT / DIMENSIONS

Weight: 4.4 kg including 2m cable tails

Dimensions: (approx): 280mm long x 125 mm diameter

DC - CHARACTERISTICS

- Diode reverse voltage: 1600V (2 x 800V)
- DC current average: 35A (nom)
- Peak current 10ms: 1300A
- Surge energy current: 8450A
- Voltage across device for 1mA current flow: > 0.9V forward/reverse
- Voltage across device for 10mA current flow: > 1.1V forward/reverse

AC - CHARACTERISTICS

- Xc of capacitor (100,000microF) @ 50Hz: 31.83 mOhms
- ESR of capacitor @ 100Hz: 5 mOhms
- Impedance of device @ 50Hz: 40 mOhms (estimated)
- AC current for 1mA current through diodes: 15A
- AC current for 10mA current through diodes: 20A

Note: Due to ongoing technical developments, all stated information is typical and is subject to change without notice or obligation.

AFTER SALES SERVICE / TECHNICAL SUPPORT

All Buckleys products are manufactured under the controls established by a quality management system that meets the requirements of BS EN ISO 9001:2015 and are supplied with a one year 'back-to-base' warranty. The equipment is proven to be robust and reliable and will give years of service if maintained in accordance with our instructions.

Buckleys provide full repair and calibration facilities; offering a fast turn-around service for customers' equipment.

Advice on specific applications for all Buckleys products is available from our technical department. Contact us by telephone or e-mail using the contact details below.

Buckleys (UVRAL) Ltd.

Buckleys House, Unit G, Concept Court, Shearway Business Park, Shearway Road, Folkestone, Kent. CT19 4RG. UK

Tel: +44 (0)1303 278888 Email: sales@buckleys.co.uk Website: www.buckleysinternational.com